FINAL REPORT

INVESTIGATE AND COMPLILE A RECORD OF REGULATIONS/POLICIES USED BY TRANSPORTATION MODES TO MONITOR THE AFFECT OF MEDICAL CONDITIONS ON EMPLOYEE PERFORMANCE

(DTFR53-03-00101)

By

William C. Keppen

Keppen & Associates

May 12, 2003

William Keppen, Pres.
Keppen & Associates
1603 Honeysuckle Ridge Ct
Annapolis, MD 21401
410.573.9094
wkeppen@comcast.net

TABLE OF CONTENTS

Affect of Medical Conditions on Employee's Performance

Statement of Work

The Office of Safety's fatigue program is structured on addressing a multitude of factors and concerns that affect the safety of the railroad industry's employees and their quality of life. Among these factors or concerns is the role of medical conditions, including prescription and over-the-counter (OTC) medications, on an employee's performance. In view of an industry's requirement for 24/7 operations, demanding customer schedules, and the constant movement of heavy machinery, it is essential that an employee be fully alert at all times. The National Transportation Safety Board (NTSB), the Federal Railroad Administration (FRA), and rail labor and management, are deeply concerned that the performance of employees (and their safety) may be influenced by various medical conditions and/or the use of medications. In fact, the NTSB, by letter of November 27, 2002, has directed FRA to take action in response to three recommendations dealing with the relationship between medical conditions (including medications) and the performance of employees.

This Statement of Work represents one more initiative in the Office of Safety's compendium of possible solutions to the fatigue threat within the industry. Specifically, this initiative necessitates complying and reviewing of current regulations/policies and procedures utilized within the transportation community to monitor medical conditions that may incapacitate or significantly impair the performance of employees in safety-sensitive positions. Particular attention will be directed toward obstructive sleep apnea conditions and reporting by an employee's private physician to a carrier's physician of applicable medications concerns. Both these two stipulations were embodied in the NTSB's recommendations.

<u>60 days after the project is funded</u>

- A summary of regulation/policies and procedures utilized within the transportation community to monitor medical conditions that may incapacitate or significantly impair the performance of employees in safety-sensitive positions.

- A summary of policies and practices governing communications between private and transportation company physicians on employees with sleep disorders or other medical conditions that may impair their performance. (Specific attention must be given to sleep disorder conditions, e.g., obstructive sleep apnea, etc.)

- A complete compendium of relevant documents related to procedure for handling sleep disorders by transportation mode.

- A final report and evaluation of which (combination of) procedure(s) has the greatest potential for reducing the safety risks associated with employees who suffer from sleep disorders.

EXECUTIVE SUMMARY

At 5:54 a.m. November 15, 2001 two Canadian National/Illinois Central (CN/IC) trains collided head on near the town of Clarkston, Michigan. Two crewmembers of one train (243) were killed, while the two on the other train (533) were seriously injured. The National Transportation Safety Board (NTSB) determined the probable cause of the accident to be fatigue of the crewmembers operating train 533, primarily due to the engineer's untreated and the conductor's insufficiently treated obstructive sleep apnea.

In its investigation of the accident, the Safety Board examined one safety issue:

> **The adequacy of rail industry standards and procedures for identifying and reporting potentially incapacitating medical conditions.**

As a result of its investigation the Safety Board made three recommendations to the Federal Railroad Administration. These recommendations are paraphrased below. (Refer to the Executive Summary of the NTSB report behind Tab 8 of this report for the complete recommendations.)

- **R-02-24** – Develop a standard medical form that includes questions regarding sleep problems and require that the forms be used …
- **R-02-25** – Require that employees working in a safety-sensitive position report conditions that could impair their performance to the railroad in a timely manner …
- **R-02-26** – Require that a railroad prohibit employees with impairing medical conditions from performing safety-sensitive duties until the railroad's designated physician determines the employee can continue work safely …

This FRA funded research project examines medical oversight procedures in four regulated modes of transportation; air, highways, marine, and rail, with a special emphasis on the handling of sleep disorders by mode of transportation.

All modes of transportation have regulations covering medical oversight procedures and requirements. The most comprehensive, and sleep disorder specific, rules apply to employees in air transport seeking medical certification under the rules and regulations applicable airmen applying for first class medical certification. Individuals seeking a commercial drivers license (CDL) must complete a comprehensive medical application and examination procedure, which includes questions on sleep disorders. Mariners, seeking medical certification also must complete a comprehensive application and examination procedure; however, the only sleep disorder specifically referred to in the process is sleepwalking. Locomotive engineers are required by regulation to meet specific vision and hearing standards once every three years to have their operating certificate renewed. There are no other regulatory requirements regarding medical conditions (sleep disorders) covering locomotive engineers or other railroad employees working in "safety-sensitive" positions.

Medical examination forms and procedures in all modes of transportation, other than railroads operating in the United States, identify a number of potentially impairing medical

conditions, set specific minimal standards for some, and identify a number of conditions that would result in medical disqualification of the employee. Railroad workers in "safety-critical" positions in Canada are covered by new rules/regulations that are very comprehensive, setting medical standards, a schedule for periodic medical examinations, and a process for removing employees from safety-sensitive work, if they fail to meet medical standards.

In evaluating procedures that have the greatest potential for reducing the safety risks associated with employees who suffer from sleep disorders, or other performance impairing conditions (PIC's), Keppen & Associates makes the following observations.

Sleep disorders (PIC's) can result in loss of alertness or consciousness, a clear safety risk in transportation operations.

Sleep disorders (and several other PIC's) are difficult to detect without the cooperation of affected workers and a comprehensive medical oversight process.

Medical oversight could be mandated by rule/regulation or could be established as a part of company policy related to employee and operational safety.

The majority of transportation operations have regulations and medical oversight procedures for equipment operators (employees performing safety-sensitive tasks).

First Deliverable - A summary of regulations/policies and procedures utilized within the transportation community to monitor medical conditions that may incapacitate or significantly impair the performance of employees in safety-sensitive positions. (By mode of transportation)	Medical policy statement (Regulatory agency)	Standard application forms (medical)	Standard medical exam forms	Exam procedures covering impairing conditions	Procedures for addressing sleep disorders	Procedures for withholding certification (license)	Requirements for reporting impairing conditions	Medical review procedures (for reinstatement)	Identification & monitoring of substance abuse	Waivers for contact with applicants physician(s)	Medical waivers may be granted
Air (FAA)	X	X	X	X	X	X	X	X	X	X	X
Highway – Commercial drivers (FMCSA)	X	X	X	X	X	X	X	X	X		X
Highway – Non-Commercial (State)	X		X	X	?	X		X	X		X
Waterways (USCG)	X	X	X	X		X		X	X		
Railroads – US (FRA)	**P**			**P**		**X**	**P**	**X**	**X**		**X**
Railroads – Canada (Transport Canada)	X			X	X	X	X	X	X	X	X

Table 1

P = Partial

As indicated in our 30-day deliverables report, Keppen & Associates found that all modal administrative bodies had rules and regulations covering medical standards and physical examinations for equipment operators. According to our research, air (FAA) has to most comprehensive regulatory regimen, followed by highways/commercial drivers (FMCSA), waterways (USCG), and then railroads. It should be noted that railroad operations in Canada have more comprehensive regulations, with respect to medical issues, than those operating in the United States. One Canadian railroad indicated that they currently apply the Canadian standards only to "safety-critical" employees involved in Canadian railroad operations. Documents associated with these regulations are appended behind **Tab 1** of this report.

It appears that most states have rules and procedures covering medical oversight of non-commercial drivers. Documents associated with oversight procedures for several states are appended behind **Tab 2** of this report.

First Deliverable (con't) - A summary medical conditions, including sleep disorders, that are covered by medical oversight rules, regulations, and/or procedures for employees involved in safety-sensitive work. (By mode of transportation)	Medical Conditions & Issues Covered/Considered																			
	Eye	Hearing	Ear, nose, throat, and equilibrium	Mental	Neurologic	Cardiovascular	General medical condition	Loss of limb/limb impairment	Diabetes	Respiratory dysfunction	Hypertension	Muscular/skeletal	Epilepsy	Drug use	Alcohol (ism) or abuse	Medications (prescription & OTC)	Digestive system	Infections	**Sleep disorders**	Other
Air (FAA)	X	X	X	X	X	X	X	G	X	X	X	X	X	X	X	X			**X**	X
Highway – Commercial drivers (FMCSA)	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X		**X**	
Waterways (USCG)	X	X		X	X	X			X	X	X		X	X	X	X	X	X	**P**	X
Railroads – US (FRA)	**X**	**X**												**X**	**X**	**SA**				
Railroads – Canada (Transport Canada)	X	X		X	X	X		X	X	X	X	X	X	X	X	X			**X**	

Table 2

P = Partial, G = General, SA = Safety Advisory

Keppen & Associates circulated a questionnaire to 8 freight and passenger railroads seeking information on their current medical oversight procedures. The survey questionnaire, cover letter and table of responses are appended behind **Tab 3** of this report. The questionnaires were followed up with telephone calls and, in some cases electronic messages, seeking cooperation with the survey process. Responses indicate railroads are complying with 49 CFR 240 requirements, screening locomotive engineers in accordance with vision and hearing standards as set forth in the regulation. Three railroad respondents indicated they had more extensive physical examination and medical oversight procedures. Research also indicates that air/pilots, highways/commercial drivers, waterways/mariners, and railroads in Canada/safety critical employees are, to varying degrees, questioned or examined for sleep disorder conditions. Documents associated with medical oversight procedures in these modes of transportation are appended behind **Tab 4** of this report. The most comprehensive policy and procedures related to sleep disorders are those covering airmen (FAA) and in the rules and regulations covering safety-critical positions in Canadian railroad operations. USGC medical forms only address sleepwalking.

There is anecdotal evidence (reports from railroad operating personnel) to suggest that some railroads have discontinued comprehensive periodic physical examinations for operating employees. Each railroad likely has somewhat different reasons for their decision, but the absence of a list of medical conditions to be monitored and a defined set of medical standards appears to have played a role in the decision making process.

Second Deliverable - A summary of policies and practices governing communications between private and transportation company physicians on employees with sleep disorders or other medical conditions that may impair their performance. (By mode of transportation)	**Communications between Private & Company Physicians**			
	Rule/Regulation covering general medical conditions	Rule/Regulation (exam form) specific to **sleep disorders**	**Rules/Regulations requiring applicant to waive privacy rights**	Sanctions against individuals for not or false reporting of medical conditions
Air (FAA)	X	X		X
Highway – Commercial drivers (FMCSA)	X	X		X
Waterways (USCG)	X	P		X
Railroads – US (FRA)	**P**			**P**
Railroads – Canada (Transport Canada)	X	X	X	X

Table 3

P = Partial

Keppen & Associates found that railroads operating in Canada have rules and procedures to facilitate communications between private and company physicians. Safety-critical employees are required to sign declarations as to the truthfulness of information provided to examining physicians and authorizations for those physicians to release information to the railroad's chief medical officer. A sample medical examination form is appended behind **Tab 5** of this report.

Forms used for medical examination of airmen **(FAA)** carry the following instructions for applicants:

> **"I hereby certify that all statements and answers provided by me on this application form are complete and true to the best of my knowledge, and I agree that they are to be considered part of the basis for issuance of any FAA certificate to me."**

Section 19 of the application form requires airmen to list all visit to health professionals within the last 3 years and to provide: dates, name, address, and type of health care professional, as well as the reason for the visit. Some AME's question the effectiveness of these procedures for addressing sleep disorders. (see survey response Tab 1)

Medical examination forms used for medical examination of commercial drivers **(FMCSA)** carry the following instructions for applicants:

> **"I certify that the above information is complete and true. I understand that inaccurate, false or missing information may invalidate the examination and my Medical Examiner's Certificate."**

Section 2. Health History – Asks applicant to state, yes or no, if they have: sleep disorders, pauses in breathing while asleep, daytime sleepiness, loud snoring.

Medical examination forms used (but not required) for medical examination of mariners **(USGC)** carry the following instructions for applicants:

> **"Disclosure of this information is voluntary, but failure to provide this information will result in <u>non-issuance of a license and/or merchant mariner's document."</u>**

These documents/forms are appended behind **Tab 6** of this report.

While the rules and regulations, and medical certification procedures for operators in these transportation modes, do not appear to mandate or encourage communication between private and company physicians, the sleep disorder/medical condition issues are addressed in the periodic medical examination procedures. Information must be disclosed to the examining health care professional, who, in turn, is required to take that information into consideration, prior to issuance of a medical certificate, which allows the individual to work. Rules for airmen (pilots) go one step further and require pilots to take themselves out of service if they have a medical condition (even a cold) that could affect their on-duty performance and the safety of flight operations.

Research into rules, regulations, policies, and/or practices governing "doctor-patient" privacy and privilege indicate a much different situation exists in Canada, as opposed to the United States. The Canadian system of socialized medicine, as well as government rules and regulations, facilitate private-company physician interaction, particularly in situations related to industry and public safety. Government rules and regulations in the United States (U.S.), including but not limited to Americans with Disabilities Act (ADA) and the Health Insurance Portability and Accountability Act (HIPAA), **preclude, or at the very least inhibit, <u>unauthorized</u> communications between private and company physicians regarding patient medical issues and information.** Also to be considered are the provisions for "occupational" and "total and permanent" disability determinations provided for in the Railroad Retirement Act. Documents related to doctor-patient privacy in the U.S. are appended behind **Tab 7** of this report.

Third Deliverable – An evaluation of which (combination of) procedure(s) has the greatest potential for reducing the safety risks associated with employees who suffer from sleep disorders.

Sleep disorders, like a number of other medical conditions that could cause loss of consciousness or otherwise impair performance, represent a serious safety risk. This evaluation of procedures for reducing the safety risks associated with employees who suffer from sleep disorders may also be germane to other medical conditions identified in **Table 2**.

Since medical conditions that impair performance and individuals that make up a workforce are both, to some extent, transient, managing the risks associated with these conditions is a process rather than a program.

In order to be effective the process would have to accomplish four basic tasks:

1. Identify conditions that represent a risk to safety (sleep disorders)
2. Identify employees that are affected by **performance impairing conditions (PIC's),** and develop an effective process for referral and evaluation
3. Eliminate safety risks by treating the conditions that affect performance
4. Monitor individuals to assure compliance with treatment regimens

1. Identify conditions that represent a risk to safety –

The National Transportation Safety Board has identified sleep disorders (affected employees) as a safety risk. At least two collaborative forums involving railroad management and labor (Work/Rest Review Task Force and North American Rail Alertness Partnership) have recognized sleep disorders as a serious issue that can affect performance and workplace safety. Many educational efforts arising from these collaborative efforts address sleep disorders; some may include information on other performance impairing conditions.

Education, particularly on conditions such as sleep disorders, which have very few observable symptoms that would distinguish a single episode of fatigue from a chronic condition, is important because it allows individuals to self identify reoccurring symptoms that may be indicators of sleep disorders. Educating managers on the signs and symptoms of sleep disorders would enhance the process because they may observe workers with reoccurring sleep disorder symptoms or receive reports from other managers (workers) of individuals that display symptoms of sleep disorders.

Educators generally agree that continuing education leads to continuing improvement. This would certainly be the case with sleep disorder conditions as the knowledge of the research and medical community on these issues is continually evolving.

Recommendations –

- **Review the list of medical conditions identified by the medical community and other modes of transportation as recognized safety risks (Table 2)**
- **Determine which, if any of these conditions should be given consideration**
- **Provide periodic education to workers and managers on such medical conditions**
- **Update educational programs to include current scientific/medical knowledge**

2. Identify employees that are affected by performance impairing conditions (PIC's) and develop an effective process for referral and evaluation –

There are three likely scenarios for identifying workers with sleep disorders (PIC's):

- Self-referral (this would require that the worker understands that (s)he has a problem)

- Referral by a supervisor, coworker, friend or family member (this would require that these parties know and understand the symptoms of sleep disorders, that a program exists, and that their referral will not adversely affect the worker)
- Identification of problem conditions during the course of a periodic medical examination procedure

Self-referrals will not occur if workers feel that they are risking income, their employment relationship with the railroad, or additional (excessive) medical expenses. They may not refer themselves simply because they do not know or understand that they have a problem. And, they may not refer themselves because they believe there problem is small or that they can work through it. If self-referral is the only method relied upon for identification of with individuals with sleep disorders, many individuals that represent a safety risk may not be identified.

Referrals by other parties add an additional level of oversight that may allow individuals with potential conditions may be identified, diagnosed, and treated. Education would have to be extended to include those parties that would participate in the referral network. In the case of coworkers, friends and family members, referrals would not likely occur if doing so jeopardizes the workers income or employment. There are clear benefits to developing an extended referral network, but doing so would add costs to the process.

Identification of problem conditions during the course of a periodic medical examination procedure is a key component of a successful identification process. Just as medical knowledge changes over time, so do individuals. The person that is healthy and fit today may not be tomorrow. A condition that represents a small safety risk one day may represent a significant risk the next. The point is, when individuals do not recognize the potential risk of a medical condition that could affect performance and safety, for whatever reason, it does not get diagnosed or treated and, therefore, continues to represent a risk to workplace and public safety. Many health care plans cover period physical examinations and treatments for sleep disorders, thereby, minimizing costs to the railroads and to individual employees.

There are a number of questions (partial list) that may need to be answered in the process of establishing an effective periodic medical examination program:

- Who would be subject to periodic medical exams?
- What would be covered in the examination procedure?
- What medical standards would apply?
- Who would conduct the examinations?
- What would be communicated to the railroads' medical departments?
- How would identified risk conditions affect the income/employment of workers?
- Are medical service providers sufficiently educated on targeted issues, conditions and appropriate procedures?
- Are there procedures for dealing with disputes (differences of opinion) that are acceptable to affected parties?
- The extent of healthcare coverage for sleep disorder diagnosis/treatment

Recommendations –

- **Develop a process that includes all forms of referral and provide the support necessary to ensure its effectiveness**
- **Develop a policy that protects income and employment for workers who seek help for conditions that could pose a safety risk and comply with prescribed treatment regimens (ensure that workers and supervisors know and understand the policy)**
- **Extend educational efforts to include those parties that could contribute to the referral process**
- **Make a clear statement (top management) on the objectives of the railroad's medical oversight and assistance program**
- **Develop an effective periodic medical examination process**
    - **Medical standards that are generally accepted in the medical community**
    - **Privacy of medical information protected**
    - **Referral network to ensure proper diagnosis and treatment**
    - **An appropriate forum for resolving differences of opinion on medical issues**
- **Have a process for continual evaluation of program content and effectiveness**

3. Eliminate safety risks by treating the conditions that affect performance –

Workers and managers in every workforce have the potential to be affected by one or more performance impairing medical conditions; they are human beings. Individuals with medical conditions that are not identified, properly diagnosed and treated represent a risk to themselves, as well as the safety and welfare of their families, their coworkers, the company they work for, and the general public. There is valid statistical evidence that a meaningful percentage of the general population is affected by sleep disorders. Railroad workers are members of that population. The fact that many of them work shifts or on-call and are, at times, required to work extended shifts, increases the importance of obtaining quality sleep during off-duty intervals that are sometimes limited by the demands of service. Sleep disorders can have a profound affect on the quantity and quality of sleep affected individuals obtain.

Medical conditions that affect performance are treatable; however, they cannot be treated if they are not identified, or if health care providers are not properly trained and equipped to deal with the identified condition. These are issues that must be considered when processes are being developed.

The good news is that there is evidence to suggest that many railroad workers have been successfully treated for sleep disorders and other medical conditions that could affect performance (heart conditions, blood pressure, etc). Many of the affected individuals never missed a day of work and they remain productive members of the workforce, to this day.

Recommendations –

- **Build on the success experienced with treatments for other medical conditions**
- **Involve company medical personnel in the process**
- **Seek the involvement of all workers and supervisor in supporting treatment efforts**
- **Reassure workers that the objective of the process is to ensure health and safety, not to remove them from the workplace**

4. Monitor individuals to assure compliance with treatment regimens

It is not possible to know how effective a treatment regimen is without a process for monitoring it. Fortunately, technologies for monitoring medical conditions continue to evolve and advance. One example is the new CPAP devise (for treatment of sleep apnea) that can be remotely monitored by a health care professional to ensure the devise is operable and in use by the individual. There are other examples, but the important point is that compliance with treatment regimens can, and should, be tracked.

One commonly used method for tracking the use and effectiveness of a treatment program is a requirement for more frequent visits to the treating health care providers. Businesses have used these procedures for years to assure that medical conditions remain under control and do not affect workplace safety. It is quite common to increase the frequency of periodic medical examinations for workers as they age, even though there may be no known medical issues. The logic being, as people age, they are more likely to develop medical issues that could affect their health and workplace safety. As an example, new rules governing medical examinations for railroad workers in safety critical positions in Canada require employees to have a comprehensive physical examination once every 5 years up to age 40 and once every 3 years thereafter; more frequent exams may be required, as warranted, on an individual basis.

Recommendations –

- **Follow the advice of the medical community on the need for, and best methods of, monitoring compliance**
- **Emphasize the individual benefits of a treatment-monitoring program**
- **Define the sanctions for non-compliance**

Prescription and non-prescription drugs

The use of prescription and non-prescription drugs by employees performing safety-sensitive tasks is a serious matter. As such, heath care providers prescribing medications to control medical conditions that could impair performance should know and understand the work tasks and work environment of the individuals for whom they are writing prescriptions. It is also important that individuals who are taking prescription drugs to follow their doctors instructions and

to take the recommended dosages. Safeguards build into the system for delivery of prescription drugs provide a level of protection from abuse of prescription drugs.

Non-prescription (OTC) drugs may represent a significant risk to safety. A wide range of drugs, many with potentially adverse side effects, are readily available for purchase. OTC's that sedate, impair coordination, cause drowsiness, or blur vision represent a clear safety risk to transportation operations. It is, therefore, important that people performing safety-sensitive tasks take great care in the use of OTC's; read the labels, use only in recommended dosages, and remove themselves from performing safety-sensitive tasks, if they have ingested OTC's that could impair performance.

Our research indicates that every mode of transportation considers the (mis) use of both prescription and OTC's a serious matter. We see three basic strategies for addressing the use of medications.

- Educate the medical community on the nature of work tasks so inappropriate medications are not prescribed.

- Require applicants for medical certification to disclose all medications currently being taken. Allow physicians (personal & company) to determine if medications represent a risk to safety.

- Educate workers on the risks associated with the use of prescription and OTC's medications while they are on-duty or subject to duty.

See medical examination forms for air, highways, and marine behind **Tab 5.** FRA's Safety Advisory 98-3 and FAA's advisory on OTC's are appended behind **Tab 10** of this report.

This evaluation and recommendations begs the larger question; what is the best method for achieving the objective? Is it regulations, unilateral action by employers, stakeholder collaborations, or is it a combination of these strategies? Experience suggests that each of these proposed strategies has strengths and weaknesses. While it is impossible to predict which strategies would ultimately yield the best outcome, and, given the NTSB's view as to the immediacy of the threat posed by untreated sleep disorders (PIC's), decision makers may wish to consider the following:

Regulations		Unilateral Action by Employers		Stakeholder Collaborations	
Advantages	Disadvantages	Advantages	Disadvantages	Advantages	Disadvantages
Compels action Sets dates for compliance Sets standards for compliance Imposes sections for non-compliance (incentive to comply) Creates uniformity	Issue must meet criteria for imposition of regulations Can be a slow, tedious process Outcomes are subject to the political process and are, therefore, uncertain Regulations are rigid, unable to adjust to evolving knowledge and technology Can be costly and yet yield very poor results Leaves many issues without solutions	Employer has total control over the nature and scope of program Can be implemented on a timetable determined by the employer (quickly) Establishes company standards and compels action Costs are reviewed and considered as the program is constructed Outcomes are under the control of the railroad company	Programs may not address all significant issues Programs may not be developed and implemented within a reasonable timeframe Standards may not be acceptable to other stakeholders (disputes) Likely to increase the adversarial nature of relationships Outcomes may be acceptable to employer but not to other stakeholders	Solutions address the concerns of involved stakeholder parties Solutions are more likely to address public safety concerns Tend to eliminate adversarial relationships Issues can be addressed in a timely manner Solutions can be more comprehensive in nature, reaching issues that regulations and unilateral actions cannot address	Can be a time-consuming and expensive process Would likely occur separately on each railroad property Solutions may vary widely in content and effectiveness There are few, if any, mechanisms to compel activity

Table 4

The list is by no means complete; however, it should offer insights into barriers that inhibit solutions. It would seem that stakeholders should look for a **combination of strategies** that would:

- Bring them together to form an understanding of which medical conditions represent a threat to safety and what level of threat they represent
- Help them expedite the implementation of effective countermeasures (processes could be phased in)
- Help them formulate strategies for monitoring and measuring program effectiveness
- Guide ongoing efforts so that the most recent scientific and medical knowledge is incorporated into the process

Appendix 1

Subpart B—First-Class Airman Medical Certificate

§ 67.101 Eligibility.

To be eligible for a first-class airman medical certificate, and to remain eligible for a first-class airman medical certificate, a person must meet the requirements of this subpart.

§ 67.103 Eye.

Eye standards for a first-class airman medical certificate are:

(a) Distant visual acuity of 20/20 or better in each eye separately, with or without corrective lenses. If corrective lenses (spectacles or contact lenses) are necessary for 20/20 vision, the person may be eligible only on the condition that corrective lenses are worn while exercising the privileges of an airman certificate.

(b) Near vision of 20/40 or better, Snellen equivalent, at 16 inches in each eye separately, with or without corrective lenses. If age 50 or older, near vision of 20/40 or better, Snellen equivalent, at both 16 inches and 32 inches in each eye separately, with or without corrective lenses.

(c) Ability to perceive those colors necessary for the safe performance of airman duties.

(d) Normal fields of vision.

(e) No acute or chronic pathological condition of either eye or adnexa that interferes with the proper function of an eye, that may reasonably be expected to progress to that degree, or that may reasonably be expected to be aggravated by flying.

(f) Bifoveal fixation and vergence-phoria relationship sufficient to prevent a break in fusion under conditions that may reasonably be expected to occur in performing airman duties. Tests for the factors named in this paragraph are not required except for persons found to have more than 1 prism diopter of hyperphoria, 6 prism diopters of esophoria, or 6 prism diopters of exophoria. If any of these values are exceeded, the Federal Air Surgeon may require the person to be examined by a qualified eye specialist to determine if there is bifoveal fixation and an adequate vergence-phoria relationship. However, if otherwise eligible, the person is issued a medical certificate pending the results of the examination.

§ 67.105 Ear, nose, throat, and equilibrium.

Ear, nose, throat, and equilibrium standards for a first-class airman medical certificate are:

(a) The person shall demonstrate acceptable hearing by at least one of the following tests:

(1) Demonstrate an ability to hear an average conversational voice in a quiet room, using both ears, at a distance of 6 feet from the examiner, with the back turned to the examiner.

(2) Demonstrate an acceptable understanding of speech as determined by audiometric speech discrimination testing to a score of at least 70 percent obtained in one ear or in a sound field environment.

(3) Provide acceptable results of pure tone audiometric testing of unaided hearing acuity according to the following table of worst acceptable thresholds, using the calibration standards of the American National Standards Institute, 1969 (11 West 42d Street, New York, NY 10036):

Frequency (Hz)	500 Hz	1000 Hz	2000 Hz	3000 Hz
Better ear (Db)	35	30	30	40
Poorer ear (Db)	35	50	50	60

(b) No disease or condition of the middle or internal ear, nose, oral cavity, pharynx, or larynx that—

(1) Interferes with, or is aggravated by, flying or may reasonably be expected to do so; or

(2) Interferes with, or may reasonably be expected to interfere with, clear and effective speech communication.

(c) No disease or condition manifested by, or that may reasonably be expected to be manifested by, vertigo or a disturbance of equilibrium.

§ 67.107 Mental.

Mental standards for a first-class airman medical certificate are:

(a) No established medical history or clinical diagnosis of any of the following:

(1) A personality disorder that is severe enough to have repeatedly manifested itself by overt acts.

(2) A psychosis. As used in this section, "psychosis" refers to a mental disorder in which:

(i) The individual has manifested delusions, hallucinations, grossly bizarre or disorganized behavior, or other commonly accepted symptoms of this condition; or

(ii) The individual may reasonably be expected to manifest delusions, hallucinations, grossly bizarre or disorganized behavior, or other commonly accepted symptoms of this condition.

(3) A bipolar disorder.

(4) Substance dependence, except where there is established clinical evidence, satisfactory to the Federal Air Surgeon, of recovery, including sustained total abstinence from the substance(s) for not less than the preceding 2 years. As used in this section—

(i) "Substance" includes: Alcohol; other sedatives and hypnotics; anxiolytics; opioids; central nervous system stimulants such as cocaine, amphetamines, and similarly acting sympathomimetics; hallucinogens; phencyclidine or similarly acting arylcyclohexylamines; cannabis; inhalants; and other psychoactive drugs and chemicals; and

(ii) "Substance dependence" means a condition in which a person is dependent on a substance, other than tobacco or ordinary xanthine-containing (e.g., caffeine) beverages, as evidenced by—

(A) Increased tolerance;

(B) Manifestation of withdrawal symptoms;

(C) Impaired control of use; or

(D) Continued use despite damage to physical health or impairment of social, personal, or occupational functioning.

(b) No substance abuse within the preceding 2 years defined as:

(1) Use of a substance in a situation in which that use was physically hazardous, if there has been at any other time an instance of the use of a substance also in a situation in which that use was physically hazardous;

(2) A verified positive drug test result acquired under an anti-drug program or internal program of the U.S. Department of Transportation or any other Administration within the U.S. Department of Transportation; or

(3) Misuse of a substance that the Federal Air Surgeon, based on case history and appropriate, qualified medical judgment relating to the substance involved, finds—

(i) Makes the person unable to safely perform the duties or exercise the privileges of the airman certificate applied for or held; or

(ii) May reasonably be expected, for the maximum duration of the airman medical certificate applied for or held, to make the person unable to perform those duties or exercise those privileges.

(c) No other personality disorder, neurosis, or other mental condition that the Federal Air Surgeon, based on the case history and appropriate, qualified medical judgment relating to the condition involved, finds—

(1) Makes the person unable to safely perform the duties or exercise the privileges of the airman certificate applied for or held; or

(2) May reasonably be expected, for the maximum duration of the airman medical certificate applied for or held, to make the person unable to perform those duties or exercise those privileges.

§ 67.109 Neurologic.

Neurologic standards for a first-class airman medical certificate are:

(a) No established medical history or clinical diagnosis of any of the following:

(1) Epilepsy;

(2) A disturbance of consciousness without satisfactory medical explanation of the cause; or

(3) A transient loss of control of nervous system function(s) without satisfactory medical explanation of the cause.

(b) No other seizure disorder, disturbance of consciousness, or neurologic condition that the Federal Air Surgeon, based on the case history and appropriate, qualified medical judgment relating to the condition involved, finds—

(1) Makes the person unable to safely perform the duties or exercise the privileges of the airman certificate applied for or held; or

(2) May reasonably be expected, for the maximum duration of the airman medical certificate applied for or held, to make the person unable to perform those duties or exercise those privileges.

§ 67.111 Cardiovascular.

Cardiovascular standards for a first-class airman medical certificate are:

(a) No established medical history or clinical diagnosis of any of the following:

(1) Myocardial infarction;

(2) Angina pectoris;

(3) Coronary heart disease that has required treatment or, if untreated, that has been symptomatic or clinically significant;

(4) Cardiac valve replacement;

(5) Permanent cardiac pacemaker implantation; or

(6) Heart replacement;

(b) A person applying for first-class medical certification must demonstrate an absence of myocardial infarction and other clinically significant abnormality on electrocardiographic examination:

(1) At the first application after reaching the 35th birthday; and

(2) On an annual basis after reaching the 40th birthday.

(c) An electrocardiogram will satisfy a requirement of paragraph (b) of this section if it is dated no earlier than 60 days before the date of the application it is to accompany and was performed and transmitted according to acceptable standards and techniques.

§ 67.113 General medical condition.

The general medical standards for a first-class airman medical certificate are:

(a) No established medical history or clinical diagnosis of diabetes mellitus that requires insulin or any other hypoglycemic drug for control.

(b) No other organic, functional, or structural disease, defect, or limitation that the Federal Air Surgeon, based on the case history and appropriate, qualified medical judgment relating to the condition involved, finds—

(1) Makes the person unable to safely perform the duties or exercise the privileges of the airman certificate applied for or held; or

(2) May reasonably be expected, for the maximum duration of the airman medical certificate applied for or held, to make the person unable to perform those duties or exercise those privileges.

(c) No medication or other treatment that the Federal Air Surgeon, based on the case history and appropriate, qualified medical judgment relating to the medication or other treatment involved, finds—

(1) Makes the person unable to safely perform the duties or exercise the privileges of the airman certificate applied for or held; or

(2) May reasonably be expected, for the maximum duration of the airman medical certificate applied for or held, to make the person unable to perform those duties or exercise those privileges.

§ 67.115 Discretionary issuance.

A person who does not meet the provisions of §§ 67.103 through 67.113 may apply for the discretionary issuance of a certificate under § 67.401.

Sec. 61.23 - Medical certificates: Requirement and duration.

(a) *Operations requiring a medical certificate.* Except as provided in paragraph (b) of this section, a person:

(1) Must hold a first-class medical certificate when exercising the privileges of an airline transport pilot certificate;

(2) Must hold at least a second-class medical certificate when exercising the privileges of a commercial pilot certificate; or

(3) Must hold at least a third-class medical certificate --

(i) When exercising the privileges of a private pilot certificate;

(ii) When exercising the privileges of a recreational pilot certificate;

(iii) Except as specified in paragraph (b)(3) of this section, when exercising the privileges of a student pilot certificate;

(iv) When exercising the privileges of a flight instructor certificate, except for a flight instructor certificate with a glider category rating, if the person is acting as the pilot in command or is serving as a required pilot flight crewmember; or

(v) Except for a glider category rating or a balloon class rating, prior to taking a practical test that is performed in an aircraft for a certificate or rating at the recreational, private, commercial, or airline transport pilot certificate level.

(b) *Operations not requiring a medical certificate.* A person is not required to hold a medical certificate:

(1) When exercising the privileges of a pilot certificate with a glider category rating;

(2) When exercising the privileges of a pilot certificate with a balloon class rating;

(3) When exercising the privileges of a student pilot certificate while seeking a pilot certificate with a glider category rating or balloon class rating;

(4) When exercising the privileges of a flight instructor certificate with a glider category rating;

(5) When exercising the privileges of a flight instructor certificate if the person is not acting as pilot in command or serving as a required pilot flight crewmember;

(6) When exercising the privileges of a ground instructor certificate;

(7) When serving as an examiner or check airman during the administration of a test or check for a certificate, rating, or authorization conducted in a flight simulator or flight training device; or

(8) When taking a test or check for a certificate, rating, or authorization conducted in a flight simulator or flight training device.

(c) *Duration of a medical certificate.* (1) A first-class medical certificate expires at the end of the last day of --

(i) The sixth month after the month of the date of examination shown on the certificate for operations requiring an airline transport pilot certificate;

(ii) The 12th month after the month of the date of examination shown on the certificate for operations requiring a commercial pilot certificate or an air traffic control tower operator certificate; and

(iii) The period specified in paragraph (c)(3) of this section for operations requiring a recreational pilot certificate, a private pilot certificate, a flight instructor certificate (when acting as pilot in command or a required pilot flight crewmember in operations other than glider or balloon), or a student pilot certificate.

(2) A second-class medical certificate expires at the end of the last day of --

(i) The 12th month after the month of the date of examination shown on the certificate for operations requiring a commercial pilot certificate or an air traffic control tower operator certificate; and

(ii) The period specified in paragraph (c)(3) of this section for operations requiring a recreational pilot certificate, a private pilot certificate, a flight instructor certificate (when acting as pilot in command or a required pilot flight crewmember in operations other than glider or balloon), or a student pilot certificate.

(3) A third-class medical certificate for operations requiring a recreational pilot certificate, a private pilot certificate, a flight instructor certificate (when acting as pilot in command or a required pilot flight crewmember in operations other than glider or balloon), or a student pilot certificate issued --

(i) Before September 16, 1996, expires at the end of the 24th month after the month of the date of examination shown on the certificate; or

(ii) On or after September 16, 1996, expires at the end of:

(A) The 36th month after the month of the date of the examination shown on the certificate if the person has not reached his or her 40th birthday on or before the date of examination; or

(B) The 24th month after the month of the date of the examination shown on the certificate if the person has reached his or her 40th birthday on or before the date of the examination.

[Code of Federal Regulations]
[Title 14, Volume 2]
[Revised as of January 1, 2002]
From the U.S. Government Printing Office via GPO Access
[CITE: 14CFR67.405]

TITLE 14--AERONAUTICS AND SPACE

CHAPTER I--FEDERAL AVIATION ADMINISTRATION, DEPARTMENT OF TRANSPORTATION
(Continued)

PART 67--MEDICAL STANDARDS AND CERTIFICATION--Table of Contents

Subpart E--Certification Procedures

Sec. 67.405 Medical examinations: Who may give.

(a) First-class. Any aviation medical examiner who is specifically designated for the purpose may give the examination for the first-class medical certificate. Any interested person may obtain a list of these aviation medical examiners, in any area, from the FAA Regional Flight Surgeon of the region in which the area is located.

(b) Second- and third-class. Any aviation medical examiner may give the examination for the second- or third-class medical certificate. Any interested person may obtain a list of aviation medical examiners, in any area, from the FAA Regional Flight Surgeon of the region in which the area is located.

Keppen & Associates
1603 Honeysuckle Ridge
Annapolis, Maryland 21401-6425

Improved Operational Safety Through – Fatigue Avoidance & Enhanced Alertness Strategies

April 30, 2003 (original letter January 2003)

Mr. Jon L. Jordan, MD, JD
Federal Air Surgeon
Federal Aviation Administration
AFS-20, Room 825
800 Independence Avenue, SW
Washington, DC 20591

Dear Dr. Jordan:

I am conducting research on the subject of sleep disorders and how regulated modes of transportation screen equipment operators, commercial airline pilots in the case of the airline industry, for sleep disorders.

My research on the FAA and CAMI web sites, and conversations with representatives from both, indicate that there are procedures in place to identify applicants for certification that may suffer from a sleep disorder. I was informed that polysomnigrams are administered during the medical examination procedures conducted on individuals seeking their initial pilot's certification. If the evaluation determines that the individual has a sleep disorder, medical certification is withheld until such time as the condition is successfully treated. The issue that is unclear to me is the procedures followed subsequent to initial certification to assure that pilots who may have developed a sleep disorder are identified, diagnosed and treated, before they represent a safety risk.

My Questions are as follows:

1. When, if ever, are polysomnigrams used to determine if pilots seeking certification suffer from sleep disorders?
2. If a pilot passes the original screening procedures for sleep disorders, but later in his/her career develops a disorder, how would he/she be identified before they represent a safety risk?
3. Are AME's or other physicians required or encouraged to use other sleep disorder screening tools/procedures to detect the likelihood of a disorder, and what are those tools/procedures?
4. Do government regulations prescribe procedures for withholding pilot certification in the case of a pilot with a sleep disorder that has not been, or cannot be, successfully treated?

Thank your for your time and attention to these questions. Any information and/or supporting documents you can provide will be greatly appreciated.

Sincerely,

W. C. Keppen

William C. Keppen
President

Phone/Fax: 410 573-9094 **Email: bkeppen@msn.com**

U.S. Department
of Transportation
**Federal Aviation
Administration**

800 Independence Ave., S.W.
Washington, D.C. 20591

APR 30 2003

Mr. William C. Keppen
President, Keppen & Associates
1603 Honeysuckle Ridge
Annapolis, MD 21401

Dear Mr. Keppen:

Thank you for your letter inquiring about certification of pilots who may have a sleep disorder. Applicants for airman medical certification are required to complete FAA Form 8500-8 and undergo an examination by an aviation medical examiner. The examiner performs various medical tests including an electrocardiogram at prescribed intervals for applicants seeking first class certification.

We do not require screening polysomnograms as a routine element for airman medical certification. However, if it is determined during the examination process, that the airman has an established diagnosis or has clinical symptoms suggestive a sleep disorder, the aviation medical examiner is instructed to defer issuance of the medical certificate.

The airman would then be required to submit all medical information pertaining to their sleep disorder, including medical information relative to treatment and their response to therapy. The agency then reviews the information to determine if the medical condition or treatment adversely effects safety. If we determine that the status of the condition would not negatively impact safety, the airman is given an authorization for special issuance and is certificated. This process generally requires the airman to submit periodic medical information to justify continuance of their medical certification. If, however, we determined that the medical condition or treatment was incompatible with aviation safety, the agency can deny medical certification. The specific Part 67 regulation would depend on the medical findings of the individual case being evaluated.

The Federal Aviation Regulations that define this process are found in 14 CFR Part 67. In addition, 14 CFR Part 61.53, Prohibition on Operations During Medical Deficiency, prohibit airmen from performing airmen duties if they know or have reason to know that they are unable to meet the requirements for medical certification.

I hope this answers your questions regarding our process for airman medical certification.

Thank you for your interest is aviation safety.

Sincerely,

Jon L. Jordan, M.D.
Federal Air Surgeon

14 CFR - CHAPTER I - PART 61

§ 61.53 - Prohibition on operations during medical deficiency.

(a) *Operations that require a medical certificate.* Except as provided for in paragraph (b) of this section, a person who holds a current medical certificate issued under part 67 of this chapter shall not act as pilot in command, or in any other capacity as a required pilot flight crewmember, while that person:

(1) Knows or has reason to know of any medical condition that would make the person unable to meet the requirements for the medical certificate necessary for the pilot operation; or

(2) Is taking medication or receiving other treatment for a medical condition that results in the person being unable to meet the requirements for the medical certificate necessary for the pilot operation.

(b) *Operations that do not require a medical certificate.* For operations provided for in § 61.23(b) of this part, a person shall not act as pilot in command, or in any other capacity as a required pilot flight crewmember, while that person knows or has reason to know of any medical condition that would make the person unable to operate the aircraft in a safe manner.

William C. Keppen, Pres
Keppen & Associates
1603 Honeysuckle Ridge
Annapolis, Maryland 21401-6425
Improved Operational Safety Through – Fatigue Avoidance & Enhanced Alertness Strategies

March 21, 2003

«First_name» «Initial» «Last_name», «Title»
«Address»
«Address_1»
«City», «State» «Zip»

Dear Dr. «Last_name»:

The National Transportation Safety Board (NTSB) found the "probable cause" of a head-on collision of two CN/IC freight trains was, "... crewmembers' fatigue, which was primarily due to the engineer's untreated and the conductor's insufficiently treated obstructive sleep apnea." The following recommendations were issued to the Federal Railroad Administration (FRA):

1. **Develop a standard medical examination form that includes questions regarding sleep problems and require that the form be used**, pursuant to 49 Code of Federal Regulations Part 240, to determine the medical fitness of locomotive engineers; the form should also be available for use to determine the medical fitness of other employees in safety-sensitive positions.

2. **Require that any medical condition that could incapacitate, or seriously impair the performance** of an employee in a safety-sensitive position **be reported to the railroad** in a timely manner.

3. Require that, when a railroad becomes aware that an employee in a safety-sensitive position has a potentially incapacitating or performance-impairing medical condition, **the railroad prohibit that employee from performing any safety-sensitive duties** until the railroad's designated physician determines that the employee can continue to work safely in a safety-sensitive position.

Keppen & Associates is conducting an investigation into methods and procedures used by other modes of transportation to monitor and regulate equipment operators (pilots) who have medical conditions that could impair performance.

A review of 14 CFR § 67, application forms for Airman Medical Certification, and medical examination forms, finds that most medical conditions are given close scrutiny, while sleep disorders (apnea) are handled differently under § 67.113 - General medical condition. It appears the process relies heavily on pilot self-reports and/or interaction between AME's and a pilot's personal physician to identify and monitor affected individuals.

We have developed a brief questionnaire to gain insights into the effectiveness of the existing examination forms, and procedures, for evaluating and monitoring pilots with sleep disorder conditions that may impair their performance.

You are one of twenty AME's selected to receive the questionnaire because you also hold a pilots license and, as such, are familiar with the processes from two different perspectives. This information may be extremely helpful in formulating policies that deal effectively with the issues mentioned above for train operating crews.

Your cooperation in completing and returning the enclosed brief questionnaire is important and deeply appreciated.

Sincerely,

William C. Keppen

Encl.

QUESTIONNAIRE ON THE SUBJECT OF -
IDENTIFICATION AND MONITORING OF MEDICAL CONDITIONS
THAT IMPAIR OPERATOR PERFORMANCE
(DTFR53-03-00101)

1. Do you currently perform Airman Medical Certification examinations?
   - ☐ Yes
   - ☐ No

2. Do you find current application and examination forms sufficient for gathering information on (potential) sleep disorder conditions of applicants?
   - ☐ Yes
   - ☐ No

3. Have you experienced an applicant for (re)certification self-reporting a (potential) sleep disorder condition?
   - ☐ Yes
   - ☐ No

4. Have you become aware of an applicant's sleep disorder condition by some other means?
   - ☐ Yes – If yes, how?
   - ☐ No

5. Have you become aware of sleep disorder condition as a result of consultation with an applicant's personal physician (health care provider)?
   - ☐ Yes
   - ☐ No

6. Are there any other medical conditions that could impair the performance of pilots that are not given adequate attention by existing medical forms and procedures?
   - ☐ Yes – If yes, describe
   - ☐ No

Your comments:

The source of information provided will be kept strictly confidential.

Please fax completed questionnaires to: 410 573-9094. Thanks again.

This questionnaire was distributed to 20 AME's with a cover letter requesting their response be returned by facsimile to Keppen & Associates. (One envelope was returned, undeliverable.)

Questions	Yes	No
Do you currently perform Airman Medical Certification examinations?	7	
Do you find current application and examination forms sufficient for gathering information on (potential) sleep disorder conditions of applicants?	4	3
Have you experienced an applicant for (re)certification self-reporting a (potential) sleep disorder condition?	3	4
Have you become aware of an application's sleep disorder condition by some other means?		7
Have you become aware of sleep disorder conditions as a result of consultation with an applicant's personal physician (health care provider)?		7
Are there any other medical conditions that could impair the performance of pilots that are not given adequate attention by existing medical forms and procedures?	1	6

Comments:

1) Applicants are required to report all contacts with physicians, and that is the primary source of medical information. AME's have no authority to contact pilots' personal physicians without specific permission. There really is no other way to learn about conditions, like sleep apnea, with no physical sings. The system works.

2) Pilots are required to report all medical treatments and any symptoms of loss of consciousness on their form already.

3) Ear problems, such as difficulty in equalizing pressure when flying or diving – not sufficiently addressed in form 8500.

FAA Medical Certification | Special Issuance

Pilots with disqualifying medical conditions are often eligible for waivers through Special Issuance medical certification.
Federal Aviation Regulation (FAR) 67.401
Typically this requires extensive documentation and decisions are made on a case by case basis.

The FAA also requires Special Issuance for many medical conditions not specifically listed as disqualifying in the FAR's. Some conditions require self-grounding while others do not.

The conditions listed below are specifically listed in the FAR's as disqualifying, yet many of these conditions still permit Special Issuance medical certification. Contact us to determine eligibility.

- **Coronary heart disease**
- **Angina**
- **Myocardial infarction**
- **Heart replacement**
- **Cardiac valve replacement**
- **Permanent cardiac pacemakers**
- **Diabetes**
- **Psychosis**
- **Bipolar disorder**
- **Severe personality disorder**
- **Substance dependence or abuse**
- **Epilepsy**
- **Disturbance of consciousness**
- **Transient loss of nervous system function**

Medical Examiners are now encouraged to

renew special issuance certificates for 20 medical conditions.

This initiative is for 3rd CLASS CERTIFICATION ONLY and is NOT for first-time Special Issuance applicants. Airman must have a letter from the FAA which authorizes AME Special Issuance renewal.

THE FAA MUST GRANT THE INITIAL MEDICAL CERTIFICATION

Special Issuance may be renewed for the following medical conditions:

- **Urolithiasis**
- **Prostate cancer**
- **Heart murmur**
- **Asthma**
- **Arthritis**
- **Hypothyroidism**
- **Hyperthyroidism**
- **Diseases continued:**
- **Migraine syndrome**
- **Colitis (Ulcerative or Crohn's)**
- **Glaucoma**
- **Paroxysmal Atrial Fibrillation**
- **Diet-controlled Diabetes Mellitus**
- **Hepatitis C**
- **Diseases continued:**
- **Paroxysmal Atrial Tachycardia**
- **Lymphoma**
- **Hodgkin's Lymphoma**
- **Sleep Apnea**
- **Colon Cancer**
- **Chronic Obstructive Pulmonary Disease**
- **Chronic Lymphocytic Leukemia** MORE

Pilot Medical Solutions has helped thousands of pilots with FAA Special Issuance medical certification.

We work directly with your physicians and the FAA to assure compliance with FAA protocol and to resolve complex aeromedical certification issues quickly.

Contact us at 800-699-4457 or via E-Mail to confidentially discuss the details of your case and

FAA Medical Certification | Sleep Conditions

The initial presentation of a sleep disorder requires an evaluation be performed, by your private physician, to establish eligibility for FAA medical certification.

This includes but is not limited to:

- **Insomnia**
- **Sleep Apnea**
- **Narcolepsy**
- **Restless Leg Syndrome**
- **The use of sleep aiding medication or devices.**

Evaluations must be accomplished in compliance with a specific FAA protocol.

Authorization should be obtained from the Aeromedical Certification Division of the FAA in Oklahoma City.

SLEEP APNEA EVALUATION SPECIFICATIONS

Obstructive Sleep Apnea - Review of multiple specialists reports and medical publications indicate sleep apnea is a condition with significant complications such as, daytime hypersomnolence, also referred to as Excessive Daytime Sleepiness (EDS), cardiac dysrhythmia personality disturbances and significant hypertension. Those complications could present a risk to flying safety. The AMCD staff physician make the following recommendation:

I. Initial work-up should include:

a. Sleep studies (overnight polysomnography). The evaluator should comment on any cardiovascular or psychological aberrations and provide the results of any test deemed necessary.

b. Maintenance of Wakefulness Test (MWT), after therapy has been initiated. If a favorable current status report indicating effective treatment such as CPAP or surgery has been provided with the initial report, a current MWT will not be required.

II. Acceptable treatment includes:

a. SURGERY
If surgery has been the treatment of choice, documentation of satisfactory results, to include post-op sleep study, current status report or a MWT evaluation should be done as soon as surgical wounds have healed or as recommended by the treating physician. If the treatment is successful, no follow-up is required.

b. CPAP
A post treatment sleep study, MWT, or current status report should be provided to document effective treatment. Current status reports should be provided annually thereafter.

III. Unacceptable treatment includes:

a. Tennis balls in sleep shirt.

b. Weight loss only.

Difficult cases or cases denied seeking reconsideration may require review by a FAA specialist consultant.

IV. Suggested protocol for MWT:

a. No dietary or medication manipulation is needed.

b. The MWT consists of four twenty-minute test periods at two hour intervals (e.g., 9:00 a.m., 11:00 a.m., 1:00 p.m., and 3:00 p.m.)

c. Patients should be monitored in the standard polysomnographic manner (central and occipital EEG, digastric EMG, and eye movement recorder).

d. Patients be dressed and sitting semi-recumbent on a bed in a dark room.

e. Patients are asked to remain awake, but not to use extraordinary measures such as face slapping or singing.

f. The endpoint of each test period is either a sleep (three consecutive 30-s epochs or Stage I of any single 30-s epoch of Stages 2, 3, 4, or REM) or the end of the twenty-minute time period. The patient is then asked to stay awake until the next test.

Although the member often becomes aware of the shortcomings in performance and responds by trying to increase self-motivation and effort, performance improvement is short-lived. He/she may perceive the operation as more stressful and tiring as the effort continues. Ultimately, the crewmember's motivation to perform well and avoid risks erodes.

No individual is immune to the effects of sleep loss and fatigue, although there are individual differences in the ability to tolerate sleep loss. After one night of sleep loss, half of healthy individuals perform reasonably well, but the remainder exhibit moderate to severe performance deficits. After 36 hours, there is little difference between individuals in their ability to perform-all have severe performance deficits.

The ability of a fatigued crewmember to self-assess alertness is also limited. In fatigued individuals, initial good performance early on may give a false sense of security. As time goes by, performance deteriorates. A crewmember is also more likely to overestimate his or her ability to perform if asked about being tired or able to perform. Relief from other crewmembers when signs of fatigue are observed (eyelids drooping, yawning, irritability, forgetfulness) is crucial.

Every flight operation has its own tempo, time required to perform the major tasks, personnel structure, and number of personnel. There are a number of different aerospace scenarios, ranging from mundane short- and long-haul ferrying operations, to combat and space flight. Prevailing cultural attitudes may pose a hindrance to adequate resting and napping. Our society now sleeps about an hour less on average than our ancestors a century ago. Sleep and the demand for productivity are at odds, and adult napping is virtually frowned upon.

Extensive government research into fatigue has yielded important information about techniques to improve performance and safety during prolonged and/or night-time flying. Basic principles to keep in mind are listed below. Naps are defined as intentional sleep lasting less than half the length of the major sleep period.

- Do not overwork or under-sleep before flying
- Naps taken before and at the beginning of flights at night improve performance.
- Two nights of normal sleep before flying greatly improve performance.
- Two nights of normal sleep at the end of an operation are necessary to recover from the effects of sleep deprivation.
- A night off in a long series of night operations helps restore function.
- Naps are possible during the day, especially in the mid-afternoon sleepiness phase.
- Naps are a stopgap approach to improve performance and safety for limited periods of time, not an indefinite substitute for long sleep periods during biological night.
- Make an attempt to anchor sleep when sleeping in a different time zone by getting some of the sleep during home base sleeping hours.
- The longer the nap, the better the improvement in performance.
- The longer the nap, the longer it takes to awaken (more sleep inertia).
- Longer and harder operations require more napping.
- At least 20 minutes should be allowed to awaken from a nap to allow dissipation of sleep inertia.
- Noise and activity help dissipate sleep inertia.
- When possible, engage in conversation, stretch, and move about to improve alertness.
- Caffeine can help maintain alertness but may disrupt sleep if used too close to desired sleep times.
- Alcohol use may interfere with sleep quality and performance.
- Napping will not promote circadian adjustment to night flying.
- Relaxation techniques and sleep hygiene can assist napping and adjustment to a new circadian schedule.
- The napping environment should be as free as possible from noise, light, temperature extremes, and interruptions.
- Lying down and sleeping is more beneficial than trying to sleep with chest elevated.
- Maintain a meal schedule with healthy and nutritional food to minimize gastrointestinal problems associated with night operations.

Stimulants and sedatives are currently used in US military and foreign commercial operations. There may be a role for stimulants such as modafanil, pemoline, methylphenidate, and amphetamines in defined settings. The same is true for short- and intermediate-acting sedatives. Even short-acting sedatives can impair next-day performance, however, and reasonable concerns exist about the effect of stimulants on sleep, emotions,

and performance. For the time being, though, US private pilots and flight crews are prohibited from using medications discussed above.

Poor Seep Habits May Contribute to Fatigue.

These Sleep Hygiene Techniques Are Useful Countermeasures for Desynchronosis.

- Use the bed primarily for sleep.
- Avoid looking at the time. Set an alarm and ignore the time.
- Avoid alcohol, caffeine, and heavy meals before bed.
- Schedule a worry time, planning session, and wind-down time before getting into bed. Make lists of things to do the next day.
- Make the bedroom quiet, comfortable, dark, and secure. Use white-noise generators if the environment is noisy. Minimize disruptions.
- Get out of bed after lying awake for more than 20 minutes-do something boring or try relaxation techniques.
- Avoid exercise and hot baths within 3 hours of bedtime.
- Exercise regularly, in the morning or afternoon.
- Keep a regular bedtime and get-up time.
- Do not spend excessive amounts of time in bed, e.g., if you can sleep only 7 hours, spend no more than 7.5 hours in bed.
- Avoid excessive napping, which can interfere with your ability to sleep at night.

References

1. Caldwell JA. The impact of fatigue in air medical and other types of operations: A review of fatigue facts and potential countermeasures. Air Med J. 2001 Jan-Feb;20(1):25-32
2. Samel A, Wegmann H-M, Vejvoda M, et al. Two-crew operations: Stress and fatigue during long-haul night flights. Aviat. Space Environ. Med. 1997; 68:679-87.
3. Crew factors in flight operations: The initial NASA-Ames field studies on fatigue. Aviat. Space Environ. Med. 1998; 69(9, Suppl.):B1-B60.
4. Ferrer CF, Bisson RU, French J. Circadian rhythm desynchronosis in military deployments: a review of current strategies. Aviat. Space Environ. Med. 1995; 66:571-8.
5. Emonson DL, Vanderbeek RD. The use of amphetamines in US Air Force tactical operations during Desert Shield and Storm. Aviat. Space Environ. Med. 1995; 66:260-3.

Dr. Wooten is a special medical consultant in sleep disorders to the Federal Air Surgeon, is an FAA aviation medical examiner, and is the Medical Director of TriHealth Sleep and Alertness Center, Good Samaritan and Bethesda Hospitals, Cincinnati, Ohio.

Federal Aviation Administration
Office of Aerospace Medicine
Civil Aerospace Medical Institute

Guide for Aviation Medical Examiners - 1999

Link	Link Description
Guide Cover, Letter from the Federal Air Surgeon, Introduction, and Table of Contents (1,194KB)	Guide Cover, Letter from the Federal Air Surgeon Introduction, and Table of Contents
Chapter 1 - General Instructions (479KB)	This chapter provides general information importa in helping an AME perform his or her duties
Chapter 2 - Application for Medical Certification (1,698KB)	Contains guideance on Medical History and Gene Information page of FAA Form 8500-8
Chapter 3 - Examination Techniques and Criteria for Qualification (items 21-48, 1,905KB)	Examination techniques and criteria for Items 21- of FAA Form 8500-8
Chapter 4 - Examination Techniques and Criteria for Qualification (items 49-64, 4,223KB)	Examination techniques and criteria for Items 49- of FAA Form 8500-8
Subject Index (2,399KB)	Subject Index for the Guide for Aviation Medical Examiners
Appendix B - Standard Forms and Limitation (40,492KB)	Appendix B - Standard Forms and Limitation
Appendix D - FAA Order 8520.2E (83KB)	Provides guidelines for the administration of the AME System.
Appendix E - General Aviation District Offices (504KB)	Appendix E - General Aviation District Offices

Last modified 27 July, 2001

CHAPTER 1
GENERAL INFORMATION

This chapter provides general information that is important in helping an Examiner efficiently and effectively perform his or her duties. It also describes Examiner responsibilities as the Federal Aviation Administration's (FAA) representative in medical certification matters and as the link between airmen and the FAA.

1. LEGAL RESPONSIBILITIES OF DESIGNATED AVIATION MEDICAL EXAMINERS

Title 49, United States Code (U.S.C.) (Transportation), sections 109(9), 40113(a), 4701-44703, and 44709 (1994) formerly codified in the Federal Aviation Act of 1958, as amended, authorizes the FAA Administrator to delegate to qualified private persons; i.e. designated Aviation Medical Examiners (AME), matters related to the examination, testing, and inspection necessary to issue a certificate under the U.S.C. and to issue the certificate. Designated Examiners are delegated the Administrator's authority to examine applicants for airman medical certificates and to issue or deny issuance of certificates.

Approximately 460,000 applications for airman medical certification are received and processed each year. The vast majority of medical examinations conducted in connection with these applications are performed by physicians in private practice who have been designated to represent the FAA for this purpose. An Examiner is a designated representative of the FAA Administrator with important duties and responsibilities. It is essential that Examiners recognize the responsibility associated with their appointment.

The consequences of a negligent or wrongful certification, which would permit an unqualified person to take the controls of an aircraft, can be serious for the public, for the Government, and for the Examiner. If the examination is cursory and the Examiner fails to find a disqualifying defect that should have been discovered in the course of a thorough and careful examination, a safety hazard may be created and the Examiner may bear the responsibility for the results of such action.

Of equal concern is the situation in which an Examiner deliberately fails to report a disqualifying condition either observed in the course of the examination or otherwise known to exist. In this situation, both the applicant and the Examiner in completing the application and medical report form, may be found to have committed a violation of Federal criminal law which provides that —

> "Whoever in any matter within the jurisdiction of any department or agency of the United States

knowingly and willfully falsifies, conceals, or covers up by any trick, scheme, or device a material fact, or who makes any false, fictitious or fraudulent statements or representations, or entry, may be fined up to $250,000 or imprisoned not more than 5 years, or both" (Title 18 U.S. Code. Secs. 1001; 3571).

Cases of falsification may be subject to criminal prosecution by the Department of Justice. This is true whether the false statement is made by the applicant, the Examiner, or both. In view of the pressures sometimes placed on Examiners by their regular patients to ignore a disqualifying physical defect that the physician knows to exist, it is important that all Examiners be aware of possible consequences of such conduct.

In addition, when an airman has been issued a medical certificate that should not have been issued, it is frequently necessary for the FAA to begin a legal revocation or suspension action to recover the certificate. This procedure is time consuming and costly. Furthermore, until the legal process is completed, the airman may continue to exercise the privileges of the certificate, thereby compromising aviation safety.

2. AUTHORITY OF AVIATION MEDICAL EXAMINERS

The Examiner is delegated authority to:

- Examine applicants for, and holders of, airman medical certificates to determine whether or not they meet the medical standards for the issuance of an airman medical certificate: and

- Issue or deny airman medical certificates to applicants or holders of such certificates based upon whether or not they meet the applicable medical standards. The medical standards are found in Title 14 of the Code of Federal Regulations, Part 67. (See Appendix A).

A medical certificate issued by an Examiner is considered to be affirmed as issued unless, within 60 days after date of issuance (date of examination), it is reversed by the Federal Air Surgeon, a Regional Flight Surgeon, or the Manager, Aeromedical Certification Division, Civil Aeromedical Institute. However, if the FAA requests additional information from the applicant within 60 days after the issuance, the above-named officials have 60 days after receipt of the additional information to reverse the issuance.

3. MEDICAL CERTIFICATION DECISION MAKING

After reviewing the medical history and completing the examination, the Examiner must:

- Issue a medical certificate,
- Deny the application, or
- Defer the action to the Manager, Aeromedical Certification Division, AAM-300, or the appropriate Regional Flight Surgeon.

The Examiner **may issue** a medical certificate *only* if the applicant meets all medical standards, including those pertaining to medical history.

The Examiner **may not issue** a medical certificate if the applicant fails to meet specified minimum standards or demonstrates any of the findings or diagnoses described in this Guide as "disqualifying" unless the condition is unchanged or improved and the applicant presents written documentation that the FAA has evaluated the condition, found the applicant eligible for certification, and authorized Examiners to issue certificates.

The Examiner must be aware that an established medical history or clinical diagnosis of any of the following is disqualifying:

- Diabetes mellitus requiring insulin or other hypoglycemic medication;
- Angina pectoris;
- Coronary heart disease that has required treatment or, if untreated, that has been symptomatic or clinically significant;
- Myocardial infarction;
- Cardiac valve replacement;
- Permanent cardiac pacemaker;
- Heart replacement;
- Psychosis;
- Bipolar disorder;
- Personality disorder that is severe enough to have repeatedly manifested itself by overt acts;
- Substance dependence;
- Substance abuse;
- Epilepsy;
- Disturbance of consciousness without satisfactory medical explanation of the cause; and
- Transient loss of control of nervous system function(s) without satisfactory medical explanation of cause.

An airman who is medically disqualified for any reason may be considered by the FAA for grant of an Authorization for Special Issuance of a Medical Certificate (Authorization). For medical defects, which are static or nonprogressive in nature, a Statement of Demonstrated Ability (SODA), may be granted in lieu of an Authorization. (See Item 23).

The Examiner **always may defer** the application to the FAA for action. In the interests of the applicant and of a responsive certification system, however, deferral is appropriate only if the standards are not met; if there is an unresolved question about the history, the findings, the standards, or agency policy; if the examination is incomplete; if further evaluation is necessary; or, if directed by the FAA.

The Examiner **may deny** certification *only* when the applicant clearly does not meet the standards.

4. PRIVACY OF MEDICAL INFORMATION

Within the FAA, access to an individual's medical information is strictly on a "need-to-know" basis. The safeguards of the Privacy Act apply to the application for airman medical certification and to other medical files in the FAA's possession. The FAA does not release medical information without an order from a court of competent jurisdiction, written permission from the individual to whom it applies, or, with the individual's knowledge, during litigation of matters related to certification. The FAA does, however, on request, disclose the fact that an individual holds an airman medical certificate and its class, and it may provide medical information regarding a pilot involved in an accident to the National Transportation Safety Board (NTSB) (or to a physician of the appropriate medical discipline who is retained by the NTSB) for use in aircraft accident investigation.

The Examiner, as a representative of the FAA, should treat the applicant's medical certification information in accordance with the requirements of the Privacy Act. Therefore, information should not be released without the written consent of the applicant or an order from a court of competent jurisdiction. In order to ensure that release of information is proper, whenever a court order or subpoena is received by the Examiner, the appropriate Regional Flight Surgeon (see Appendix C), or the Aeromedical Certification Division, AAM-300 (see address below), should be contacted. Similarly, unless the applicant's written consent for release is of a routine nature; e.g., accompanying a standard insurance company request, advice should be sought from the FAA before releasing any information. In all cases, copies of all released information should be retained.

5. RELEASE OF INFORMATION

Except in compliance with an order of a court of competent jurisdiction, or upon an applicant's written request, Examiners will not divulge or release copies of any reports prepared in connection with the examination to anyone other than the applicant or the FAA. A copy of the examination may be released to the applicant upon request. Upon receipt of a court subpoena or order, the Examiner shall notify the appropriate Regional Flight Surgeon. Other

requests for information will be referred to:

MANAGER, AEROMEDICAL CERTIFICATION DIVISION, AAM-300
CIVIL AEROMEDICAL INSTITUTE
FEDERAL AVIATION ADMINISTRATION
POST OFFICE BOX 26080
OKLAHOMA CITY, OK 73126-0080

6. NO "ALTERNATE" EXAMINERS DESIGNATED

The Examiner is to conduct all medical examinations in the Examiner's regular office. An Examiner *is not permitted* to conduct examinations at a temporary address and is not permitted to name an alternate Examiner. During an Examiner's absence from the permanent office, applicants for airman medical certification shall be referred to another Examiner in the area.

7. WHO MAY BE CERTIFIED

a. Age Requirements

There is no age restriction or aviation experience requirements for medical certification. Any applicant who qualifies medically may be issued a Medical Certificate, FAA Form 8500-9 (white), regardless of age. Examiners also have been delegated authority to issue the combined Medical Certificate and Student Pilot Certificate, FAA Form 8420-2 (yellow), which is age restricted because it is an airman medical and student pilot certificate (student license and medical certificate). For issuance of the combined certificate, the applicant must have reached his or her 16th birthday.

Minimum age requirements for the various airman certificates (i.e., pilot license certificates) are defined in 14 CFR Part 61, Certification: Pilots and Flight Instructors, as follows:

(1) Student pilot certificate: powered aircraft — 16 years; gliders and balloons — 14 years.

(2) Private pilot certificate: powered aircraft — 17 years; gliders and balloons — 16 years.

(3) Commercial pilot certificate: 18 years.

(4) Airline transport pilot (ATP) certificate: 23 years.

b. Language Requirements

An applicant for an Airman Medical and Student Pilot Certificate must be able to read, speak, write, and understand the English language.

If the Examiner believes that an applicant applying for a Medical Certificate and Student Pilot Certificate, FAA Form 8420-2 (yellow), cannot read, speak, write, and understand the English language, the applicant shall be referred to the nearest Flight Standards District Office (FSDO) for a determination of eligibility for the Student Pilot Certificate. (See Appendix E for FSDO addresses).

Under these circumstances, the Examiner may issue only a Medical Certificate, FAA Form 8500-9 (white), and the applicant must present that certificate to the FSDO when applying for a Student Pilot Certificate.

8. CLASSES OF MEDICAL CERTIFICATES

The class of medical certificate for which an individual applies will be issued if the applicant possesses the required medical qualifications. Regardless of whether an applicant holds an airman certificate that permits the exercise of a high level of airman duties, it is only necessary for the applicant to have a medical certificate of a class appropriate to the airman privileges exercised. For example, an airman who holds an ATP certificate may pilot aircraft while holding only a third-class medical certificate as long as flying activities are limited to those authorized for *private pilots.* Also, an applicant need not hold an ATP airman certificate to be eligible for a first-class medical certificate.

Listed below are the three classes of airman medical certificates and, with each, the categories of airmen requiring such a medical certificate in order to exercise their privileges.

First-Class — Airline Transport Pilot.

Second-Class — Commercial Pilot; Flight Engineer; Flight Navigator; or Air Traffic Control Specialist (ATCS). (Note: This category of ATCS's does not include FAA employee ATCS's.)

Third-Class — Private Pilot, Recreational Pilot, or Student Pilot.

Glider and Free Balloon Pilots are not required to hold a medical certificate of any class. To be issued Glider or Free Balloon Airman Certificates, the applicant must certify that he or she has no known physical defect that makes him or her unable to pilot a glider or free balloon.

9. VALIDITY OF MEDICAL CERTIFICATES

A. First-Class Medical Certificate:

A first-class medical certificate is valid for the remainder of the month of issue;

plus

6-calendar months for activities requiring a first-class medical certificate, or

plus

12-calendar months for activities requiring a second-class medical certificate, or

plus

24-calendar months for activities requiring a third-class medical certificate, or

plus

36-calendar months for activities requiring a third-class medical certificate if examination occurs on or after September 16, 1996, and the airman has not reached his or her 40th birthday on or before the date of examination.*

B. Second-Class Medical Certificate:

A Second-class medical certificate is valid for the remainder of the month of issue;

plus

12-calendar months for activities requiring a second-class medical certificate, or

plus

24-calendar months for activities requiring a third-class medical certificate, or

plus

36-calendar months for activities requiring a third-class medical certificate if the examination occurs on or after September 16, 1996, and the airman has not reached his or her 40th birthday on or before the date of the examination.*

C. Third-Class Medical Certificate:

A third-class medical certificate is valid for the remainder of the month of issue;

plus

24-calendar months for activities requiring a third-class medical certificate, or

plus

36-calendar months for activities requiring a third-class medical certificate if the examination occurs on or after September 16, 1996, and the airman has not reached his or her 40th birthday on or before the date of the examination.*

Each medical certificate must bear the same date as the date of medical examination regardless of the date the certificate is actually issued.

***NOTE: Flight Outside the Airspace of the United States of America (U.S.A.)--a pilot who is issued a medical certificate under the age of 40 may not exercise the privileges of a private pilot certificate outside the U.S.A. after the 24 months of validity of that medical certificate except as permitted by a foreign country(s) where the flight occurs. The maximum validity of a private pilot medical certificate is 24 months under the standards of the International Civil Aviation Organization.**

10. TITLE 14 CFR § 61.53, PROHIBITION ON OPERATIONS DURING MEDICAL DEFICIENCY.

***(a) Operations that require a medical certificate. Except as provided for in paragraph (b) of this section, a person who holds a current medical certificate issued under part 67 of this chapter shall not act as pilot in command, or in any other capacity as a required pilot flight crewmember, while that person:

(1) Knows or has reason to know of any medical condition that would make the person unable to meet the requirements for the medical certificate necessary for the pilot operation; or

(2) Is taking medication or receiving other treatment for a medical condition that results in the person being unable to meet the requirements for the medical certificate necessary for the pilot operation.

(b) Operations that do not require a medical certificate. For operations provided for in § 61.23(b) of this part, a person shall not act as pilot in command, or in any other capacity as a required pilot flight crewmember, while that person knows or has reason to know of any medical condition that would make the person unable to operate the aircraft in a safe manner.

11. REEXAMINATION OF AN AIRMAN

A medical certificate holder may be required to undergo a reexamination at any time if, in the opinion of the Federal Air Surgeon or authorized representative within the FAA, there is a reasonable basis to question the airman's ability to meet the medical standards. An Examiner may **NOT** order such reexamination.

12. EXAMINATION FEES

The FAA does not establish fees to be charged by Examiners for the medical examination of persons applying for airman medical certification. It is recommended that the fee be the usual and customary fee established by other physicians in the same general locality for similar services.

13. REPLACEMENT OF MEDICAL CERTIFICATES

Medical certificates that are lost or accidentally destroyed may be replaced upon proper application provided such certificates have not expired. The request should be sent to:

MANAGER, AEROMEDICAL
CERTIFICATION DIVISION,
AAM-300
FEDERAL AVIATION
ADMINISTRATION
CIVIL AEROMEDICAL INSTITUTE
POST OFFICE BOX 26080
OKLAHOMA CITY, OK 73126-0080

The airman's request for replacement must be accompanied by a remittance of two dollars ($2) made payable to the FAA. This request must include:

- The airman's full name and date of birth;

- The class of certificate;
- The place and date of examination;

- The name of the Examiner; and

- The circumstances of the loss or destruction of the original certificate.

The replacement certificate will be prepared in the same manner as the missing certificate and will bear the same date of examination regardless of when it is issued.

In an emergency, contact the Manager, Aeromedical Certification Division, AAM-300, at above address or by facsimile at 405-954-3231 for certification verification **only**.

14. DISPOSITION OF APPLICATIONS AND MEDICAL EXAMINATIONS

All **completed** applications and medical examinations, unless otherwise directed by the FAA, **must** be transmitted electronically in a timely manner to the Aeromedical Certification Division.

In addition, the FAA/Original Copy **must** be mailed to:

MANAGER, AEROMEDICAL CERTIFICATION DIVISION, AAM-300
CIVIL AEROMEDICAL INSTITUTE
FEDERAL AVIATION ADMINISTRATION
POST OFFICE BOX 26080
OKLAHOMA CITY, OK 73126-0080

These may be batch mailed at monthly intervals.
All **incomplete** applications and medical examinations **must** be mailed immediately to the above address.

The AME Work Copy **must** be retained as the file copy.

The Applicant's Copy (last page) must be given to the applicant along with the Information for Applicant and the instruction sheet.

Examiners not required to use the AMCS; e.g., International AME's, **must** forward the typed, completed FAA/Original Copy to the above address.

Applications awaiting additional information prior to submission to the FAA should not be held by the Examiner for more than 2 weeks.

15. PROTECTION AND DESTRUCTION OF FORMS

Examiners are cautioned to provide adequate security for blank medical application and certificate forms to ensure that they do not become available for illegal use. When the FAA issues new or revised medical forms and certificates, the FAA will advise Examiners of the disposition of the old forms and certificates. The serial numbers of FAA Form 8500-8 assigned to each Examiner are recorded at the Civil Aeromedical

Institute in Oklahoma City. If asked, the Examiner should be prepared to account for the forms. **Forms should not be shared with other Examiners.**

16. QUESTIONS OR REQUESTS FOR ASSISTANCE

When an Examiner has a question or needs assistance in carrying out responsibilities, the Examiner should contact one of the following individuals:

a. Regional Flight Surgeon (Names, addresses, and telephone numbers of Regional Flight Surgeons are provided in Appendix C).

- Questions pertaining to problem medical certification cases in which the Regional Flight Surgeon has initiated action.
- Telephone interpretation of medical standards or policies involving an individual airman whom the Examiner is examining.
- Matters regarding designation and redesignation of Examiners and the Aviation Medical Examiner Program.
- Attendance at Aviation Medical Examiner Seminars.

b. Manager, Aeromedical Certification Division, AAM-300

- Inquiries concerning guidance on problem medical certification cases.
- Information concerning the overall airman medical certification program.
- Matters involving FAA medical certification of military personnel.
- Information concerning medical certification of applicants in foreign countries.

These inquiries should be made to:

MANAGER, AEROMEDICAL CERTIFICATION DIVISION, AAM-300
CIVIL AEROMEDICAL INSTITUTE
FEDERAL AVIATION ADMINISTRATION
POST OFFICE BOX 26080
OKLAHOMA CITY, OK 73126-0080

c. Manager, Aeromedical Education Division, AAM-400

- Matters regarding designation and redesignation of International Examiners, military facilities, and military Examiners.
- Requests for medical forms and stationery.
- Requests for airman medical educational material.

These inquiries should be made to:

MANAGER, AEROMEDICAL
EDUCATION DIVISION, AAM-400
CIVIL AEROMEDICAL INSTITUTE
FEDERAL AVIATION
ADMINISTRATION
POST OFFICE BOX 25082
OKLAHOMA CITY, OK 73125-0082

17. AIRMAN APPEALS

a. Request for Reconsideration

An Examiner's denial of a medical certificate is not a final FAA denial. An applicant may ask for reconsideration of an Examiner's denial by submitting a request in writing to:

FEDERAL AIR SURGEON
ATTN: MANAGER, AEROMEDICAL
CERTIFICATION DIVISION,
AAM-300
CIVIL AEROMEDICAL INSTITUTE
FEDERAL AVIATION
ADMINISTRATION
POST OFFICE BOX 26080
OKLAHOMA CITY, OK 73126-0080

The Manager of the Aeromedical Certification Division will provide initial reconsideration. Some cases may be referred to the appropriate Regional Flight Surgeon for action. If the Manager of the Aeromedical Certification Division or a Regional Flight Surgeon finds that the applicant is not qualified, the applicant is denied and advised of further reconsideration and appeal procedures. These may include reconsideration by the Federal Air Surgeon and/or petition for NTSB review.

b. Authorization for Special Issuance of a Medical Certificate (Authorization)

At the discretion of the Federal Air Surgeon, an Authorization for Special Issuance of a Medical Certificate (Authorization); i.e., a waiver, valid for a specified period, may be granted to a person who does not meet the established medical standards if the person shows to the satisfaction of the Federal Air Surgeon that the duties authorized by the class of medical certificate applied for can be performed without endangering public safety during the period in which the Authorization would be in force. The Federal Air Surgeon may authorize a special medical flight test, practical test, or medical evaluation for this purpose. A medical certificate of the appropriate class may be issued to a person who does not meet the established medical standards if that person possesses a valid Authorization and is otherwise eligible. An airman medical certificate issued in accordance with the special issuance section of Part 67 (14 CFR 67.401), shall expire no later than the end of the validity period or upon the withdrawal of the Authorization upon which it is based. At the end of its specified validity period, for grant of a new Authorization, the person must again show to the satisfaction of the Federal Air Surgeon that the duties authorized by the class of medical certificate applied for can be performed without endangering public

safety during the period in which the Authorization would be in force.

In granting an Authorization, the Federal Air Surgeon may consider the person's operational experience and any medical facts that may affect the ability of the person to perform airman duties including:

- The combined effect on the person of failure to meet more than one requirement of Part 67; and

- The prognosis derived from professional consideration of all available information regarding the person.

In granting an Authorization the Federal Air Surgeon specifies the class of medical certificate authorized to be issued and may do any or all of the following:

- Limit the duration of an Authorization;

- Condition the granting of a new Authorization on the results of subsequent medical tests, examinations, or evaluations;

- State on the Authorization, and any medical certificate based upon it, any operational limitation needed for safety; or

- Condition the continued effect of an Authorization, and any second- or third-class medical certificate based upon it, on compliance with a statement of functional limitations issued to the person in coordination with the Director of Flight Standards or the Director's designee.

- In determining whether an Authorization should be granted to an applicant for a third-class medical certificate, the Federal Air Surgeon considers the freedom of an airman, exercising the privileges of a private pilot certificate, to accept reasonable risks to his or her person and property that are not acceptable in the exercise of commercial or airline transport pilot privileges, and, at the same time, considers the need to protect the safety of persons and property in other aircraft and on the ground.

An Authorization granted to a person who does not meet the applicable medical standards of Part 67 may be withdrawn, at the discretion of the Federal Air Surgeon, at any time if:

- There is adverse change in the holder's medical condition;

- The holder fails to comply with a statement of functional limitations or operational limitations issued as a condition of certification under the special issuance section of Part 67 (14 CFR 67.401);

- Public safety would be endangered by the holder's exercise of airman privileges;

- The holder fails to provide medical information reasonably needed by the Federal Air Surgeon for certification under the

special issuance section of Part 67 (14 CFR 67.401); or

- The holder makes or causes to be made a statement or entry that is the basis for withdrawal of an Authorization under the falsification section of Part 67 (14 CFR 67.403).

A person who has been granted an Authorization under the special issuance section of Part 67 (14 CFR 67.401), based on a special medical flight or practical test, need not take the test again during later medical examinations unless the Federal Air Surgeon determines or has reason to believe that the physical deficiency has or may have degraded to a degree to require another special medical flight test or practical test.

The authority of the Federal Air Surgeon under the special issuance section of Part 67 (14 CFR 67.401) is also exercised by the Manager, Aeromedical Certification Division, and each Regional Flight Surgeon.

If an Authorization is withdrawn at any time, the following procedures apply:

- The holder of the Authorization will be served a letter of withdrawal, stating the reason for the action;

- By not later than 60 days after the service of the letter of withdrawal, the holder of the Authorization may request, in writing, that the Federal Air Surgeon provide for review of the decision to withdraw. The request for review may be accompanied by supporting medical evidence;

- Within 60 days of receipt of a request for review, a written final decision either affirming or reversing the decision to withdraw will be issued; and

- A medical certificate rendered invalid pursuant to a withdrawal, in accordance with the special issuance section of Part 67 (14 CFR 67.401) shall be surrendered to the Administrator upon request.

c. Statement of Demonstrated Ability (SODA)

At the discretion of the Federal Air Surgeon, a Statement of Demonstrated Ability (SODA); i.e., a waiver, may be granted, instead of an Authorization, to a person whose disqualifying condition is static or nonprogressive and who has been found capable of performing airman duties without endangering public safety. A SODA does not expire and authorizes a designated Examiner to issue a medical certificate of a specified class if the Examiner finds that the condition described on the SODA has not adversely changed.

In granting a SODA, the Federal Air Surgeon may consider the person's operational experience and any medical facts that may affect the ability of the person to perform airman duties including:

- The combined effect on the person of failure to meet more than one requirement of Part 67; and

- The prognosis derived from professional consideration of all available information regarding the person.

In granting a SODA under the special issuance section of Part 67 (14 CFR 67.401), the Federal Air Surgeon specifies the class of medical certificate authorized to be issued and may do any of the following:

- State on the SODA, and on any medical certificate based upon it, any operational limitation needed for safety; or

- Condition the continued effect of a SODA, and any second- or third-class medical certificate based upon it, on compliance with a statement of functional limitations issued to the person in coordination with the Director of Flight Standards or the Director's designee.

- In determining whether a SODA should be granted to an applicant for a third-class medical certificate, the Federal Air Surgeon considers the freedom of an airman, exercising the privileges of a private pilot certificate, to accept reasonable risks to his or her person and property that are not acceptable in the exercise of commercial or airline transport pilot privileges, and, at the same time, considers the need to protect the safety of persons and property in other aircraft and on the ground.

A SODA granted to a person who does not meet the applicable standards of Part 67 may be withdrawn, at the discretion of the Federal Air Surgeon, at any time if:

- There is adverse change in the holder's medical condition;

- The holder fails to comply with a statement of functional limitations or operational limitations issued under the special issuance section of Part 67 (14 CFR 67.401).

- Public safety would be endangered by the holder's exercise of airman privileges;

- The holder fails to provide medical information reasonably needed by the Federal Air Surgeon for certification under the special issuance section of Part 67 (14 CFR 67.401).

- The holder makes or causes to be made a statement or entry that is the basis for withdrawal of a SODA under the falsification section of Part 67 (14 CFR 67.403); or

- A person who has been granted a SODA under the special issuance section of Part 67 (14 CFR 67.401), based on a special medical flight or practical test need not take the test again

during later medical examinations unless the Federal Air Surgeon determines or has reason to believe that the physical deficiency has or may have degraded to a degree to require another special medical flight test or practical test.

The authority of the Federal Air Surgeon under the special issuance section of Part 67 (14 CFR 67.401) is also exercised by the Manager, Aeromedical Certification Division, and each Regional Flight Surgeon.

If a SODA is withdrawn at any time, the following procedures apply:

- The holder of the SODA will be served a letter of withdrawal stating the reason for the action;

- By not later than 60 days after the service of the letter of withdrawal, the holder of the SODA may request, in writing, that the Federal Air Surgeon provide for review of the decision to withdraw. The request for review may be accompanied by supporting medical evidence;

- Within 60 days of receipt of a request for review, a written final decision either affirming or reversing the decision to withdraw will be issued; and

- A medical certificate rendered invalid pursuant to a withdrawal, in accordance with the special issuance section of Part 67 (14 CFR 67.401(a)) shall be surrendered to the Administrator upon request.

d. National Transportation Safety Board (NTSB)

Within 60 days after a final FAA denial of a medical certificate, an airman may petition the NTSB for a review. A petition for NTSB review must be submitted in writing to:

NATIONAL TRANSPORTATION SAFETY BOARD
490 L'ENFANT PLAZA, EAST SW.
WASHINGTON, DC 20594-0001

The NTSB is an independent agency of the Federal Government that has the authority to review on appeal the suspension, amendment, modification, revocation, or denial of any certificate or license issued by the FAA Administrator.

An Administrative Law Judge (ALJ) for the NTSB may hold a formal hearing at which the FAA will present documentary evidence and testimony by medical specialists supporting the denial decision. The petitioner will also be given an opportunity to present evidence and testimony at the hearing. The ALJ's decision is subject to review by the full NTSB.

William C. Keppen, Pres
Keppen & Associates
1603 Honeysuckle Ridge
Annapolis, Maryland 21401-6425
Improved Operational Safety Through - Fatigue Avoidance & Enhanced Alertness Strategies

March 21, 2003

Dear

The National Transportation Safety Board (NTSB) found the "probable cause" of a head-on collision of two CN/IC freight trains was, "... crewmembers' fatigue, which was primarily due to the engineer's untreated and the conductor's insufficiently treated obstructive sleep apnea." The following recommendations were issued to the Federal Railroad Administration (FRA):

1. **Develop a standard medical examination form that includes questions regarding sleep problems and require that the form be used**, pursuant to 49 Code of Federal Regulations Part 240, to determine the medical fitness of locomotive engineers; the form should also be available for use to determine the medical fitness of other employees in safety-sensitive positions.

2. **Require that any medical condition that could incapacitate, or seriously impair the performance** of an employee in a safety-sensitive position **be reported to the railroad** in a timely manner.

3. Require that, when a railroad becomes aware that an employee in a safety-sensitive position has a potentially incapacitating or performance-impairing medical condition, **the railroad prohibit that employee from performing any safety-sensitive duties** until the railroad's designated physician determines that the employee can continue to work safely in a safety-sensitive position.

Keppen & Associates is conducting an investigation into methods and procedures used by other modes of transportation to monitor and regulate equipment operators (pilots) who have medical conditions that could impair performance.

A review of 14 CFR § 67, application forms for Airman Medical Certification, and medical examination forms, finds that most medical conditions are given close scrutiny, while sleep disorders (apnea) are handled differently under § 67.113 - General medical condition. It appears the process relies heavily on pilot self-reports and/or interaction between AME's and a pilot's personal physician to identify and monitor affected individuals.

We have developed a brief questionnaire to gain insights into the effectiveness of the existing examination forms, and procedures, for evaluating and monitoring pilots with sleep disorder conditions that may impair their performance.

You are one of twenty AME's selected to receive the questionnaire because you also hold a pilots license and, as such, are familiar with the processes from two different perspectives. This information may be extremely helpful in formulating policies that deal effectively with the issues mentioned above for train operating crews.

Your cooperation in completing and returning the enclosed brief questionnaire is important and deeply appreciated.

Sincerely,

William C. Keppen

Encl.

QUESTIONNAIRE ON THE SUBJECT OF -
IDENTIFICATION AND MONITORING OF MEDICAL CONDITIONS
THAT IMPAIR OPERATOR PERFORMANCE
(DTFR53-03-00101)

1. Do you currently perform Airman Medical Certification examinations?
   - ☐ Yes
   - ☐ No

2. Do you find current application and examination forms sufficient for gathering information on (potential) sleep disorder conditions of applicants?
   - ☐ Yes
   - ☐ No

3. Have you experienced an applicant for (re)certification self-reporting a (potential) sleep disorder condition?
   - ☐ Yes
   - ☐ No

4. Have you become aware of an applicant's sleep disorder condition by some other means?
   - ☐ Yes – If yes, how?
   - ☐ No

5. Have you become aware of sleep disorder condition as a result of consultation with an applicant's personal physician (health care provider)?
   - ☐ Yes
   - ☐ No

6. Are there any other medical conditions that could impair the performance of pilots that are not given adequate attention by existing medical forms and procedures?
   - ☐ Yes – If yes, describe
   - ☐ No

Your comments:

The source of information provided will be kept strictly confidential.

Please fax completed questionnaires to: 410 573-9094. Thanks again.

This questionnaire was distributed to 20 AME's with a cover letter requesting their response be returned by facsimile to Keppen & Associates. (One envelope was returned, undeliverable.)

Questions	Yes	No
Do you currently perform Airman Medical Certification examinations?	|||||||	
Do you find current application and examination forms sufficient for gathering information on (potential) sleep disorder conditions of applicants?	||||	|||
Have you experienced an applicant for (re)certification self-reporting a (potential) sleep disorder condition?	|||	||||
Have you become aware of an application's sleep disorder condition by some other means?		|||||||
Have you become aware of sleep disorder conditions as a result of consultation with an applicant's personal physician (health care provider)?		|||||||
Are there any other medical conditions that could impair the performance of pilots that are not given adequate attention by existing medical forms and procedures?	|	||||||

Comments:

1) Applicants are required to report all contacts with physicians, and that is the primary source of medical information. AME's have no authority to contact pilots' personal physicians without specific permission. There really is no other way to learn about conditions, like sleep apnea, with no physical sings. The system works.

2) Pilots are required to report all medical treatments and any symptoms of loss of consciousness on their form already.

3) Ear problems, such as difficulty in equalizing pressure when flying or diving – not sufficiently addressed in form 8500.

Electronic Code of Federal Regulations
e-CFR™

THIS DATA CURRENT AS OF THE FEDERAL REGISTER DATED MARCH 27, 2003

49 CFR - CHAPTER III - PART 391

View Part

§ 391.51 General requirements for driver qualification files.

(a) Each motor carrier shall maintain a driver qualification file for each driver it employs. A driver's qualification file may be combined with his/her personnel file.

(b) The qualification file for a driver must include:

(1) The driver's application for employment completed in accordance with § 391.21;

(2) A written record with respect to each past employer who was contacted and a copy of the response by each State agency, pursuant to § 391.23 involving investigation and inquiries;

(3) The certificate of driver's road test issued to the driver pursuant to § 391.31(e), or a copy of the license or certificate which the motor carrier accepted as equivalent to the driver's road test pursuant to § 391.33;

(4) The response of each State agency to the annual driver record inquiry required by § 391.25(a);

(5) A note relating to the annual review of the driver's driving record as required by § 391.25(c)(2);

(6) A list or certificate relating to violations of motor vehicle laws and ordinances required by § 391.27;

(7) The medical examiner's certificate of his/her physical qualification to drive a commercial motor vehicle as required by § 391.43(f) or a legible photographic copy of the certificate; and

(8) A letter from the Field Administrator, Division Administrator, or State Director granting a waiver of a physical disqualification, if a waiver was issued under § 391.49.

(c) Except as provided in paragraph (d) of this section, each driver's qualification file shall be retained for as long as a driver is employed by that motor carrier and for three years thereafter.

(d) The following records may be removed from a driver's qualification file three years after the date of execution:

(1) The response of each State agency to the annual driver record inquiry required by § 391.25(a);

(2) The note relating to the annual review of the driver's driving record as required by § 391.25(c)(2);

(3) The list or certificate relating to violations of motor vehicle laws and ordinances required by § 391.27;

(4) The medical examiner's certificate of the driver's physical qualification to drive a commercial motor vehicle or the photographic copy of the certificate as required by § 391.43(f); and

(5) The letter issued under § 391.49 granting a waiver of a physical disqualification. (Approved by the Office of Management and Budget under control number 2125-0065)

[63 FR 33277, June 18, 1998]

Regulations

§391.43 - Medical examination; certificate of physical examination.

(a) Except as provided in paragraph (b) of this section, the medical examination shall be performed by a licensed medical examiner as defined in 390.5 of this subchapter.

(b) A licensed optometrist may perform so much of the medical examination as pertains to visual acuity, field of vision, and the ability to recognize colors as specified in paragraph (10) of (b).

(c) Medical examiners shall:

(c)(1) Be knowledgeable of the specific physical and mental demands associated with operating a commercial motor vehicle and the requirements of this subpart, including the medical regulatory criteria prepared by the FHWA as guidelines to aid the medical examiner in making the qualification determination; and

(c)(2) Be proficient in the use of and use the medical protocols necessary to adequately perform the medical examination required by this section.

(d) Any driver authorized to operate a commercial motor vehicle within an exempt intracity zone pursuant to §391.2(d) shall furnish the examining medical examiner with a copy of the medical findings that led to the issuance of the first certificate of medical examination which allowed the driver to operate a commercial motor vehicle wholly within an exempt intracity zone.

(e) Any driver operating under a limited exemption authorized by 391.64 shall furnish the medical examiner with a copy of the annual medical findings of the endocrinologist, ophthalmologist or optometrist, as required under that section. If the medical examiner finds the driver qualified under the limited exemption in 391.64, such fact shall be noted on the Medical Examiner's Certificate.

(f) The medical examination shall be performed, and its results shall be recorded, substantially in accordance with the following instructions and examination form. Existing forms may be used until current printed supplies are depleted or until March 31, 1997.

INSTRUCTIONS FOR PERFORMING AND RECORDING PHYSICAL EXAMINATIONS

The examining medical examiner should review these instructions before performing the physical examination. Answer each question yes or no where appropriate.

The examining medical examiner should be aware of the rigorous physical demands and mental and emotional responsibilities placed on the driver of a commercial motor vehicle. In the interest of public safety the examining medical examiner is required to certify that the driver does not have any physical, mental, or organic defect of such a nature as to affect the driver's ability to operate safely a commercial motor vehicle.

General information. The purpose of this history and physical examination is to detect the presence of physical, mental, or organic defects of such a character and extent as to affect the applicant's ability to operate a commercial motor vehicle safely. The examination should be made carefully and at least as complete as indicated by the attached form. History of certain defects

and more stringent, examination. Defects may be recorded which do not, because of their character or degree, indicate that certification of physical fitness should be denied. However, these defects should be discussed with the applicant and he/she should be advised to take the necessary steps to insure correction, particularly of those which, if neglected, might lead to a condition likely to affect his/her ability to drive safely.

General appearance and development. Note marked overweight. Note any posture defect, perceptible limp, tremor, or other defects that might be caused by alcoholism, thyroid intoxication, or other illnesses. The Federal Motor Carrier Safety Regulations provide that no driver shall use a narcotic or other habit forming drugs.

Head-eyes. When other than the Snellen chart is used, the results of such test must be expressed in values comparable to the standard Snellen test. If the applicant wears corrective lenses, these should be worn while applicant's visual acuity is being tested. If appropriate, indicate on the Medical Examiner's Certificate by checking the box, "Qualified only when wearing corrective lenses." In recording distance vision use 20 feet as normal. Report all vision as a fraction with 20 as numerator and the smallest type read at 20 feet as denominator. Note ptosis, discharge, visual fields, ocular muscle imbalance, color blindness, corneal scar, exophthalmos, or strabismus, uncorrected by corrective lenses. Monocular drivers are not qualified to operate commercial motor vehicles under existing Federal Motor Carrier Safety Regulations. If the driver habitually wears contact lenses, or intends to do so while driving, there should be sufficient evidence to indicate that he/she has good tolerance and is well adapted to their use. The use of contact lenses should be noted on the record.

Ears. Note evidence of mastoid or middle ear disease, discharge, symptoms of aural vertigo, or Meniere's Syndrome. When recording hearing, record distance from patient at which a forced whispered voice can first be heard. If audiometer is used to test hearing, record decibel loss at 500 Hz, 1,000 Hz, and 2,000 Hz.

Throat. Note evidence of disease, irremediable deformities of the throat likely to interfere with eating or breathing, or any laryngeal condition which could interfere with the safe operation of a commercial motor vehicle.

Thorax heart. Stethoscopic examination is required. Note murmurs and arrhythmias, and any past or present history of cardiovascular disease, of a variety known to be accompanied by syncope, dyspnea, collapse, enlarged heart, or congestive heart failures. Electrocardiogram is required when findings so indicate.

Blood pressure. Record with either spring or mercury column type of sphygomomanometer. If the blood pressure is consistently above 160/90 mm. Hg., further tests may be necessary to determine whether the driver is qualified to operate a commercial motor vehicle.

Lungs. If any lung disease is detected, state whether active or arrested; if arrested, your opinion as to how long it has been quiescent.

Gastrointestinal system. Note any diseases of the gastrointestinal system.

Abdomen. Note wounds, injuries, scars, or weakness of muscles of abdominal walls sufficient to interfere with normal function. Any hernia should be noted if present. State how long and if adequately contained by truss.

Abnormal masses. If present, note location, if tender, and whether or not applicant knows how

control and safe operation of a commercial motor vehicle, more stringent tests must be made before the applicant can be certified.

Tenderness. When noted, state where most pronounced, and suspected cause. If the diagnosis suggests that the condition might interfere with control and safe operation of a commercial motor vehicle, more stringent tests must be made before the applicant can be certified.

Genito-urinary. Urinalysis is required. Acute infections of the genito-urinary tract, as defined by local and State public health laws, indications from urinalysis of uncontrolled diabetes, symptomatic albumin urea in the urine, or other findings indicative of health conditions likely to interfere with the control and safe operation of a commercial motor vehicle, will disqualify an applicant from operating a commercial motor vehicle.

Neurological. If positive Romberg is reported, indicate degrees of impairment. Pupillary reflexes should be reported for both light and accommodation. Knee jerks are to be reported absent only when not obtainable upon reinforcement and as increased when foot is actually lifted from the floor following a light blow on the patella, sensory vibratory and positional abnormalities should be noted.

Extremities. Carefully examine upper and lower extremities. Record the loss or impairment of a leg, foot, toe, arm, hand, or fingers. Note any and all deformities, the presence of atrophy, semiparalysis or paralysis, or varicose veins. If a hand or finger deformity exists, determine whether sufficient grasp is present to enable the driver to secure and maintain a grip on the steering wheel. If a leg deformity exists, determine whether sufficient mobility and strength exist to enable the driver to operate pedals properly. Particular attention should be given to and a record should be made of, any impairment or structural defect which may interfere with the driver's ability to operate a commercial motor vehicle safely.

Spine. Note deformities, limitation of motion, or any history of pain, injuries, or disease, past or presently experienced in the cervical or lumbar spine region. If findings so dictate, radiologic and other examinations should be used to diagnose congenital or acquired defects; or spondylolisthesis and scoliosis.

Recto genital studies. Diseases or conditions causing discomfort should be evaluated carefully to determine the extent to which the condition might be handicapping while lifting, pulling, or during periods of prolonged driving that might be necessary as part of the driver's duties.

Laboratory and other special findings. Urinalysis is required, as well as such other tests as the medical history or findings upon physical examination may indicate are necessary. A serological test is required if the applicant has a history of luetic infection or present physical findings indicate the possibility of latent syphilis. Other studies deemed advisable may be ordered by the examining medical examiner.

Diabetes. If insulin is necessary to control a diabetic condition, the driver is not qualified to operate a commercial motor vehicle. If mild diabetes is noted at the time of examination and it is stabilized by use of a hypoglycemic drug and a diet that can be obtained while the driver is on duty, it should not be considered disqualifying. However, the driver must remain under adequate medical supervision.

Upon completion of the examination, the medical examiner must date and sign the form, provide his/her full name, office address and telephone number. The completed medical examination form shall be retained on file at the office of the medical examiner.

U.S. Department of Transportation
United States Coast Guard

Commanding Officer
United States Coast Guard
National Maritime Center

4200 Wilson Blvd. Suite 510
Arlington, VA 22203-1804
Staff Symbol: NMC-4
Phone: (703) 235-0018
FAX: (703) 235-1062

version 11-98

16721
NMC Policy Ltr No. 11-98
July 30, 1998

From: Commanding Officer, National Maritime Center

To: Distribution

Subj: MEDICAL STANDARDS FOR ENTRY LEVEL RATINGS

Ref: (a) Title 46, Code of Federal Regulations (CFR), Section 12.02-17
(b) Navigation and Vessel Inspection Circular 2-98

1. Reference (a) requires that an applicant for entry level ratings valid for service on a seagoing vessel of 200 or more gross register tons (domestic tonnage) (GRT) "provide a document issued by a qualified medical practitioner attesting the applicant's medical fitness to perform the functions for which the document is issued." This policy letter provides guidance for acceptance of such documents. Reference (b) sets forth the medical fitness standards for an applicant for entry level ratings. These standards apply to all applicants for original issuance or renewal of any entry level rating.

2. An applicant for entry level ratings who will be employed only on non-seagoing vessels, i.e., vessels that do not go beyond the Boundary Line as defined in 46 CFR Part 7, is not required to provide medical certification. If such an applicant otherwise qualifies for issue of a merchant mariner's document (MMD), the MMD shall be endorsed with a limitation valid for service only on Great Lakes and Inland waters. A typical endorsement would read "Ordinary seaman, wiper, steward's department (GL & Inland waters only)."

3. An applicant for entry level ratings who will be employed on seagoing vessels over 200 GRT shall provide a medical report document that meets the following requirements and attests to his or her medical qualifications:

a. The medical report document may consist of form CG-719K, but its use is not required. If this form is used, only the portions of the form identifying the applicant must be completed. If letterhead stationary is used for the report, the applicant must be positively identified in the report by name, soccial security number, height, weight, color of hair and eyes, and any distinguishing characteristics;

b. The following shall be typed or written on either the form CG-719K or the letter: "The applicant has the strength, agility, and flexibility to perform the activities stated in paragraph 4 of Navigation and Vessel Inspection Circular No. 2-98;"

c. The report of medical qualifications, form CG-719K or letter report, shall be signed by a licensed physician, licensed physician's assistant, or a licensed nurse practitioner; and,

d. An ordinary seaman who applies for a form issued in accordance with the International Convention on Standards of Training, Certification, and

Watchkeeping for Seafarers (STCW) endorsed as a rating forming part of a navigational watch must provide evidence that he/she meets the vision, color vision, and hearing requirements for a deck officer as set forth in reference (b). A wiper who applies for an STCW form endorsed as a rating forming part of an engineering watch must provide evidence that he/she meets the vision, color vision, and hearing requirements for an engineer officer as set forth in reference (b).

4. An applicant for entry level ratings to serve on seagoing vessels of 200 or more gross tons who does not meet the standards listed in reference (b) may be issued an MMD with appropriate limitations.

5. An applicant for entry level ratings for service on seagoing vessels of less than 200 GRT is not required to present a document attesting to his or her medical qualifications. This applicant should be advised of the employment limitations of such an endorsement. If he or she still does not want to provide a document of medical qualification, the endorsement on the MMD would read "Ordinary seaman, wiper, steward's department. May not serve on seagoing vessels of 200 or more GRT."

W. C. BENNETT
By direction

Dist: All District Commanders (m)
Commandant (G-MSO)
All MSOs/Activities
All RECs

Appendix 2

Welcome to the Maryland Motor Vehicle Administration
COMMITTED TO SAFETY, SERVICE, AND YOU

What's New

MVA Programs
ABOUT MVA
Employment Opportunities
Frequently Asked Questions
infoMVA
Legislation
Lemon Law
Motorists with Disabilities
Office Wait Time
Press Releases
Procurement and Contracts
Rules of the Road
Speakers' Bureau
Statistics

Online Services
Vehicle Services
Driver Services

SEARCH

Customer Self-Report of a Medical Condi

Must I notify the MVA about my medical or psychological condition:

Maryland law requires drivers to notify the MVA if they are diagnosed wit the following conditions:

1. Cerebral palsy;
2. Diabetes;
3. Epilepsy;
4. Multiple sclerosis;
5. Muscular dystrophy;
6. Heart condition;
7. Stroke;
8. Alcoholism, or alcohol abuse;
9. Drug addiction;
10. Loss of limb or limbs;
11. Organic brain syndrome;
12. Manic depressive disorders (major affective disorders);
13. Schizophrenic disorders;
14. Severe anxiety disorders;
15. Other illness in which there was a lapse of consciousness, blacko seizure; or
16. Disorder that prevents a corrected minimum visual acuity of 20/70 eye and a field of vision of at least 110 degrees.

A driver must report the problem when it is diagnosed, or when he or she applying for a driver's license or renewing an existing driver's license.

How do I notify the MVA of my diagnosis?

You may report your diagnosis in by email, phone, mail or fax to the MV/ Wellness and Safety Division, or to any MVA branch or express office. Pl sure to include:

- your full name,
- date of birth,
- current mailing address,
- driver's license number, and
- medical or psychological conditions

What will happen after I report my diagnosis?

When you have reported a condition, the Driver Wellness and Safety Div (DW&S) may send you several forms to complete. They also may send y form for your physician to complete. After you return the forms, the Drive Wellness and Safety Division then will make a decision about whether yc

situation should be referred for an opinion from the Medical Advisory Boa (MAB). The MAB is a group of doctors who works with the MVA in analyz customers' driving abilities. If the MAB is involved, they (the MAB) may a for more information, or to attend a meeting.

All medical data obtained will be kept CONFIDENTIAL and will only for those purposes permitted by law.

After the doctor assigned by the MAB analyzes your situation, he or she provide an opinion to the Driver Wellness and Safety Division. The Drive Wellness and Safety Division will make the final decision about whether driving privileges should be restricted in any way.

Please remember that the MVA wants only to be sure that you are al drive safely and not endanger others on the highway. We will work you to meet any special transportation needs that you may have.

Fees:

- There is no fee **($0)** involved in this process.

Contact Information:

MVA Driver Wellness and Safety Division
6601 Ritchie Highway
Room 124
Glen Burnie, MD 21062
Phone – 410-768-7511
FAX – 410-768-7627

MVA Customer Service Center:	1-800-950-1MVA(1682)
TTY/Hearing Impaired:	1-800-492-4575
Out-of-State:	1-301-729-4550

[Go to infoMVA Home]

February 14, 2003

Aging or impaired drivers
Driving with a disability
Driving with a medical condition
Mature drivers
Medically impaired drivers

Drivers & Vehicles > Drivers > Aging or impaired drivers >

Medically impaired drivers

Conditions that cause impairment | Confidentiality a concern | Driver condition or behavior report | How a decision is made | Pledge of confidentiality | Safety consideration | Signs of impairment | What can happen | What is needed | When doctors report

Related link:

DMV service centers

Cause for concern

If you know someone who could be dangerous behind the wheel because of a medical condition, you may report this to the Wisconsin Department of Transportation (WisDOT), Medical Review Unit. Download a Driver Condition or Behavior Report form MV3141 (105KB) here or obtain one at the DMV service center nearest you.

A safety consideration

It is not easy to decide to report a relative or friend to WisDOT, but concern for the driver's safety and the safety of others is usually the deciding factor.

How a decision is made

WisDOT cares about a driver's functional ability to safely operate a motor vehicle. Decisions about impaired drivers are based on individual signs, symptoms, behaviors, and the observations of others, rather than the type of condition or a diagnosis.

sis. The issue is whether or not a medical condition affects a driver's ability to drive safely.

Signs of impairment

- Confusion
- Disorientation
- Memory loss
- Impaired judgment
- Extreme exhaustion
- Difficulty making simple decisions
- Chronic drowsiness
- Impaired response/reaction time
- Inability to concentrate
- Impulsive behaviors
- Severe shortness of breath
- Episodes of impaired or altered consciousness

Conditions that may cause impairment

- Alzheimer's and other types of dementia
- Diabetes, if frequent episodes of low blood sugar (hypoglycemia) occur
- Neurological conditions, such as seizure disorders
- Sleep disorders
- Behavioral or mental disorders
- Respiratory (lung) diseases
- Cardiovascular (heart) disease

- Visual impairments

What is needed for WisDOT to act

- Positive identification of the driver. The license plate number is not enough; the driver could be someone other than the owner of the car.
- A report that is signed. If the report is from a citizen, another person must be able to verify the information.
- A description of behaviors, observations or impairment related to driving

WisDOT will not take action based only on a diagnosis or a person's advanced age.

What can happen

Depending on the nature of the driver's limitation, and the contents of the Driver Condition or Behavior Report, WisDOT may require a:

1. Road test
2. Written test
3. Medical report
4. Vision exam or screening
5. No further action
6. Cancellation of the license*
7. Any combination of 1-4

*Only a behavior report signed by a physician can result in immediate cancellation of a license.

Confidentiality a concern?

Wisconsin has an open records law, which means that behavior report information is available to the reported driver. If this is a concern, you might want to discuss your concerns with the driver and suggest that the person stop driving or see a physician. The physician may be willing to send in a report. If you have good reason to remain anonymous and will not provide information otherwise, you may request a Pledge of Confidentiality form MV3454 (4KB) . You must sign this form in the presence of a WisDOT representative before we accept the information.

When doctors report

Wisconsin does not have a mandatory reporting law, but physicians may report concerns about a patient's driving ability to WisDOT without informed consent of the patient. This applies to anyone whose physical or mental condition may affect his/her ability to safely operate a motor vehicle, based on the physician's judgment.

Reports from physicians are considered confidential because they contain medical information; however, the information is available to the driver.

For additional information about reporting impaired drivers, contact:

- E-mail: rlis.dmv@dot.state.wi.us

DRIVER CONDITION OR BEHAVIOR REPORT

MV3141 11/2002

The following information is submitted for consideration as "Good Cause" for Departmental action as authorized under section 343.16 Wisconsin Statutes. Advanced age alone, cannot be considered as good cause. **Positive driver identification must be established.** License plate number only is **not** sufficient.

Submit To: Wisconsin Department of Transportation
Medical Review
PO Box 7918
Madison, WI 53707-7918

Telephone: 608-266-2327
FAX: 608-267-0518
E-Mail: rlis.dmv@dot.state.wi.us

M.D. or D.O.: Please complete back. All others, complete front.

This information may be subject to Wisconsin's Open Records Law.

Driver Name - First, Middle, Last	Birth Date	Driver License Number		State of Issuance
Address		**City**	**State**	**Zip Code**

Driver Condition - Check appropriate boxes. **Describe below.**

- ☐ Physical Condition
- ☐ Mental/Emotional Condition
- ☐ Blackout, Seizure, Fainting Spell
- ☐ Lack of Knowledge of Traffic Laws
- ☐ Confused/Disoriented
- ☐ Alcohol/Other Drugs
- ☐ Defective Vision
- ☐ Obstructing Traffic

Describe in detail incidents or conditions which brought this driver to your attention. Give specific information such as dates, places, accident reports, all other available information to support the Department's action.

Type of Enforcement Action Taken	Incident Date	Time
Title and Signature of Person Completing this Form X	Print Full Name	Area Code - Telephone Number
Address - Please Print	City and State	Zip Code

Print Full Name of Person who can **verify** the above information- Required if report is completed by private citizens or family members		Area Code - Telephone Number
Address	City and State	Zip Code

This side must be completed by an M.D. or D.O. only.

This information is not subject to Wisconsin's Open Records Law; it is, however, available to the driver upon request.

Driver Name - First, Middle, Last	Birth Date	Driver License Number	State of Issuance

Address	City	State	Zip Code

Describe in detail patient's current medical condition(s) and diagnosis. Give specific information to support the Department's action.

YES NO

☐ ☐ Do you recommend a complete re-examination of patient's driving ability?

☐ ☐ Is this patient able to safely operate a motor vehicle at this time? A "No" answer will result in immediate cancellation of all license classes and endorsements.

Signature of M.D. or D.O.	Date	Print Full Name	Medical License Number
X			

Mailing Address	City, State, Zip Code	Area Code - Telephone Number

MEDICAL EXAMINATION REPORT

MV3644 5/2002 Ch. 343 Wis. Stats. & Trans. 112 Admin. Code

APPLICANT: After this medical report has been reviewed, you may be required to file medical reports on a regular basis. We will send you the forms at the time they are required.

Wisconsin Department of Transportation
Medical Review
P O Box 7918
Madison WI 53707-7918
Telephone: (608) 266-2327

Applicant Name		Street Address
Operator License Number		City, State, Zip Code
Birth Date		Area Code and Telephone Number
Date Issued	Examiner Badge Number	License Type ☐ Instruction Permit ☐ Operator ☐ CDL ☐ Passenger Bus ☐ School Bus

Reason for Referral

☐ 1. Driving Incident/Accident (Date) _____
☐ 2. General Medical: complete sections A and F(others if appropriate)
☐ 3. Mental / Emotional: complete sections A, B, and F
☐ 4. Neurological: complete sections A, C, and F
☐ 5. Endocrine (Diabetes): complete sections A, D, and F
☐ 6. Cardiovascular / Pulmonary: complete sections A, E, and F

SECTION A: PHYSICIAN TO COMPLETE FOR ALL APPLICANTS

Provide Diagnoses, Medications Used, and Dosages

Height	Weight

Yes	No	
☐	☐	1. Is the person's condition currently stable? **If not, explain below.**
☐	☐	2. Is the person reliable in following the treatment program? **If not, explain below.**
☐	☐	3. Does this person experience side effects of medication which are likely to impair driving ability? **If yes, explain below.**
☐	☐	4. Has this person experienced an episode of altered consciousness or loss of bodily control during the past 12 months? **If yes, explain below and give date.**
☐	☐	5. Is driving ability likely to be impaired by current uncontrolled use of alcohol and/or drugs? **If yes, an alcohol/drug evaluation will be required.**
☐	☐	6. Does this person experience uncontrolled sleepiness associated with sleep apnea, narcolepsy, or other disorder? **If yes, explain below.**
		7. Is driving ability likely to be impaired by limitations in any of the following?
☐	☐	a. Judgment and insight
☐	☐	b. Problem-solving and decision-making
☐	☐	c. Emotional or behavioral stability
☐	☐	d. Cognitive function
		8. Is driving ability likely to be impaired by limitations in any of the following?
☐	☐	a. Reaction time
☐	☐	b. Sensorimotor function
☐	☐	c. Strength and endurance
☐	☐	d. Range of motion
☐	☐	e. Maneuvering skills
☐	☐	f. Use of arm(s) and/or leg(s)

Details and Elaboration

SECTION B: MENTAL/EMOTIONAL

Yes No

☐ ☐ 1. Has the person been hospitalized in the past year for a mental/emotional condition? If yes, give admission date(s), reason(s) for admission and date(s) of discharge: _____

_____

☐ ☐ 2. Does the person have a behavior disorder which is likely to impair driving ability?

3. Identify current treatment program(s), counseling, etc.

_____

_____

SECTION C: NEUROLOGICAL

Examining physician: If an episode has occurred in the past 90 days, the examination must be **at least 60 days after the episode.**

1. Give date of last episode of altered consciousness or loss of bodily control. If last episode occurred within the previous 3 months, the patient is not eligible to hold a license. _____ (Month / Day / Year)

Yes No

☐ ☐ 2. Does this person have a seizure disorder? **If not, explain cause and/or diagnosis related to episode(s).**

_____

3. List anticonvulsant medication: _____ If discontinued, give date: _____

☐ ☐ 4. Was the last medication blood serum level within acceptable range?

5. If this person holds or is applying for a commerical driver license, and has had an episode of altered consciousness or loss of bodily control since the last report was filed with WDOT, the following is required:
   a. A narrative summary, including the history of the episode(s);
   b. An indication of risk for further episodes;
   c. Current blood levels of anticonvulsant medication;
   d. Results of the most recent EEG.

SECTION D: ENDOCRINE

1. Please provide a hemoglobin A_1C reading: _____ (Reading) (Date)

Yes No

☐ ☐ 2. Does this person have warning of impending hypoglycemic reactions and know how to counter them? If not, explain.

_____

☐ ☐ 3. Has this person been hospitalized for treatment of diabetes or complications in the past year? If yes, explain below.

_____

4. Indicate type of medication and dosage for current treatment.

_____

☐ ☐ 5. Is this person experiencing renal failure?

☐ ☐ 6. Does this person monitor his/her blood sugar?

7. Provide the last 3 fasting blood sugar readings and dates recorded. (Home monitoring results ARE acceptable.)

_____ (Reading) _____ (Date) _____ (Reading) _____ (Date) _____ (Reading) _____ (Date)

8. If this person holds or is applying for a commercial license, and is taking insulin as a NEW treatment in the past 2 years, please provide the following information:
   a. When was this person diagnosed with diabetes? _____

Yes No b. When was insulin first prescribed? _____

☐ ☐ c. Do any complications or associated conditions exist? If yes, please explain:

_____

_____

SECTION E: CARDIOVASCULAR/PULMONARY

1. Functional Class

☐ I ☐ II ☐ III ☐ IV

Yes No

☐ ☐ 2. Does the person have an implantable cardioverter defibrillator? If yes, give implant date _____

☐ ☐ 3. Has the unit discharged since the implant? If yes, describe the person's condition at the time and date of discharge.

_____

Has this person had any of the following? Please explain any yes answers.

Yes No

☐ ☐ 4. Cardiovascular surgery and/or other procedures - describe and give date(s) _____

_____

5. Angina _____

☐ ☐ a. Stable _____

☐ ☐ b. Unstable _____

☐ ☐ c. With exertion _____

☐ ☐ d. At rest _____

☐ ☐ 6. Arrhythmias _____

☐ ☐ 7. Other cardiac symptoms _____

☐ ☐ 8. Syncope _____

9. Fatigue _____

☐ ☐ a. With exertion _____

☐ ☐ b. At rest _____

☐ ☐ 10. Dyspnea _____

☐ ☐ 11. Pulmonary symptoms _____

☐ ☐ 12. Have any cardiac tests been conducted (exercise stress test, etc.)? **If yes, give procedure(s), date(s), results.**

_____

_____

SECTION F: PHYSICIAN'S RECOMMENDATIONS FOR ALL APPLICANTS

REPORTING PHYSICIAN: This report must be based on an examination conducted WITHIN THE PAST 90 DAYS. The Secretary of the Department of Transportation is, by statute, responsible for the driver licensing decision. Your report will be advisory in determining eligibility. Physician's signature AND recommendations (section F) are required for ALL applicants.

1. In your opinion, is this person capable of driving safely?
   - ☐ Yes
   - ☐ No
   - ☐ Only if a road test is passed
2. May this person operate a commercial motor vehicle?
   - ☐ Yes
   - ☐ No
3. May this person operate a passenger bus and/or school bus?
   - ☐ Yes
   - ☐ No
4. Please indicate recommended restrictions.
   - ☐ Daylight driving only
   - ☐ _____ Miles from home
   - ☐ Other:

I certify that I have examined this applicant and that I am licensed to practice _____.

Print Name of Reporting Physician	Check One: ☐ MD ☐ DO	**Patient** Examination Date: Month - Day - Year	
Signature of Reporting Physician X		Medical License Number	(Area Code) Office Telephone Number

mca
Maritime and Coastguard Agency

Medical Report Form

For use in connection with an application for a Boatmaster's Licence, or an application for an RYA certificate or MCA certificate of competency under one of the statutory codes (small/large commercial vessel codes; workboat code).

WHAT TO DO:

A Medical Practitioner who may be your GP must fill in Part B of the Medical Report (ML5). He/she may charge you a fee for this report. Please read the **Notes about Fitness at PART C** . Then, if you have any doubts about your fitness, talk to your Doctor **before** you ask for an ML5 examination.

The purpose of the ML5 form is to obtain a factual report of your health and medical history. The form is designed so that, if **Part B** of the report shows ticks in Box 2 only, without any qualifying remarks by the Medical Practitioner, you will be considered medically fit to hold a Licence/ Certificate. If there are ticks in Box 1, or if the Medical Practitioner has made qualifying remarks in Section 8, you cannot automatically be considered fit, and the Marine Office/RYA cannot issue your Licence/Certificate. But you have the right to have your case reviewed by the MCA's Chief Medical Adviser.

For the purposes of medical review, you may wish to provide further information. This may include medical evidence from your GP or a specialist consultant, if appropriate, as to your fitness to hold a Licence/Certificate. Medical evidence should be submitted in an envelope marked "Private and Confidential" to the Chief Medical Adviser, (MCA). It will also assist the Chief Medical Adviser to make a decision if you include information about the work for which you need the Licence/Certificate (area of operation, duties, manning of the vessel etc.).

Based on this evidence the Chief Medical Adviser will decide whether or not you meet the necessary requirements, and whether a restriction should be placed on your Licence/Certificate.
You must tell the MCA if during the validity of your Licence/Certificate, you develop a condition or disability which affects your fitness to work. This includes mental as well as physical conditions.

PART A TO BE COMPLETED BY THE APPLICANT

Full Name:

Home Address:

Tel. No. Work:

Tel. No. Home:

Date of Birth:

Place of Birth:

Date of first Licence/Cert:

YOU MUST SIGN THIS DECLARATION WHEN YOU ARE WITH THE DOCTOR WHO WILL BE FILLING IN PART B OF THIS REPORT

I authorise my Doctors and Specialists to release confidential information to the Chief Medical Adviser, if any matter affecting my fitness arises during the period of the Licence/Certificate or in connection with this application.

I also authorise the Chief Medical Adviser to advise the MCA of my fitness

Applicants Signature:

Da

PART B Medical Report - to be completed by the Doctor

SECTION 1 Cardiac

		Box 1		Box 2
a. Is there evidence of serious congenital heart disease requiring Consultant Cardiological review at least every year?	Yes		No	
b. Is the applicant suffering from, or having attacks of angina of effort or receiving continuous treatment to prevent angina from manifesting itself?	Yes		No	
c. Has the applicant suffered from myocardial infarction, unstable angina coronary artery bypass surgery or coronary angioplasty?	Yes		No	
If YES *please answer the following :* (i) give the time elapsed since the event (ii) if the applicant remains on medication, give details (iii) give details of any continuing symptoms/clinical signs of heart disease *(please use Section 8 if necessary)*				
d. Has the applicant uncontrolled complete heart block?	Yes		No	
e. Has a cardiac pacemaker been implanted?	Yes		No	
If Yes *please answer the following*: Is the applicant attending a pacemaker clinic for at least annual review?	Yes		No	
f. Has a Cardioverter/defibrillator device been implanted?	Yes		No	
g. Is there currently a serious disturbance of cardiac rhythm associated with documented ischaemic or valvular heart disease?	Yes		No	
h. Is the applicant in need of medication to prevent paroxysmal arrhythmia (except for beta blockers, verapamil and digoxin)?	Yes		No	
If Yes *please give details*				
i. Has the applicant undergone heart transplant or heart/lung transplant surgery?	Yes		No	
j. Has the applicant evidence of an aortic aneurysm that has not been successfully treated by surgery?	Yes		No	

SECTION 2 Diabetes Mellitus

a. Is the applicant a diabetic requiring insulin injections?	Yes		No	

SECTION 3 Nervous System

a. Is the applicant liable to epileptic seizures or other sudden disturbances of the state of consciousness other than simple syncope? (If there is any doubt the opinion of a consultant neurologist should be obtained)	Yes		No	
b. Is there a history of any major or minor stroke within the last five years?	Yes		No	
c. Is there a history of Multiple Sclerosis or Parkinson's disease?	Yes		No	
d. Is there a history of malignant brain tumour in the last five years?	Yes		No	
e. Is there a history of serious head injury with continuing symptoms?	Yes		No	
f. Is there profound deafness that prevents communication by radio/ telephone?	Yes		No	

SECTION 4 Psychiatric Illness

a. Has the applicant suffered from a psychotic illness or required				

treatment for a psychotic illness in the past two years?	Yes		No	
b. Has the applicant suffered from a serious mental disorder requiring treatment with psychotropic medication in the last six months?	Yes		No	
c. Is there any history of alcoholism during the last two years?	Yes		No	
d. Is there any history of drug or substance misuse during the last two years?	Yes		No	

SECTION 5 Vision

a. Is there any evidence of a colour vision defect likely to lead to inability to distinguish red, green and white lights at 1 mile distance?* * **If Ishihara Plates are used ensure that aids to colour vision are not being worn.**	Yes		No	
b. Can the applicant read 6/6 on the Snellen Chart at six metres distance in at least one eye with glasses or contact lenses if necessary?	No		Yes	
c. Can the applicant read 6/60 with at least one eye without any visual aid?	No		Yes	
d. Has the applicant an adequate field of vision with no progressive disease in at least one eye?	No		Yes	

SECTION 6 Malignant Growths

a. Does the applicant suffer from malignant disease likely to impair physical or mental fitness to undertake duties in the foreseeable future?	Yes		No	

SECTION 7 Musculoskeletal System

a. Has the applicant reasonable physique to enable him to undertake intended duties and particularly to physically assist other persons to evacuate a vessel in an emergency?	No		Yes	

SECTION 8 Additional Notes

(Please give the Section number to which these notes refer)

SECTION 9 Certification

I certify that I have examined the applicant in **PART A** and that my findings are recorded in **PART B**.

Signature of the Registered Medical Practitioner Date

Name & Address

Official Stamp

Are you the applicant's General Practitioner?

Yes ☐ No ☐

PART C

Notes about Fitness

YOU ARE UNLIKELY TO BE ISSUED WITH A LICENCE/CERTIFICATE IF, FOR EXAMPLE:

- you are liable to epileptic seizures or sudden disturbances of the state of consciousness
- you have had a coronary thrombosis or heart surgery
- you suffer problems with heart rhythm, or have a disease of the heart or arteries
- your blood pressure is not well controlled with drugs
- you need injections of insulin for diabetes
- you have had a stroke, or unexplained loss of consciousness
- you have had severe head injury with continuing loss of consciousness
- you suffer from Parkinson's disease or Multiple Sclerosis
- you are being treated for mental or nervous problems
- you have had alcohol or drug addiction problems
- you have profound deafness and cannot communicate on the radio/telephone
- you suffer from double or tunnel vision
- you have any other condition which would/could cause problems regarding your fitness to navigate a vessel

INITIAL MEDICAL REQUEST
P-40 REV. 5-2001

STATE OF CONNECTICUT
DEPARTMENT OF MOTOR VEHICLES
MEDICAL REVIEW DIVISION
On The Web At http:// dmvct.org

TO: Department of Motor Vehicles, Medical Review Division, 60 State Street, Wethersfield, CT 06161-2510

TO	**PHYSICIAN'S NAME** *(Please Print or Type)*	
	OFFICE ADDRESS *(Include Zip Code)*	
RE	**INDIVIDUAL'S NAME**	**DATE OF BIRTH**
	INDIVIDUAL'S ADDRESS	

The person named above has been referred to us for driver license review. It would be appreciated if you would respond to the questions below which will aid us in the review. Your reply can be technical if necessary, as we have a Medical Advisory Board serving the Department of Motor Vehicles.

Your earliest attention to this medical request will be helpful to us as well as to the individual in question. Please fill in the applicable section below, and keep in mind that our concern is this person's ability to safely operate a motor vehicle.

SECTION A

☐ I have some knowledge of the individual and the individual's medical history. Medical matters possibly relating to driving safety are *(check all applicable boxes below):*

☐ NEUROLOGIC	☐ ORTHOPEDIC	☐ ETOH/SUBSTANCE ABUSE
☐ OPHTHALMOLOGIC	☐ ENDOCRINE	☐ NARCOLEPSY/SLEEP APNEA
☐ CARDIOVASCULAR	☐ PSYCHIATRIC	☐ LIVER/RENAL FAILURE

☐ OTHER _____

COMMENTS

☐ **This individual has NO medical matters which would affect his/her ability to safely operate a motor vehicle.**

PHYSICIAN'S NAME *(Please Print or Type)*	**OFFICE ADDRESS** *(Include Zip Code)*	
TELEPHONE NO.	**PHYSICIAN'S LICENSE NO.**	**PHYSICIAN'S SPECIALTY**
PHYSICIAN'S SIGNATURE X		**DATE REPORT COMPLETED**

SECTION B

☐ **I have little knowledge of this individual or the individual's medical history. I do not feel qualified to address this matter or respond to questions about this matter.**

PHYSICIAN'S NAME *(Please Print or Type)*	**OFFICE ADDRESS** *(Include Zip Code)*	
TELEPHONE NO.	**PHYSICIAN'S LICENSE NO.**	**PHYSICIAN'S SPECIALTY**
PHYSICIAN'S SIGNATURE X		**DATE REPORT COMPLETED**

Alberta
TRANSPORTATION

Medical Examination For Motor Vehicle Operators

Name *(Last, First, Second)*	Date of Birth (year / month / day)	Telephone Number

Address	Apartment	City / Town	Province	Postal Code

Occupation	Class of Licence Required	Operator's Licence Number

Reason For Examination

☐ Pre-Employment ☐ After Illness or Injury ☐ Professional Operator's Licence (Class 1, 2 or 4) ☐ Periodic Medical (condition on Operator's Licence)

A. MEDICAL HISTORY AND PHYSICAL EXAMINATION

Applicants must be examined for each of the following medical conditions using the criteria as set out in the National Safety Code Standards on the back of this form. **A "Yes" response indicates that the applicant does NOT meet the National Safety Code standards and as a result will be ineligible to be licensed at the time of application.** A "Ref" (Referral) response will result in the applicant being required to provide further documentation from a medical specialist, optometrist, or audiologist (see Section "B", No 1).

1. Visual Acuity Results

	Uncorrected	Corrected
Right	6/	6/
Left	6/	6/

Standards

Better eye 6/9 (20/30), weaker eye 6/15 (20/50) aided or unaided for Classes 1, 2, 3, & 4.

Better eye 6/12 (20/40) aided or unaided for Classes 5, 6 & 7.

2. Hearing — Yes / No / Ref

Applies only to applicants wishing to operate a bus, taxi, or ambulance.

a) Loss greater than 40 decibels averaged at 500, 1000 and 2000 HZ. May require an audiogram. (refer to back of form). ☐ ☐ ☐

3. Cardiovascular/Cerebrovascular System

a) Current history, or evidence of any disorder of the heart or circulatory system that results in a Canadian Cardiovascular Society Level IV Classification (refer to back of form). ☐ ☐ ☐

b) Current history, or evidence of uncontrolled Sick Sinus Syndrome. ☐ ☐ ☐

c) Aortic Aneurysm > 5 cm. or containing thrombus. ☐ ☐ ☐

d) Blood Pressure: Systolic _____ Diastolic _____

e) Recurrent transient ischemia attacks (reference CMA 1991 6.1.2). ☐ ☐ ☐

f) Past history of myocardial infarction (approx date). _____

4. Nervous System

a) Current history of multiple syncope episodes. ☐ ☐ ☐

b) Current history of spontaneous seizures uncontrolled or controlled less than 12 months (exempted: toxic illness now recovered). ☐ ☐ ☐

State onset of Disease (approx date)	Date of Last Seizure	Frequency

c) Current history of uncontrolled Narcolepsy. ☐ ☐ ☐

d) Current history of uncontrolled Meniere's disease. ☐ ☐ ☐

4. Nervous System (Continued) — Yes / No / Ref

e) Post traumatic conditions that should require the applicant to successfully pass a road test examination. ☐ ☐ ☐

5. Respiratory System

a) Level 4 impairment (severe impairment 50 - 100%). Dyspnea after walking more than 100m at own pace on level ground or at rest (significant dyspnea - moderate exertion). ☐ ☐ ☐

6. Metabolic System

a) If diabetes is present, state onset of illness (approx date). _____

b) Date of last significant hypoglycemic episode. _____

Type of control: ☐ Diet only ☐ Oral Medication ☐ Insulin

c) Insulin dependent diabetic who has had insulin related hypoglycemic attacks controlled less than 1 month or who has a history of alcohol abuse. ☐ ☐ ☐

d) Current history of uncontrolled hypoglycemia for any other reason. ☐ ☐ ☐

e) Current history of uncontrolled symptomatic hypothyroidism, Cushing's Disease, Addison's Disease, or pheochromocytoma. ☐ ☐ ☐

7. Psychiatric Disorders

a) Current history, or evidence of severe cognitive disorder or dementia. ☐ ☐ ☐

b) Current history, or evidence of uncontrolled Psychosis or Bipolar Disorders. ☐ ☐ ☐

c) Current history, or evidence of habitual alcohol abuse or illicit drug use. ☐ ☐ ☐

8. Other _____

_____

B. PHYSICIAN'S STATEMENT AND CERTIFICATE

1. Is additional information required? ☐ Yes ☐ No

If yes, ☐ will you submit supplementary medical direct to Alberta Transportation?

☐ suggest Alberta Transportation obtain supplementary medical?

2. Are you the applicant's regular doctor? ☐ Yes ☐ No

If yes, how long has the patient been under your care? _____

3. Would you recommend a driver's examination? ☐ Yes ☐ No

4. Patient meets the medical requirements for licence classification:

☐ 1 - Tractor/Trailer ☐ 4 - Taxis, Small Buses ☐ 6 - Motorcycles
☐ 2 - Large Buses ☐ 5 - Private Vehicles ☐ 7 - Learners
☐ 3 - Heavy Trucks (i.e. gravel)

I, _____
Name of Doctor

of _____
Address

certify that the above named applicant was examined in accordance with the National Safety Code Medical Standards.

_____
Physician's Signature

_____
Date of Examination

C. OPERATOR'S CERTIFICATE AND WAIVER

I certify that the information I have given to my doctor is true to the best of my knowledge. I authorize release of this information, as well as additional medical information an examining physician may wish to submit for the confidential use of Alberta Transportation.

_____
Signature of Applicant

_____
Date

D. ALBERTA TRANSPORTATION USE ONLY

More Information Required	Accept for Class
Second Opinion G.P.	Accept with Conditions
Second Opinion Specialist	Reject Unfit
Authorized Signature	Date

This information is being collected for the purposes of motor vehicle records in accordance with the Motor Vehicle Administration Act, administered by Alberta Registries on behalf of Alberta Transportation. Questions about the collection of this information can be directed to the Director, Driver Records for Alberta Transportation, 4999 - 98 Avenue, Edmonton, Alberta T6B 2X3, (780) 427-8230.

National Safety Code Standards

The numbers at the right denote the eligible class of licence for each medical statement.		Class						
Vision Requirements	Best eye 6/9 or better, worst eye not less than 6/15 aided or unaided.	1	2	3	4	5	6	7
	Best eye at least 6/12.					5	6	7
	Must be able to identify (traffic lights).	1	2	3	4	5	6	7
	Field of vision is not less than 120 degrees in each eye examined separately.	1	2	3	4	5	6	7
	Field of vision is not less than 120 degrees in one eye with both eyes open and examined together.					5	6	7
	Corrected Diplopia.			3		5	6	7
Hearing Requirements	If unable to perceive at least a forced whispered voice at no less than five feet in the best ear. If tested by the use of an audiometer device, does not have a loss in the best ear greater than 40 decibels at 500, 1000, or 2000 HZ under the new I.S.O. standards and using a puretone audiometer.	1		3		5	6	7
Cardiovascular/ Cerebrovascular System	Medical evidence of a first myocardial infarction, angina pectoris, thrombosis, etc., is not a contraindication if it is medically determined that a full recovery has been accomplished.					5	6	7
	History of successful aortic aneurysm resection.	1	2	3	4	5	6	7
	Presence of hypertension accompanied by postural hypotension and vertigo.					5	6	7
Nervous System	Medical history of loss of consciousness, or awareness due to chronic or recurring condition.							
	Medical history or diagnosis of a disorder of the muscle-skeletal or nervous system which may interfere with the safe operation of a motor vehicle.							
Respiratory System	Medical evidence respiratory dysfunction likely to interfere with the safe operation of a motor vehicle.					5		7
Metabolic System	History or clinical diagnosis of diabetes that requires insulin for control.					5	6	7
Psychiatric Disorders	Medical evidence of an intractable psychoneurotic disorder, having particular regard for sustained hostility: aggressive, paranoid or suicidal tendencies: or agitated depression.							
Other	If taking any medication that could, in the dosage prescribed, impair the ability to operate a motor vehicle.							
	Presence of impairment of the use of fingers, legs, hands, arms or other structural defects, limitation of mobility, or coordination to a degree likely to interfere with the safe operation of a motor vehicle. NOTE: Loss of hand, arm, foot or leg is not a contraindication to a class 4 licence if it can be determined, by a medical review and a driver's examination, that the impairment with or without the use of compensating equipment does not interfere with safe operation of a motor vehicle.	1		3		5	6	7
	Clinical diagnosis of alcoholism or drug addiction.							
	Other physical or mental impairment, disease or condition which is likely to significantly interfere with the individual's ability to safely operate a motor vehicle.							
	Must submit medical report upon application.	1	2		4			

Drivers who have any type of medical condition, such as diabetes, heart disease, epilepsy, or vision problems which may affect their ability to safely operate a motor vehicle, are required by law to advise Alberta Transportation of the condition.

Alberta Transportation will conduct a medical review on an individual case basis for clients who do not meet the National Safety Code Standards for a specific licence classification.

Medical Appeal Process

A driver who is denied any class of licence as a result of a medical condition may appeal the decision to the Medical Review Board.

To initiate an appeal, the Board will require a detailed medical report completed by a physician specializing in that field of concern. This report can be forwarded to Driver Records along with any other information regarding the appeal.

NOTE: The Alberta Health Care Insurance Plan will only pay for medical examinations for motor vehicle operators who are 75 years of age or older.

Appendix 3

William C. Keppen, Pres
Keppen & Associates
1603 Honeysuckle Ridge
Annapolis, Maryland 21401-6425
Improved Operational Safety Through – Fatigue Avoidance & Enhanced Alertness Strategies

March 28, 2003

«First_name» «Initial» «Last_name»
«Title», «Company»
«Address»
«Address_1»
«City», «State» «Zip»

Dear «Salutation» «Last_name»:

Keppen & Associates is conducting research into the policies and practices of transportation service providers regarding medical examination and monitoring procedures for (train) operating employees. This research effort extends to: airlines (pilots), waterways (pilots), trucking (CDL drivers), and non-commercial drivers.

The purpose of the research is to identify medical oversight procedures that reduce the likelihood of employees loosing consciousness while operating equipment, thereby, increasing the risk to employee and public safety.

Enclosed with this cover you will find a brief questionnaire, which we would like you to fill-out and return by fax, or mail, if you prefer. Your response will be aggregated with data on practices in other modes of transportation and will provide insights into procedures for evaluating and monitoring the medical fitness of employees working in safety-sensitive positions. Your cooperation in completing and returning the questionnaire is important and deeply appreciated.

If you have any questions, I can be contacted at 410.573.9094, 410.271.4157, or wkeppen@comcast.net.

Sincerely,

William C. Keppen

Encl.

SURVEY OF RAILROAD PRACTICES REGARDING MEDICAL EXAMINATION AND MONITORING OF OPERATING EMPLOYEES

Please mark the square adjacent to the response that most accurately describes the current policy and/or practice of your railroad regarding medical examinations, medications, and reporting of medical conditions for employees working in safety-sensitive positions (operating employees).

Physical examinations are required for new hire train operating employees.

☐ Yes
☐ No

Periodic physical examinations (not just sight and hearing) are required for operating employees.

Engineers:

☐ Yes
☐ No

Conductors:

☐ Yes
☐ No

If periodic examinations are required, what is the normal period of time between required examinations?

☐ 1 year
☐ 2 years
☐ 3 years
☐ Other – Describe:

Do medical examination forms and procedures inquire about conditions that could cause loss of consciousness? (diabetes, neurological conditions, sleep disorders, cardiovascular disease, etc.)

☐ Yes
☐ No

Do you have a company policy governing the use of prescription and non-prescription (OTC) medications?

☐ Yes
☐ No

Do you have a company policy requiring employees in safety-sensitive positions to report medical conditions, including sleep disorders, to supervisors and/or your medical department?

☐ Yes
☐ No

Would you be willing to share copies of current medical examination forms and policies?

☐ Yes
☐ No

Does your company have a policy regarding communications between an employee's personal physician and your medical department on medical conditions that may affect the employee's performance?

☐ Yes
☐ No

Your comments:

Completed forms may be faxed to 410.573.9094. If you are willing to share copies of medical examination forms and policies, they may be faxed or mailed to the following address:

Keppen & Associates
1603 Honeysuckle Ridge Ct.
Annapolis, MD 21401-6425

THANK YOU FOR YOUR TIME AND COOPERATION!

A questionnaire containing the following questions was distributed to 8 freight and passenger requesting their response be returned by facsimile or mail to Keppen & Associates. The original mailing was follow by a phone call or email to the railroad to encourage participation. We were advised that the mailing had been received and the question on responding was under consideration. At the present time responses have been received from 2 freight and 1 passenger railroad. The table below records was has been reported.

Questions were prefaced with the following: Please mark the square adjacent to the response that most accurately describes the current policy and/or practice of your railroad regarding medical examinations, medication and reporting of medical conditions for employees working in safety-sensitive positions (operating employees).

Questions	Yes	No
Physical examinations are required for new hire train operating employees?	I I I I	
Periodic physical examination (not just sight and hearing) are required of operating employees – ENGINEERS?	I I I	I
Periodic physical examination (not just sight and hearing) are required of operating employees – CONDUCTORS?	I I I	I
If periodic examinations are required, what is the normal period of time between required examinations? 1 year, 2 years, 3 years, other – describe	3, 5/3, 1	NA
Do medical examination forms and procedures inquire about conditions that could cause loss of consciousness?	I I I I	
Do you have a company policy governing the use of prescription and non-prescription (OTC) medications?	I I I I	
Do you have a company policy requiring employees in safety-sensitive positions to report medical conditions, including sleep disorders, to supervisors and/or your medical department?	I I	I I
Would you be willing to share copies of current medical examination forms and policies?	I I	I I
Does your company have a policy regarding communications between an employee's personal physician and your medical department on medical conditions that may affect the employee's performance?	I I I	I

Comments:

William C. Keppen, Pres
Keppen & Associates
1603 Honeysuckle Ridge
Annapolis, Maryland 21401-6425
Improved Operational Safety Through ~ Fatigue Avoidance & Enhanced Alertness Strategies

March 28, 2003

«First_name» «Initial» «Last_name»
«Title», «Company»
«Address»
«Address_1»
«City», «State» «Zip»

Dear «Salutation» «Last_name»:

Keppen & Associates is conducting research into the policies and practices of transportation service providers regarding medical examination and monitoring procedures for (train) operating employees. This research effort extends to: airlines (pilots), waterways (pilots), trucking (CDL drivers), and non-commercial drivers.

The purpose of the research is to identify medical oversight procedures that reduce the likelihood of employees loosing consciousness while operating equipment, thereby, increasing the risk to employee and public safety.

Enclosed with this cover you will find a brief questionnaire, which we would like you to fill-out and return by fax, or mail, if you prefer. Your response will be aggregated with data on practices in other modes of transportation and will provide insights into procedures for evaluating and monitoring the medical fitness of employees working in safety-sensitive positions. Your cooperation in completing and returning the questionnaire is important and deeply appreciated.

If you have any questions, I can be contacted at 410.573.9094, 410.271.4157, or wkeppen@comcast.net.

Sincerely,

William C. Keppen

Encl.

SURVEY OF RAILROAD PRACTICES REGARDING MEDICAL EXAMINATION AND MONITORING OF OPERATING EMPLOYEES

Please mark the square adjacent to the response that most accurately describes the current policy and/or practice of your railroad regarding medical examinations, medications, and reporting of medical conditions for employees working in safety-sensitive positions (operating employees).

Physical examinations are required for new hire train operating employees.

☐ Yes
☐ No

Periodic physical examinations (not just sight and hearing) are required for operating employees.

Engineers:

☐ Yes
☐ No

Conductors:

☐ Yes
☐ No

If periodic examinations are required, what is the normal period of time between required examinations?

☐ 1 year
☐ 2 years
☐ 3 years
☐ Other – Describe:

Do medical examination forms and procedures inquire about conditions that could cause loss of consciousness? (diabetes, neurological conditions, sleep disorders, cardiovascular disease, etc.)

☐ Yes
☐ No

Do you have a company policy governing the use of prescription and non-prescription (OTC) medications?

☐ Yes
☐ No

Do you have a company policy requiring employees in safety-sensitive positions to report medical conditions, including sleep disorders, to supervisors and/or your medical department?

☐ Yes
☐ No

Would you be willing to share copies of current medical examination forms and policies?

☐ Yes
☐ No

Does your company have a policy regarding communications between an employee's personal physician and your medical department on medical conditions that may affect the employee's performance?

☐ Yes
☐ No

Your comments:

Completed forms may be faxed to 410.573.9094. If you are willing to share copies of medical examination forms and policies, they may be faxed or mailed to the following address:

Keppen & Associates
1603 Honeysuckle Ridge Ct.
Annapolis, MD 21401-6425

THANK YOU FOR YOUR TIME AND COOPERATION!

A questionnaire containing the following questions was distributed to 8 freight and passenger requesting their response be returned by facsimile or mail to Keppen & Associates. The original mailing was follow by a phone call or email to the railroad to encourage participation. We were advised that the mailing had been received and the question on responding was under consideration. At the present time responses have been received from 2 freight and 1 passenger railroad. The table below records was has been reported.

Questions were prefaced with the following: Please mark the square adjacent to the response that most accurately describes the current policy and/or practice of your railroad regarding medical examinations, medication and reporting of medical conditions for employees working in safety-sensitive positions (operating employees).

Questions	Yes	No
Physical examinations are required for new hire train operating employees?	I I I I	
Periodic physical examination (not just sight and hearing) are required of operating employees – ENGINEERS?	I I I	I
Periodic physical examination (not just sight and hearing) are required of operating employees – CONDUCTORS?	I I I	I
If periodic examinations are required, what is the normal period of time between required examinations? 1 year, 2 years, 3 years, other – describe	3, 5/3, 1	NA
Do medical examination forms and procedures inquire about conditions that could cause loss of consciousness?	I I I I	
Do you have a company policy governing the use of prescription and non-prescription (OTC) medications?	I I I I	
Do you have a company policy requiring employees in safety-sensitive positions to report medical conditions, including sleep disorders, to supervisors and/or your medical department?	I I	I I
Would you be willing to share copies of current medical examination forms and policies?	I I	I I
Does your company have a policy regarding communications between an employee's personal physician and your medical department on medical conditions that may affect the employee's performance?	I I I	I

Comments:

Appendix 4

(A CANADIAN) RAILWAY

PERIODIC MEDICAL REPORT

To The Physician

Railway employees are responsible for various aspects of railway safety. Depending on their occupation, their responsibilities may include, but are not limited to the operation of trains, the movement of trains, and/or maintaining safe railway operations.

This report is to be used to record the results of a medical assessment, by a physician, on a Railway employee. The contents of this report will be reviewed by the Office of the Chief Medical Officer of Railway to determine an employee's fitness to work.

In completing this form, please be aware that the safety of the employee, their co-workers and the general public is at stake. Special attention should be devoted to medical conditions that may result in sudden mental or physical impairment or any condition which may potentially interfere with an employee's ability to perform their duties in a safe manner. In the case of chronic conditions, be aware that impairment may occur gradually.

Railway will pay you $75.00 for the completion of this report. See back page for reporting guidelines and for information on payment. **Please write or print legibly.**

PART 1 - Employee Information (to be completed by employee)

Name: _____ Employee No.: _____

Address: _____ Date of Birth: _____

_____ Telephone: Home ( ) _____

_____ Postal Code: _____ Work ( )

_____

Employee's Certificate of Information and Release for Physician to Report Medical Information

I, the undersigned, acknowledge that the position which I hold is of a safety-critical nature and that it is incumbent on me to report any medical condition that may constitute a threat to safe railway operations. I declare that the information that I have provided or will be providing to the treating physician is truthful and complete. I hereby authorize any physician, hospital, medical clinic or other medical service provider to release to the Office of the Chief Medical Officer of Railway any information concerning any medical condition that may constitute a threat to safe railway operations. I understand that this information will be reviewed for the purpose of making a fitness to work determination.

_____	_____	_____
Current Position	**Signature of Employee**	**Date**

PLEASE WRITE LEGIBLY
FOR ASSISTANCE REGARDING ANY COMPONENT OF THIS REPORT, CALL

PART 2 - Medical Assessment (to be completed by the treating physician)

"Yes" response indicates that the employee has a medical condition which may result in mental or physical impairment or affect her ability to work safely. Particular attention should be made to any medical condition which may result in sudden impairment. any "Yes" response, please provide your comments and enclose any relevant documentation from a medical specialist.

A - VISION - Please complete all sections

Current history or evidence of:	Yes	No
(a) Reduced near vision	O	O
(b) Reduced field of vision	O	O
(c) Deficient binocular vision	O	O
(d) Abnormal depth perception	O	O
(e) Deficient colour vision	O	O
(f) Diseases of the eye (glaucoma, cataracts, retinal disorders, etc.)	O	O

If "Yes" to any of the above, please explain: _____

_____

_____

B - HEARING

Current history or evidence of:	Yes	No
(a) Diseases of the ear (tinnitis, otitis, etc.)	O	O
(b) Hearing loss (enclose audiogram if available)	O	O

If "Yes", please explain _____

_____

_____

C - CENTRAL NERVOUS SYSTEM

	Yes	No
(a) History of seizure disorder or syncopal episode(s)?	O	O

If "Yes", please provide details: _____

_____

_____

_____

(b) History of **other** disease of the nervous system? (narcolepsy, sleep apnea, vestibular disorders disorders of coordination and muscle control, head injury, post-traumatic conditions, or intracranial tumor, etc.)	O	O
(c) Currently on any medication(s) for any central nervous system disorder?	O	O

If "Yes" to any of the above, please explain: _____

_____

_____

_____

_____

_____

_____

D - CARDIOVASCULAR SYSTEM

Blood Pressure _____/_____ **Pulse** _____
Height _____ **Weight** _____

Current history or evidence of:	Yes	No
Coronary artery disease	O	O
Past history of myocardial infarction	O	O
Date(s) of last attack(s) _____		
Cerebrovascular disease (aneurysm, stroke, TIA's, etc.)	O	O
Aortic aneurysm	O	O
Congestive heart failure	O	O
Cardiac arrhythmia	O	O
Valvular heart disease	O	O
Cardiomyopathy	O	O
Heart transplant	O	O
Other cardiovascular disease not listed above	O	O

If "Yes", please explain and enclose relevant specialists reports, including results of a stress test E.C.G., if available.

_____

_____

E - METABOLIC SYSTEM	Yes	No
Current history of symptomatic metabolic disease? (ie. diabetes, hypothyroidism, Cushing's Disease, Addison's Disease, pheochromocytoma, etc.)	O	O

If "Yes", please explain _____

_____

If diabetic, please complete the following:
(employee will be advised if further information is required)

State onset of diabetes (approx. date) _____
Type of control:
Diet only O Oral Medication O Insulin O

Current medications and dose: _____

_____

	Yes	No
Insulin/sulfonylurea treated diabetic who has had a hypoglycemic episode(s) within the last 12 months? Date of last hypoglycemic episode _____	O	O
Evidence of hypoglycemic unawareness?	O	O
Insulin/sulfonylurea treated diabetic with history of alcohol abuse?	O	O
Current history or evidence of symptomatic hypoglycemia for any other reason?	O	O

If "Yes", please explain: _____

_____

PART 2 - Medical Assessment (....cont'd)

F - RESPIRATORY SYSTEM Yes No

'spnea after walking more than 1000m blocks) at own pace on level ground? O O

Current history or evidence of respiratory disease? (asthma, C.O.P.D., bronchitis, sarcoidosis, etc.) O O

Does the employee smoke? (indicate packs, years) O O

If "Yes", please explain: _____

_____

G - GASTROINTESTINAL/ GENITOURINARY SYSTEMS Yes No

History or evidence of any significant gastrointestinal or genitourinary condition? (ulcer, inflammatory bowel disease, hernia, etc.) O O

If "Yes", please explain: _____

H - MUSCULOSKELETAL SYSTEM Yes No

History or evidence of significant musculoskeletal condition? (amputation of a limb, arthritis, significant major joint dysfunction, disease of the spine, etc.) O O

Obesity limiting ability to walk 1000m or move 'ickly in an emergency? O O

'es", please explain _____

_____

I - SUBSTANCE ABUSE Yes No

History or evidence of abuse or dependence on alcohol, prescription medications or illicit drugs? O O

If "Yes" is answered, please provide details: _____

_____

_____

_____

J - MEDICATIONS Yes No

Is employee taking any prescription or over-the-counter medication(s) that may cause mental or physical impairment or affect judgment? O O

If "Yes", please list all medication(s) and dosage:

_____

_____

_____

K - PSYCHIATRIC/MENTAL DISORDERS Yes No

Current history/evidence or past history of:

(a) Cognitive disorder(s)? (Dementias, delerium, amnesia, etc.) O O

(b) Psychotic disorder(s)? (Schizophrenia, delusional, unspecified, etc.) O O

(c) Mood disorder(s)? (Depression, manic, bipolar, etc.) O O

(d) Anxiety disorder(s)? (Generalized anxiety, panic attack, phobias, etc.) O O

(e) Personality disorder(s) manifesting in anti-social, erratic or aggressive behaviour? O O

(f) Mental disorder(s) due to a general medical condition? O O

(g) Any other psychiatric/mental disorder(s) not listed above? O O

If "Yes" to any of the above, please explain: _____

_____

_____

_____

Enclose relevant specialists reports including results of a psychiatric assessment if available.

ADDITIONAL COMMENTS: (Please detail any positive findings)_____

_____

_____

_____

_____

_____

Fitness to Work: (Please read carefully. Particular attention should be made to any medical condition which may result in sudden impairment.)

1. In your opinion, is your patient fit to work in a safety-critical position as per the note to the Treating Physician on page 1? Yes O No O

2. Do you think that there is a need for further assessment in regards to your patient's fitness to work? Yes O No O

3. How long has the employee been your patient?_____

Comments: _____

_____

PART 3 - Physician Statement, Information and Reporting Guidelines

This form will be used to make an assessment on an employee's fitness to work and constitutes a third party service. In completing this form, please be thorough and write legibly. If you have any questions regarding any component of this form, call the collect number listed below for assistance.

Employee's Name _____

Date of medical visit on which this report is based _____

I certify that the information contained in this report is, to the best of my knowledge, correct.

_____ _____
Physician's Signature Date

.....
.....

Physician's Name: _____ Telephone: ( ) _____

Address: _____ Fax: ( ) _____

_____

_____ Postal Code: _____

O Family Physician/General Practitioner
O or Certified Specialist in _____

Information Regarding Payment

Within 30 days of receipt of the completed report, Railway agrees to pay to the treating physician a fee of $75.00. No additional invoice is necessary. Please provide in the space below the person to whom the cheque should be made payable, and the address.
Reports may be sent by regular mail or courier to:

Person to whom cheque should be made payable and address:

PLEASE WRITE LEGIBLY
FOR ASSISTANCE REGARDING ANY COMPONENT OF THIS REPORT,
CALL

Transport Canada Transports Canada

Canada

Railway Rules Governing Safety Critical Positions (June 2000)

1. SHORT TITLE

For ease of reference, this rule may be referred to as the "Safety Critical Position Rules".

2. SCOPE

These rules have been developed pursuant to Section 20 of the Railway Safety Act.

3. DEFINITIONS

A "**Safety Critical Position**" is herein defined as:

a) any railway position directly engaged in operation of trains in main track or yard service; and

b) any railway position engaged in rail traffic control.

Any person performing any of the duties normally performed by a person holding a Safety Critical Position, as set out in section 3 above, is deemed to be holding a Safety Critical Position while performing those duties.

4. RECORDS TO BE KEPT BY COMPANY

Each railway company shall:

a) maintain a list of all occupational names or titles which are governed by this rule;

b) maintain a list of the names of all employees qualified to serve in Safety Critical Positions; and

c) make all such records related to this rule available to Transport Canada inspectors upon reasonable request.

Return to previous page

Railway Medical Rules for Positions Critical to Safe Railway Operations (June 2000)

Railway Safety

- Acts & Regulations
- Direction 2006
- Rail Safety Facts
- Rail Safety Links
- Organization View
- Publications
- Railway Safety News
- Railway Safety Consultative Committee
- Safety Management System

Printable Version

Table of Contents

1. SHORT TITLE

1. For ease of reference, these rules may be referred to as the "Railway Medical Rules".

2. SCOPE

2.1 These rules, which have been developed pursuant to Section 20 (1) (a) of the Railway Safety Act, define the Medical Fitness for Duty requirements for Safety Critical Positions within railway companies subject to the jurisdiction of the Department.

2.2 In the case of international train movements, a railway company may allow persons to perform limited service in Safety Critical Positions while using medical requirements stipulated by U.S. Federal Railroad Administration regulations.

3. DEFINITIONS

3.1 "**Chief Medical Officer**" means a physician licensed to practice medicine in Canada and who is employed or contracted by a railway company for the purpose of, among other things, directing and managing the area of Medical Fitness for Duty requirements and guidelines.

3.2 "**Department**" means the Department of Transport, Rail Safety Group.

3.3 "**Medical Fitness for Duty**" means that a determination was made by the Chief Medical Officer, subject to any restrictions or requirements imposed under Section 6 hereof, that a person has taken the medical assessments required by these rules, and that the person meets all of the

Medical Fitness for Duty requirements provided herein.

3.4 "**Safety Critical Position**" has the same meaning as provided in the Railway Rules Governing Safety Critical Positions.

3.5 "**person**" means a person in a Safety Critical Position.

4. FREQUENCY OF MEDICAL ASSESSMENTS

4.1 Subject to sub-section 4.2, a person shall undergo a company organized Medical Fitness for Duty assessment:

a) prior to commencement of employment in a Safety Critical Position;

b) upon promotion or transfer to a Safety Critical Position; and

c) every five years until the age of forty, and every three years thereafter until retirement, or until that person is no longer employed in a Safety Critical Position.

4.2 Without varying the requirement of sub-section 4.1(c), no assessment shall be required under sub-section 4.1(b) if the person had previously occupied a Safety Critical Position which, in the opinion of the Chief Medical Officer, had similar mental and physical demands as the Safety Critical Position into which the person is entering.

4.3 The Chief Medical Officer may require additional assessments to those set out in Section 4.1 if:

b) the person has or may have a medical condition that requires assessment or more frequent monitoring; or

c) the person is returning to work in a Safety Critical Position after a leave due to illness or injury.

5. ASSESSMENT FOR MEDICAL FITNESS FOR DUTY

5.1 The Medical Fitness for Duty for a person shall be assessed on an individual basis, taking into consideration medical conditions, both past and current, that could result in:

- sudden impairment;
- impairment of cognitive function including alertness, judgment, insight, memory and concentration;
- impairment of senses;
- significant impairment of musculoskeletal function; or
- other impairment that is likely to constitute a threat to safe railway operations.

5.2 The medical conditions referred to in Section 5.1 shall include:

a) diseases of the nervous system, including seizure disorders, narcolepsy, sleep apnea and other disturbances of consciousness, vestibular disorders, disorders of coordination and muscle control, head injury, post traumatic conditions and

intracranial tumors;

b) cardiovascular diseases, including high blood pressure, coronary artery disease, myocardial infarction, cerebrovascular disease, aortic aneurysm, congestive heart failure, cardiac arrhythmia, valvular heart disease and cardiomyopathy;

c) metabolic diseases, including diabetes mellitus, thyroid disease, Cushing's Disease, Addison's Disease and pheochromocytoma;

d) musculoskeletal disabilities, including amputation of a limb, arthritis, significant joint dysfunction, disease of the spine, obesity or other significant musculoskeletal conditions;

e) respiratory diseases, including obstructive or restrictive conditions resulting in functional impairment;

f) mental disorders, including the following types of mental disorders:

- cognitive, including dementia's, delirium and amnesia;
- psychotic, including schizophrenia;
- mood, including depression, manic, bipolar;
- anxiety, including panic attacks and phobias; and
- personality, resulting in anti-social, erratic or aggressive behaviour;

g) substance abuse, including abuse or dependence on alcohol, prescription medications, or illicit drugs;

h) hearing impairment, including hearing acuity;

i) visual impairment, including distant visual acuity, field of vision, colour vision; and

j) any other organic, functional or structural disease, defect or limitation that is likely to constitute a threat to safe railway operations.

5.3 In addition to the medical conditions referred to in Section 5.2, the individual assessment of a person's Medical Fitness for Duty shall also take into consideration:

a) the occupational demands of the person's job and the person's ability to meet those demands;

b) the person's performance record; and

c) any prescription or over-the-counter medications that the person is using, or has used, that may cause mental or physical impairment or affect judgment.

5.4 Notwithstanding sub-sections 5.1 and 5.2, the Chief Medical Officer may determine that any additional assessments required under sub-section 4.3

may be limited to assessments of particular medical conditions.

6. MEDICAL RESTRICTIONS

6.1 If the Chief Medical Officer, in making an individual assessment of a person's Medical Fitness for Duty, is of the opinion that there exists a threat to safe railway operations, the Chief Medical Officer may:

a) restrict a person from occupying a Safety Critical Position;

b) require the use of corrective devices or other medical aids; or

c) otherwise restrict a person's ability to work or perform certain tasks in a Safety Critical Position.

6.2 Upon completion of a Medical Fitness for Duty assessment, the Chief Medical Officer shall advise each person, and the person's supervisor of that person's Medical Fitness for Duty and of any restrictions or requirements imposed pursuant to sub-section 6.1.

7. RECORDS TO BE KEPT BY CHIEF MEDICAL OFFICER

7.1 The Chief Medical Officer of the railway company shall maintain records of all persons' medical assessments required hereunder and any restrictions required pursuant to sub-section 6.1.

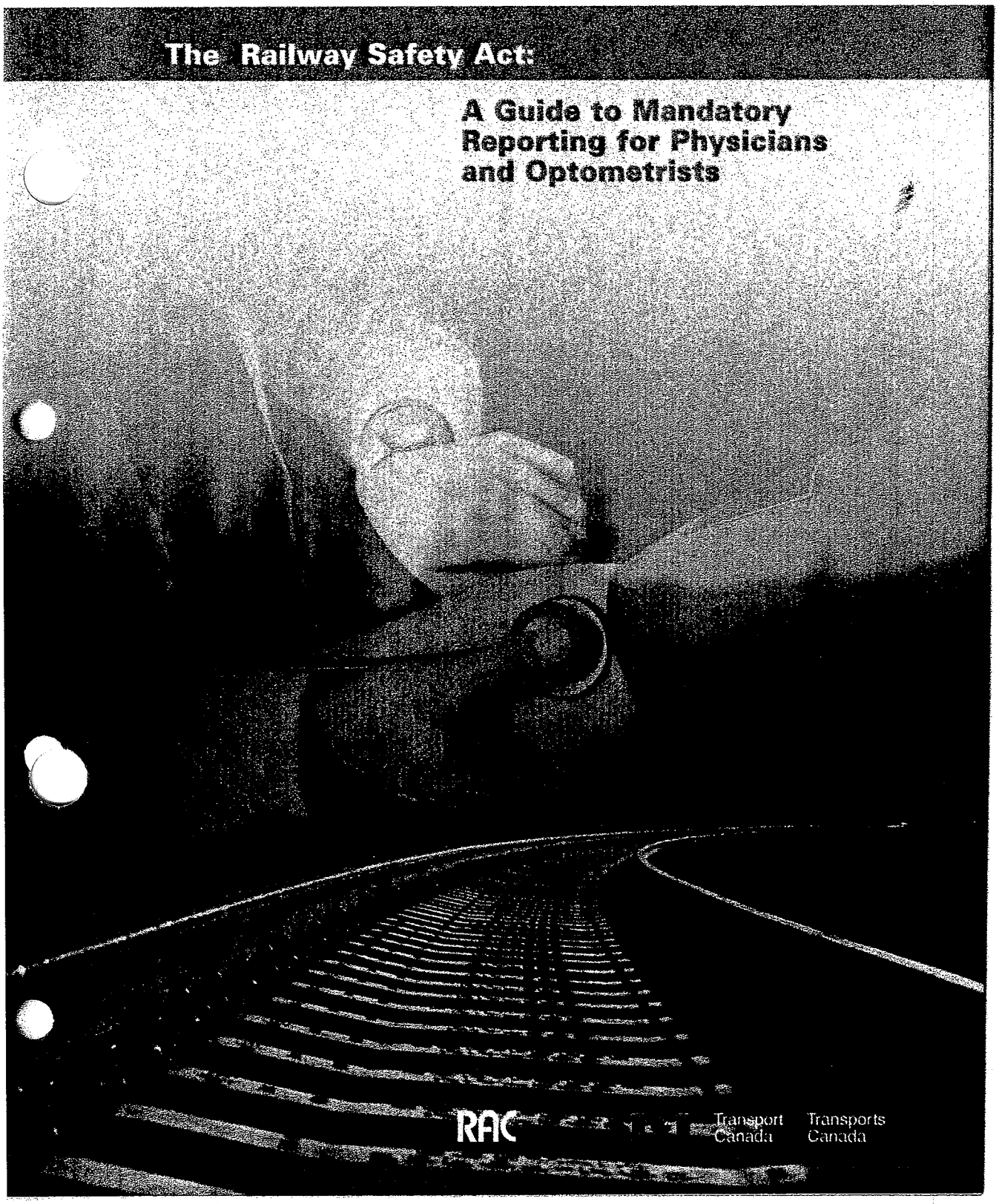
7.2 The Chief Medical Officer shall maintain copies of all medical policies and guidelines used by a railway company for the examination or assessment of persons employed in Safety Critical Positions.

7.3 The Chief Medical Officer shall make records, policies, and guidelines related to these rules available to the Department upon reasonable request.

Last updated: 2003-01-31 ▲ Important Notices

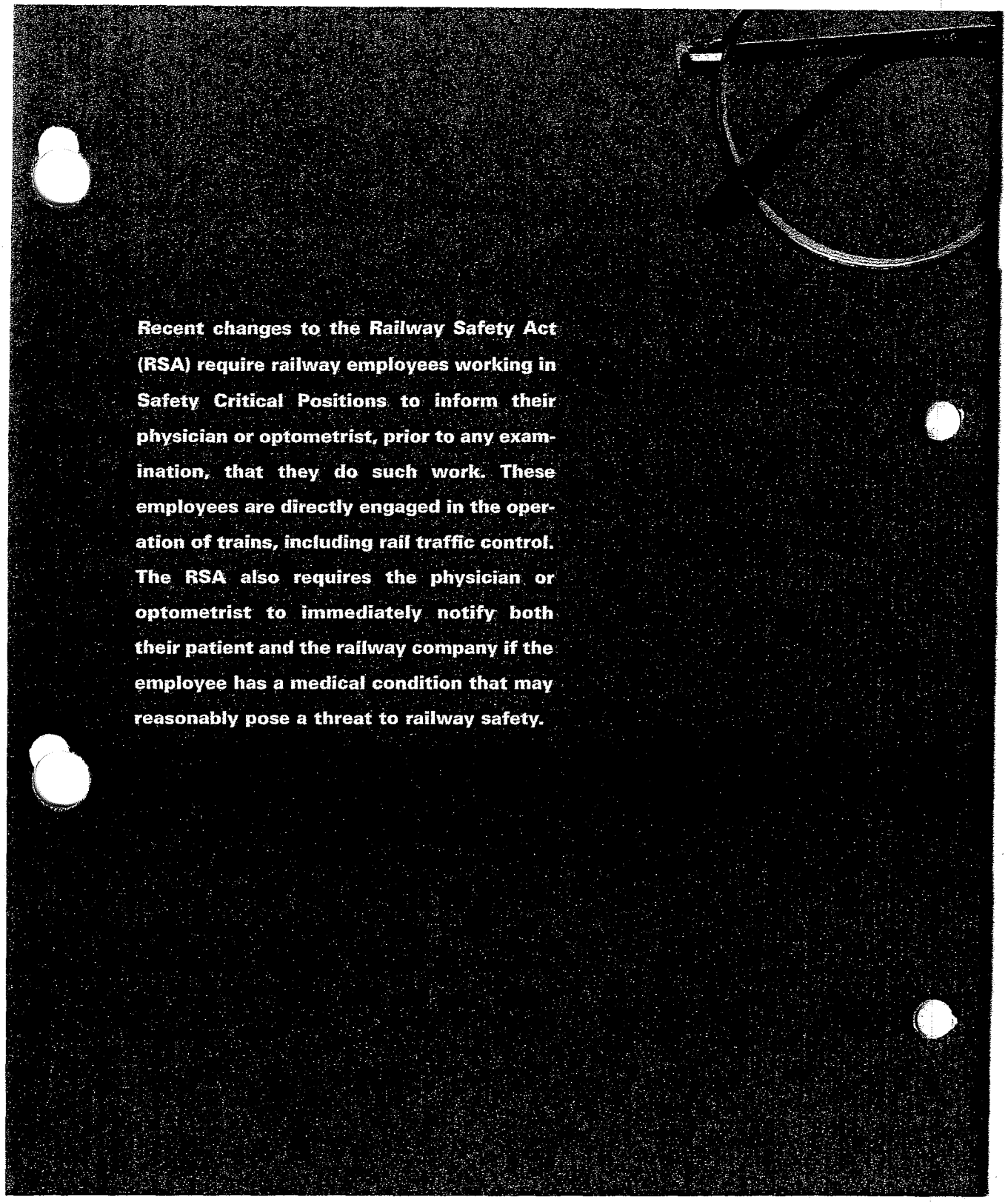
The Railway Safety Act:

A Guide to Mandatory Reporting for Physicians and Optometrists



RAC

Transport Canada | Transports Canada



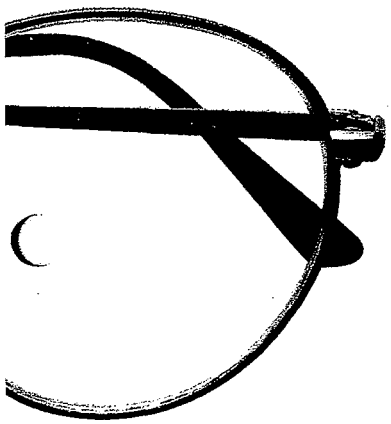
Recent changes to the Railway Safety Act (RSA) require railway employees working in Safety Critical Positions to inform their physician or optometrist, prior to any examination, that they do such work. These employees are directly engaged in the operation of trains, including rail traffic control. The RSA also requires the physician or optometrist to immediately notify both their patient and the railway company if the employee has a medical condition that may reasonably pose a threat to railway safety.

What is the Railway Safety Act?

The Railway Safety Act is federal legislation that gives jurisdiction over railway safety matters to the Minister of Transport. The RSA is regulated by Transport Canada, and covers railway safety, security and the environment.

Historically, legislated medical requirements for certain railway operating positions contained standards for vision and hearing only. Beyond that, medical requirements for employees had been left to the individual railways as a matter of company policy.

Recognition that other medical standards beyond vision and hearing should also be governed by regulation arose in the late 1980's following a tal train collision where an employee's medical ondition was a possible contributing factor.



What provisions of the Railway Safety Act affect Physicians and Optometrists?

Section 35 of the RSA mandates regular medical examinations for all persons occupying safety critical positions and:

- requires that physicians and optometrists must notify the railway company's Chief Medical Officer if a person occupying a safety critical position has a medical condition that could be a threat to safe railway operations and that the physician or optometrist send a copy of this notice without delay to the patient;
- places the responsibility on the patient to inform the physician or optometrist that he or she holds a designated safety critical position at the time of any examination;
- allows the railway company to use the information provided by the physician or optometrist in the interest of safe railway operations;
- prohibits any legal, disciplinary or other proceedings against a physician or optometrist for such information given in good faith, and;
- prohibits further disclosure, or use as evidence, of such medical information, except with the permission of the patient.

What are Safety Critical Positions?

Employees in Safety Critical Positions, as designated by the Railway Rules Governing Safety Critical Positions, operate, or control the movement of trains. They represent approximately 15,000 railway workers in Canada. These positions have a direct role in safe railway operations where impaired performance due to a medical condition could result in a significant incident affecting the health and safety of employees, the public, property or the environment.

The actual occupations included in Safety Critical Positions may vary between railways, but typically include:

- Locomotive Engineer;
- Conductor;
- Assistant Conductor (Brake person);
- Yard Foreman (Yard person), and;
- Rail Traffic Controller (Train Dispatcher).

In addition, any employee or contractor who is required to perform any of these functions will be considered to occupy a Safety Critical Position.

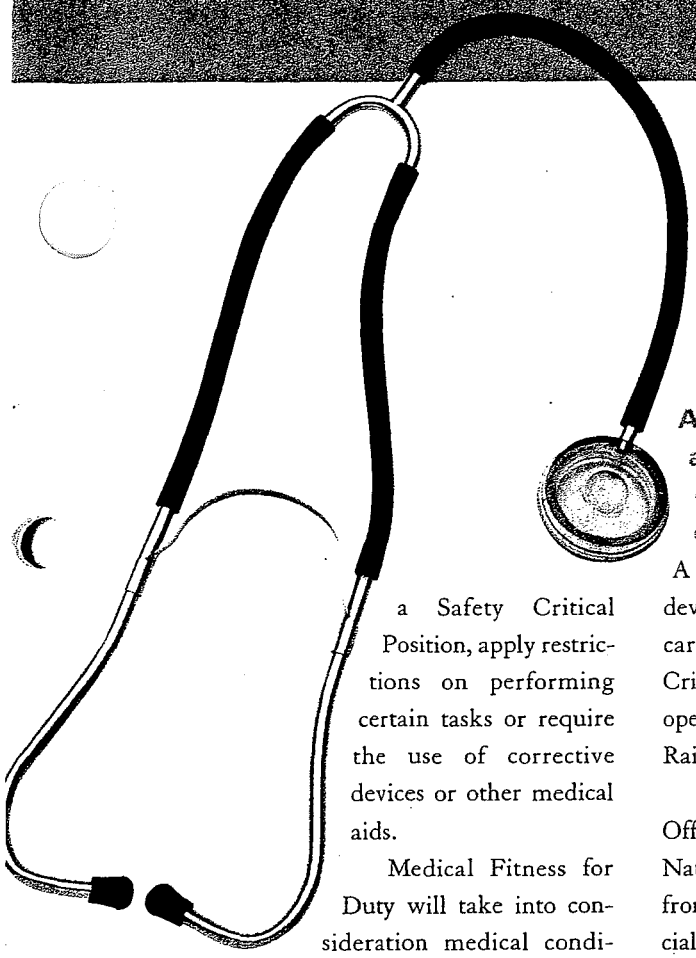
What are the Railway Medical Rules for Safety Critical Positions?

Railway Medical Rules for Positions Critical to Safe Railway Operations were developed by the Medical Steering Committee of the Railway Association of Canada and have been approved by Canada's Minister of Transport.

The goal of the Medical Steering Committee was to develop rules that set out the requirements for the frequency of medical assessments and also allow for the individual assessment of Medical Fitness for Duty. The new Medical Rules represent a significant change in the way medical fitness for duty is determined in the Canadian railway industry and increase the involvement of the treating physicians and optometrists in the process.

The required minimum frequency for Medical Fitness for Duty assessments is every five years until the age of 40 and every three years thereafter as long as an employee occupies a Safety Critical Position.

With the information provided by the employee's treating physician or optometrist, the Chief Medical Officer of each railway company may require an increase in the frequency of medical assessments, restrict a person from occupying



a Safety Critical Position, apply restrictions on performing certain tasks or require the use of corrective devices or other medical aids.

Medical Fitness for Duty will take into consideration medical conditions including treatment and medications, both past and current, that could result in:

- sudden or gradual impairment of cognitive function including alertness, judgment, insight, memory and concentration;
- impairment of senses;
- significant impairment of musculoskeletal function, or;
- other impairment that is likely to constitute a threat to safe railway operations.

Are there Medical Guidelines available to assist physicians and optometrists with patients who occupy Safety Critical Positions?

A number of Medical Guidelines have been developed to assist physicians and optometrists in caring for their patients who occupy Safety Critical Positions. These guidelines were developed by the Medical Advisory Group of the Railway Association of Canada.

This group consists of the Chief Medical Officers of Canadian Pacific Railway, Canadian National, VIA Rail Canada, a medical advisor from Transport Canada and various medical specialists. The guidelines are reviewed and updated regularly. The following guidelines are available:

- Hearing;
- Vision;
- Epilepsy;
- Cardiovascular Disorders;
- Diabetes, and;
- Mental Disorders.

Additional Medical Guidelines will be developed. Medical conditions not currently covered by a specific guideline will be governed by accepted medical practice.

Who is responsible for the costs of the medical assessments and reporting?

Medical costs incurred as a result of these Medical Rules, not covered by the provincial health care plan, will be paid by the employer in accordance with provincial third-party billing guidelines.

For a copy of the various Medical Rules and Guidelines or to obtain additional information:

Canadian Medical Association
www.cma.ca
Canadian Association of Optometrists
www.opto.ca
Railway Association of Canada
www.railcan.ca

Or call:
Canadian Pacific Railway
Occupational Health Services
1-866-876-0879

Canadian National Railway
Occupational Health Services
1-514-399-5690

VIA Rail Canada
1-800-363-6737

The Railway Association of Canada
Office of the Vice-President
Operations and Regulatory Affairs
1-613-564-8088

Acknowledgments

This guide for physicians and optometrists was prepared by the Medical Advisory Group of the Railway Association of Canada, and distributed with the cooperation of the Canadian Medical Association, the Canadian Association of Optometrists and Transport Canada, to facilitate public safety in rail freight and passenger train operations across Canada.

ISBN 0-9681145-6-3

Appendix 5

U.S. Department of Transportation
Federal Aviation Administration

INFORMATION FOR APPLICANT

Application For Airman Medical Certificate or Airman Medical and Student Pilot Certificate

Privacy Act Statement

The information on the attached FAA Form 8500-8, Application For Airman Medical Certificate or Airman Medical and Student Pilot Certificate, is solicited under the authority of Title 49, United States Code (U.S.C.) (Transportation) sections 109(9), 40113(a), 44701-44703, and 44709 (1994) formerly codified in the Federal Aviation Act of 1958, as amended, and Title 14, Code of Federal Regulations (CFR), part 67, Medical Standards and Certification.

Except for your Social Security Number (SSN), submission of this information is mandatory. Incomplete submission will result in delay of further consideration or denial of your application for a medical certificate or medical and student pilot certificate. Other than your SSN, the purpose of the information is to determine whether you meet Federal Aviation Administration (FAA) medical requirements to hold a medical certificate or medical and student pilot certificate. The information will also be used to provide data for the FAA's automated medical certification system to depict airman population patterns and to update certification procedures and medical standards. For air traffic control specialists (ATCS) employed by the Federal Government, the information requested will be used as a basis for determining medical eligibility for initial and continuing employment. The information becomes part of the FAA Privacy Act system of records, DOT/FAA-847, General Air Transportation Records on Individuals. These records and information in these records may be used (a) to provide basic airman certification and qualification information to the public upon request; (b) to disclose information to the National Transportation Safety Board (NTSB) in connection with its investigation responsibilities; (c) to provide information about airmen to Federal, state, and local law enforcement agencies when engaged in the investigation and apprehension of drug law violators; (d) to provide information about enforcement actions arising out of violations of the Federal Aviation Regulations to government agencies, the aviation industry, and the public upon request; (e) to disclose information to another Federal agency, or to a court or an administrative tribunal, when the Government or one of its agencies is a party to a judicial proceeding before the court or involved in administrative proceedings before the tribunal; and (f) to comply with the Prefatory Statement of General Routine Uses for the Department of Transportation.

Submission of your SSN is not required by law and is voluntary. Refusal to furnish your SSN will not result in the denial of any right, benefit, or privilege provided by law. Your SSN is solicited to assist in performing the agency's functions under 49 U.S.C. (Transportation). If supplied, it will be used by the FAA to associate all information in agency files relating to you. If you refuse to supply your SSN, a substitute number or other identifier will be assigned, as required.

The written consent authorization of this form under No. 20, Applicant's Declaration, permits the FAA to request information, if any, pertaining to your driving record from the National Driver Register (NDR). The FAA will then match such NDR information with the information you provide on the medical history part of the form. Since the NDR identifies only probable matches, the FAA will verify the NDR information it receives with the state of record. You have the right to request an NDR file check to determine if it contains any information and, if so, the accuracy of such information. Notarized requests may be sent to: DOT/NHTSA/NTS-32, 400 7th Street, S.W., Washington, DC 20590-0001, and must contain your complete name and date of birth. Other information about height, weight, and eye color will ensure correct positive identification.

Paperwork Reduction Act Statement:
The information collected on this form is necessary to ensure applicants meet the minimum requirements as set forth under the authority of 49 U.S.C. (Transportation). This information will be used to determine applicant eligibility for a medical certificate, medical and student pilot certificate, or ATCS eligibility for employment. When all requirements have been met, an appropriate medical certificate, medical and student pilot certificate, or medical clearance will be issued. It is estimated that it will take each applicant 2 hours to complete this form and provide all the information called for (includes providing medical history information and physical examination). The information is required to obtain a certificate and is confidential. The information will become part of the Privacy Act system of records DOT/FAA 847, General Air Transportation Records on Individuals. Note that an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a currently valid OMB control number. The control number for this collection of information is 2120-0034.

Tear off this cover sheet before submitting this form.

Instructions for Completion of the Application for Airman Medical Certificate or Airman Medical and Student Pilot Certificate, FAA Form 8500-8

Applicant must fill in completely numbers 1 through 20 of the application using a ballpoint pen. Exert sufficient pressure to make legible copies. The following numbered instructions apply to the numbered headings on the application form that follows this page.

NOTICE – Intentional falsification may result in federal criminal prosecution. Intentional falsification may also result in suspension or revocation of all airman, ground instructor, and medical certificates and ratings held by you, as well as denial of this application for medical certification.

1. APPLICATION FOR – Check the appropriate box.

2. CLASS OF AIRMAN MEDICAL CERTIFICATE APPLIED FOR – Check the appropriate box for the class of airman medical certificate for which you are making application.

3. FULL NAME – If your name has changed for any reason, list current name on the application and list any former name(s) in the EXPLANATIONS box of number 18 on the application.

4. SOCIAL SECURITY NUMBER – The social security number is optional; however, its use as a unique identifier does eliminate mistakes.

5. ADDRESS – Give permanent mailing address and country. Include your complete nine digit ZIP code if known. Provide your current area code and telephone number.

6. DATE OF BIRTH – Specify month (MM), day (DD), and year (YYYY) in numerals; e.g., 01/31/1950. Indicate citizenship; e.g., U.S.A.

7. COLOR OF HAIR – Specify as brown, black, blond, gray, or red. If bald, so state. Do not abbreviate.

8. COLOR OF EYES – Specify actual eye color as brown, black, blue, hazel, gray, or green. Do not abbreviate.

9. SEX – Indicate male or female.

10. TYPE OF AIRMAN CERTIFICATE(S) YOU HOLD – Check applicable block(s). If "Other" is checked, provide name of certificate.

11. OCCUPATION – Indicate major employment. "Pilot" will be used only for those gaining their livelihood by flying.

12. EMPLOYER – Provide your employer's full name. If self-employed, so state.

13. HAS YOUR FAA AIRMAN MEDICAL CERTIFICATE EVER BEEN DENIED, SUSPENDED, OR REVOKED – If "yes" is checked, give month and year of action in numerals.

14. TOTAL PILOT TIME TO DATE – Give total number of civilian flight hours. Indicate whether logged or estimated. Abbreviate as Log. or Est.

15. TOTAL PILOT TIME PAST 6 MONTHS – Give number of civilian flight hours in the 6-month period immediately preceding date of this application. Indicate whether logged or estimated. Abbreviate as Log. or Est.

16. MONTH AND YEAR OF LAST FAA MEDICAL EXAMINATION – Give month and year in numerals. If none, so state.

17.a. DO YOU CURRENTLY USE ANY MEDICATION (Prescription or Nonprescription) – Check "yes" or "no." If "yes" is checked, give name of medication(s) and indicate if the medication was listed in a previous FAA medical examination. See **NOTE** below.

17.b. Indicate whether you use near vision contact lens(es) while flying.

18. MEDICAL HISTORY – Each item under this heading must be checked either "yes" or "no." You must answer "yes" for every condition you have ever been diagnosed with, had, or presently have and describe the condition and approximate date in the EXPLANATIONS block.

If information has been reported on a previous application for airman medical certificate and there has been no change in your condition, you may note "PREVIOUSLY REPORTED, NO CHANGE" in the EXPLANATIONS box, but you must still check "yes" to the condition. Do not report occasional common illnesses such as colds or sore throats.

"Substance dependence" is defined by any of the following: increased tolerance; withdrawal symptoms; impaired control of use: or continued use despite damage to health or impairment of social, personal, or occupational functioning. "Substance abuse" includes the following: use of an illegal substance; use of a substance or substances in situations in which such use is physically hazardous; or misuse of a substance when such misuse has impaired health or social or occupational functioning. "Substances" include alcohol, PCP, marijuana, cocaine, amphetamines, barbiturates, opiates, and other psychoactive chemicals.

Conviction and/or Administrative Action History – Letter (v) of this subheading asks if you have ever been: (1) convicted (which may include paying a fine, or forfeiting bond or collateral) of an offense involving driving while intoxicated by, while impaired by, or while under the influence of alcohol or a drug; or (2) convicted or subject to an administrative action by a state or other jurisdiction for an offense for which your license was denied, suspended, cancelled, or revoked or which resulted in attendance at an educational or rehabilitation program. Individual traffic convictions are not required to be reported if they did not involve: alcohol or a drug; suspension, revocation, cancellation, or denial of driving privileges; or attendance at an educational or rehabilitation program. If "yes" is checked, a description of the conviction(s) and/or administrative action(s) must be given in the EXPLANATIONS box. The description must include: (1) the alcohol or drug offense for which you were convicted or the type of administrative action involved (e.g., attendance at an alcohol treatment program in lieu of conviction; license denial, suspension, cancellation, or revocation for refusal to be tested; educational safe driving program for multiple speeding convictions; etc.); (2) the name of the state or other jurisdiction involved; and (3) the date of the conviction and/or administrative action. The FAA may check state motor vehicle driving licensing records to verify your responses. Letter (w) of this subheading asks if you have ever had any other (nontraffic) convictions (e.g., assault, battery, public intoxication, robbery, etc.). If so, name the charge for which you were convicted and the date of conviction in the EXPLANATIONS box. See **NOTE** below.

19. VISITS TO HEALTH PROFESSIONAL WITHIN LAST 3 YEARS – List all visits in the last 3 years to a physician, physician assistant, nurse practitioner, psychologist, clinical social worker, or substance abuse specialist for treatment, examination, or medical/mental evaluation. List visits for counseling only if related to a personal substance abuse or psychiatric condition. Give date, name, address, and type of health professional consulted and briefly state reason for consultation. Multiple visits to one health professional for the same condition may be aggregated on one line. Routine dental, eye, and FAA periodic medical examinations and consultations with your employer-sponsored employee assistance program (EAP) may be excluded unless the consultations were for your substance abuse or unless the consultations resulted in referral for psychiatric evaluation or treatment. See **NOTE** below.

20. APPLICANT'S DECLARATION – Two declarations are contained under this heading. The first authorizes the National Driver Register to release adverse driver history information, if any, about the applicant to the FAA. The second certifies the completeness and truthfulness of the applicant's responses on the medical application. The declaration section must be signed and dated by the applicant after the applicant has read it.

NOTE: If more space is required to respond to "yes" answers for numbers 17, 18, or 19, use a plain sheet of paper bearing the information, your signature, and the date signed.

Applicant — Please Tear Off This Sheet After Completing The Application Form.

Applicant Must Complete ALL 20 Items (Except For Shaded Areas) PLEASE PRINT Form Approved OMB NO. 2120-0034

FF-

MEDICAL CERTIFICATE ______ CLASS AND STUDENT PILOT CERTIFICATE

Date of Examination | Examiner's Designation No.

Signature

Typed Name

AIRMAN'S SIGNATURE

VOID

VOID

1. Application For: ☐ Airman Medical Certificate ☐ Airman Medical and Student Pilot Certificate

2. Class of Medical Certificate Applied For: ☐ 1st ☐ 2nd ☐ 3rd

3. Last Name First Name Middle Name

4. Social Security Number — —

5. Address Telephone Number ( ) —

Number / Street

City State / Country Zip Code

6. Date of Birth MM / DD / YYYY

Citizenship

7. Color of Hair **8. Color of Eyes** **9. Sex**

10. Type of Airman Certificate(s) You Hold:

☐ None ☐ ATC Specialist ☐ Flight Instructor ☐ Recreational
☐ Airline Transport ☐ Flight Engineer ☐ Private ☐ Other
☐ Commercial ☐ Flight Navigator ☐ Student ________

11. Occupation **12. Employer**

13. Has Your FAA Airman Medical Certificate Ever Been Denied, Suspended, or Revoked ?

☐ Yes ☐ No If yes, give date ________ MM / DD / YYYY

Total Pilot Time (Civilian Only)
14. To Date **15. Past 6 months**

16. Date of Last FAA Medical Application MM / DD / YYYY ☐ No Prior Application

17.a. Do You Currently Use Any Medication (Prescription or Nonprescription)?
☐ No ☐ Yes (If yes, below list medication(s) used and check appropriate box).

	Previously Reported Yes	No
	☐	☐
	☐	☐
	☐	☐

(If more space is required, see 17.a. on the instruction sheet).

17.b. Do You Ever Use Near Vision Contact Lens(es) While Flying? ☐ Yes ☐ No

18. Medical History – HAVE YOU EVER IN YOUR LIFE BEEN DIAGNOSED WITH, HAD, OR DO YOU PRESENTLY HAVE ANY OF THE FOLLOWING? Answer "yes" or "no" for every condition listed below. In the EXPLANATIONS box below, you may note " PREVIOUSLY REPORTED, NO CHANGE" only if the explanation of the condition was reported on a previous application for an airmen medical certificate and there has been no change in your condition. See Instructions Page

Yes	No	Condition	Yes	No	Condition	Yes	No	Condition	Yes	No	Condition
a.☐	☐	Frequent or severe headaches	g.☐	☐	Heart or vascular trouble	m.☐	☐	Mental disorders of any sort; depression, anxiety, etc.	r.☐	☐	Military medical discharge
b.☐	☐	Dizziness or fainting spell	h.☐	☐	High or low blood pressure	n.☐	☐	Substance dependence or failed a drug test ever; or substance abuse or use of illegal substance in the last 2 years.	s.☐	☐	Medical rejection by military service
c.☐	☐	Unconsciousness for any reason	i.☐	☐	Stomach, liver, or intestinal trouble				t.☐	☐	Rejection for life or health insurance
d.☐	☐	Eye or vision trouble except glasses	j.☐	☐	Kidney stone or blood in urine	o.☐	☐	Alcohol dependence or abuse	u.☐	☐	Admission to hospital
e.☐	☐	Hay fever or allergy	k.☐	☐	Diabetes	p.☐	☐	Suicide attempt	x.☐	☐	Other illness, disability, or surgery
f.☐	☐	Asthma or lung disease	l.☐	☐	Neurological disorders; epilepsy, seizures, stroke, paralysis, etc.	q.☐	☐	Motion sickness requiring medication			

Conviction and/or Administrative Action History — See Instructions Page

Yes	No		Yes	No	
v.☐	☐	History of (1) any conviction(s) involving driving while intoxicated by, while impaired by, or while under the influence of alcohol or a drug; or (2) history of any conviction(s) or administrative action(s) involving an offense(s) which resulted in the denial, suspension, cancellation, or revocation of driving privileges or which resulted in attendance at an educational or a rehabilitation program.	w.☐	☐	History of nontraffic conviction(s) (misdemeanors or felonies).

Explanations: See Instructions Page

FOR FAA USE
Review Action Codes

19. Visits to Health Professional Within Last 3 Years. ☐ Yes (Explain Below) ☐ No **See Instructions Page**

Date	Name, Address, and Type of Health Professional Consulted	Reason

— NOTICE —
Whoever in any matter within the jurisdiction of any department or agency of the United States knowingly and willfully falsifies, conceals or covers up by any trick, scheme, or device a material fact, or who makes any false, fictitious or fraudulent statements or representations, or entry, may be fined up to $250,000 or imprisoned not more than 5 years, or both. (18 U.S. Code Secs. 1001; 3571).

20. Applicant's National Driver Register and Certifying Declarations

I hereby authorize the National Driver Register (NDR), through a designated State Department of Motor Vehicles, to furnish to the FAA information pertaining to my driving record. This consent constitutes authorization for a single access to the information contained in the NDR to verify information provided in this application. Upon my request, the FAA shall make the information received from the NDR, if any, available for my review and written comment. Authority: 23 U.S. Code 401, Note.

NOTE: ALL persons using this form must sign it. NDR consent, however, does not apply unless this form is used as an application for Medical Certificate or Medical Certificate and Student Pilot Certificate.

I hereby certify that all statements and answers provided by me on this application form are complete and true to the best of my knowledge, and I agree that they are to be considered part of the basis for issuance of any FAA certificate to me. I have also read and understand the Privacy Act statement that accompanies this form.

Signature of Applicant | Date ________ MM / DD / YYYY

FAA Form 8500-8 (3-99) Supersedes Previous Edition NSN: 0052-00-670-6002

NOTE: FAA/Original Copy of the Report of Medical Examination Must be TYPED.

REPORT OF MEDICAL EXAMINATION

21. Height (inches)	22. Weight (pounds)	23. Statement of Demonstrated Ability (SODA) ☐ YES ☐ NO Defect Noted:	24. SODA Serial Number

CHECK EACH ITEM IN APPROPRIATE COLUMN	Normal	Abnormal	CHECK EACH ITEM IN APPROPRIATE COLUMN	Normal	Abnormal
25. Head, face, neck, and scalp			37. Vascular system (Pulse, amplitude and character; arms, legs, others)		
26. Nose			38. Abdomen and viscera (Including hernia)		
27. Sinuses			39. Anus (Not including digital examination)		
28. Mouth and throat			40. Skin		
29. Ears, general (Internal and external canals; Hearing under Item 49)			41. G-U system (Not including pelvic examination)		
30. Ear Drums (Perforation)			42. Upper and lower extremities (Strength and range of motion)		
31. Eyes, general (Vision under Items 50 to 54)			43. Spine, other musculoskeletal		
32. Ophthalmoscopic			44. Identifying body marks, scars, tattoos (Size & location)		
33. Pupils (Equality and reaction)			45. Lymphatics		
34. Ocular motility (Associated parallel movement, nystagmus)			46. Neurologic (Tendon reflexes, equilibrium, senses, cranial nerves, coordination, etc.)		
35. Lungs and chest (Not including breast examination)			47. Psychiatric (Appearance, behavior, mood, communication, and memory)		
36. Heart (Precordial activity, rhythm, sounds, and murmurs)			48. General systemic		

NOTES: Describe every abnormality in detail. Enter applicable item number before each comment. Use additional sheets if necessary and attach to this form.

49. Hearing	Record Audiometric Speech Discrimination Score Below		Right Ear					Left Ear				
Conversational Voice Test at 6 Feet ☐ Pass ☐ Fail		Audiometer Threshold in decibels	500	1000	2000	3000	4000	500	1000	2000	3000	4000

50. Distant Vision	51.a. Near Vision	51.b. Intermediate Vision – 32 Inches	52. Color Vision
Right 20/ Corrected to 20/	Right 20/ Corrected to 20/	Right 20/ Corrected to 20/	☐ Pass
Left 20/ Corrected to 20/	Left 20/ Corrected to 20/	Left 20/ Corrected to 20/	☐ Fail
Both 20/ Corrected to 20/	Both 20/ Corrected to 20/	Both 20/ Corrected to 20/	

53. Field of Vision ☐ Normal ☐ Abnormal	54. Heterophoria 20' (In prism diopters)	Esophoria	Exophoria	Right Hyperphoria	Left Hyperphoria

55. Blood Pressure (mm of Mercury) Systolic / Diastolic	56. Pulse (Resting)	57. Urinalysis (If abnormal, give results) ☐ Normal ☐ Abnormal	Albumin	Sugar	58. ECG (Date) M M D D Y Y Y Y
/					

59. Other Tests Given

60. Comments on History and Findings: AME shall comment on all "YES" answers in the Medical History section and for abnormal findings of the examination. (Attach all consultation reports, ECGs, X-rays, etc. to this report before mailing.)

FOR FAA USE

Pathology Codes:

Called By:

Clerical Reject

Significant Medical History ☐ YES ☐ NO Abnormal Physical Findings ☐ YES ☐ NO

61. Applicant's Name

62. Has Been Issued — ☐ Medical Certificate ☐ Medical & Student Pilot Certificate
☐ No Certificate Issued — Deferred for Further Evaluation
☐ Has Been Denied — Letter of Denial Issued (Copy Attached)

63. Disqualifying Defects (List by item number)

64. Medical Examiner's Declaration – I hereby certify that I have personally reviewed the medical history and personally examined the applicant named on this medical examination report. This report with any attachment embodies my findings completely and correctly.

Date of Examination M M D D Y Y Y Y	Aviation Medical Examiner's Name	Aviation Medical Examiner's Signature
	Street Address	
		AME Serial Number
	City State Zip Code	AME Telephone ( )

49 CFR 391.41 Physical [illegible]ifications for Drivers

THE DRIVER'S ROLE

Responsibilities, work schedules, physical and emotional demands, and lifestyles among commercial drivers vary by the type of driving that they do. Some of the main types of drivers include the following: turn around or short relay (drivers return to their home base each evening); long relay (drivers drive 8-10 hours and then have an 8-hour off-duty period), straight through haul (cross country drivers); and team drivers (drivers share the driving by alternating their 4-hour driving periods and 4-hour rest periods).

The following factors may be involved in a driver's performance of duties: abrupt schedule changes and rotating work schedules, which may result in irregular sleep patterns and a driver beginning a trip in a fatigued condition; long hours; extended time away from family and friends, which may result in lack of social support; tight pickup and delivery schedules, with irregularity in work, rest, and eating patterns, adverse road, weather and traffic conditions, which may cause delays and lead to hurriedly loading or unloading cargo in order to compensate for the lost time; and environmental conditions such as excessive vibration, noise, and extremes in temperature. Transporting passengers or hazardous materials may add to the demands on the commercial driver.

There may be duties in addition to the driving task for which a driver is responsible and needs to be fit. Some of these responsibilities are: coupling and uncoupling trailer(s) from the tractor, loading and unloading trailer(s) (sometimes a driver may lift a heavy load or unload as much as 50,000 lbs. of freight after sitting for a long period of time without any stretching period); inspecting the operating condition of tractor and trailer(s) before, during, and after delivery of cargo; lifting, installing, and removing heavy tire chains; and, lifting heavy tarpaulins to cover open top trailers. The above tasks demand agility, the ability to bend and stoop, the ability to maintain a crouching position to inspect the underside of the vehicle, frequent entering and exiting of the cab, and the ability to climb ladders on the tractor and/or trailer(s).

In addition, a driver must have the perceptual skills to monitor a sometimes complex driving situation, the judgment skills to make quick decisions, when necessary, and the manipulative skills to control an oversize steering wheel, shift gears using a manual transmission, and maneuver a vehicle in crowded areas.

§ 391.41 PHYSICAL QUALIFICATIONS FOR DRIVERS

(a) A person shall not drive a commercial motor vehicle unless he is physically qualified to do so and, except as provided in §391.67, has on his person the original, or a photographic copy, of a medical examiner's certificate that he is physically qualified to drive a commercial motor vehicle.

(b) A person is physically qualified to drive a motor vehicle if that person:

(1) Has no loss of a foot, a leg, a hand, or an arm, or has been granted a Skill Performance Evaluation (SPE) Certificate (formerly Limb Waiver Program) pursuant to §391.49.

(2) Has no impairment of: (i) A hand or finger which interferes with prehension or power grasping; or (ii) An arm, foot, or leg which interferes with the ability to perform normal tasks associated with operating a commercial motor vehicle; or any other significant limb defect or limitation which interferes with the ability to perform normal tasks associated with operating a commercial motor vehicle; or has been granted a SPE Certificate pursuant to §391.49.

(3) Has no established medical history or clinical diagnosis of diabetes mellitus currently requiring insulin for control;

(4) Has no current clinical diagnosis of myocardial infarction, angina pectoris, coronary insufficiency, thrombosis, or any other cardiovascular disease of a variety known to be accompanied by syncope, dyspnea, collapse, or congestive cardiac failure.

(5) Has no established medical history or clinical diagnosis of a respiratory dysfunction likely to interfere with his ability to control and drive a commercial motor vehicle safely.

(6) Has no current clinical diagnosis of high blood pressure likely to interfere with his ability to operate a commercial motor vehicle safely.

(7) Has no established medical history or clinical diagnosis of rheumatic, arthritic, orthopedic, muscular, neuromuscular, or vascular disease which interferes with his ability to control and operate a commercial motor vehicle safely.

(8) Has no established medical history or clinical diagnosis of epilepsy or any other condition which is likely to cause loss of consciousness or any loss of ability to control a commercial motor vehicle;

(9) Has no mental, nervous, organic, or functional disease or psychiatric disorder likely to interfere with his ability to drive a commercial motor vehicle safely;

(10) Has distant visual acuity of at least 20/40 (Snellen) in each eye without corrective lenses or visual acuity separately corrected to 20/40 (Snellen) or better with corrective lenses, distant binocular acuity of at least 20/40 (Snellen) in both eyes with or without corrective lenses, field of vision of at least 70 degrees in the horizontal meridian in each eye, and the ability to recognize the colors of traffic signals and devices showing standard red, green and amber;

(11) First perceives a forced whispered voice in the better ear not less than 5 feet with or without the use of a hearing aid, or, if tested by use of an audiometric device, does not have an average hearing loss in the better ear greater than 40 decibels at 500 Hz, 1,000 Hz and 2,000 Hz with or without a hearing aid when the audiometric device is calibrated to American National Standard (formerly ASA Standard) Z24.5-1951;

(12) (i) Does not use a controlled substance identified in 21 CFR 1308.11 Schedule I, an amphetamine, a narcotic, or any other habit-forming drug. (ii) Exception: A driver may use such a substance or drug, if the substance or drug is prescribed by a licensed medical practitioner who: (A) Is familiar with the driver's medical history and assigned duties; and (B) Has advised the driver that the prescribed substance or drug will not adversely affect the driver's ability to safely operate a commercial motor vehicle; and

(13) Has no current clinical diagnosis of alcoholism.

INSTRUCTIONS TO THE MEDICAL EXAMINER

General Information

The purpose of this examination is to determine a driver's physical qualification to operate a commercial motor vehicle (CMV) in interstate commerce according to the requirements in 49 CFR 391.41-49. Therefore, the medical examiner must be knowledgeable of these requirements and guidelines developed by the FMCSA to assist the medical examiner in making the qualification determination. The medical examiner should be familiar with the driver's responsibilities and work environment and is referred to the section on the form, The Driver's Role.

In addition to reviewing the Health History section with the driver and conducting the physical examination, the medical examiner should discuss common prescriptions and over-the- counter medications relative to the side effects ad hazards of these medications while driving. Educate driver to read warning labels on all medications. History of certain conditions may be cause for rejection, particularly if required by regulation, or may indicate the need for additional laboratory tests or more stringent examination perhaps by a medical specialist. These decisions are usually made by the medical examiner in light of the driver's job responsibilities, work schedule and potential for the condition to render the driver unsafe.

Medical conditions should be recorded even if they are not cause for denial, and they should be discussed with the driver to encourage appropriate remedial care. This advice is especially needed when a condition, if neglected, could develop into a serious illness that could affect driving.

If the medical examiner determines that the driver is fit to drive and is also able to perform non-driving responsibilities as may be required, the medical examiner signs the medical certificate which the driver must carry with his/her license. The certificate must be dated. Under current regulations, the certificate is valid for two years, unless the driver has a medical condition that does not prohibit driving but does require more frequent monitoring. In such situations, the medical certificate should be issued for a shorter length of time. The physical examination should be done carefully and at least as complete as is indicated by the attached form. Contact the FMCSA at (202) 366-1790 for further information (a vision exemption, qualifying drivers under 49 CFR 391.64, etc.).

Interpretation of Medical Standards

Since the issuance of the regulations for physical qualifications of commercial drivers, the Federal Motor Carrier Safety Administration (FMCSA) has published recommendations called Advisory Criteria to help medical examiners in determining whether a driver meets the physical qualifications for commercial driving. These recommendations have been condensed to provide information to medical examiners that (l) is directly relevant to the physical examination and (2) is not already included in the medical examination form. The specific regulation is printed in italics and its reference by section is highlighted.

Federal Motor Carrier Safety Regulations
- Advisory Criteria -

Loss of Limb:
§ 391.41(b)(1)

A person is physically qualified to drive a commercial motor vehicle if that person:

Has no loss of a foot, leg, hand or an arm, or has been granted a Skill Performance Evaluation (SPE) Certificate pursuant to Section 391.49.

Limb Impairment:
§ 391.41(b)(2)

A person is physically qualified to drive a commercial motor vehicle if that person:

Has no impairment of: (i) A hand or finger which interferes with prehension or power grasping; or (ii) An arm, foot, or leg which interferes with the ability to perform normal tasks associated with operating a commercial motor vehicle; or (iii) Any other significant limb defect or limitation which interferes with the ability to perform normal tasks associated with operating a commercial motor vehicle; or (iv) Has been granted a Skill Performance Evaluation Certificate pursuant to Section 391.49.

A person who suffers loss of a foot, leg, hand or arm or whose limb impairment in any way interferes with the safe performance of normal tasks associated with operating a commercial motor vehicle is subject to the Skill Performance Evaluation (SPE) Certification Program pursuant to section 391.49, assuming the person is otherwise qualified.

With the advancement of technology, medical aids and equipment modifications have been developed to compensate for certain disabilities. The SPE Certification Program (formerly the Limb Waiver Program) was designed to allow persons with the loss of a foot or limb or with functional impairment to qualify under the Federal Motor Carrier Safety Regulations (FMCSRs) by use of prosthetic devices or equipment modifications which enable them to safely operate a commercial motor vehicle. Since there are no medical aids equivalent to the original body or limb, certain risks are still present, and thus restrictions may be included on individual SPE certificates when a State Director for the FMCSA determines they are necessary to be consistent with safety and public interest.

If the driver is found otherwise medically qualified (391.41(b)(3) through (13)), the medical examiner must check on the medical certificate that the driver is qualified only if accompanied by a SPE certificate. The driver and the employing motor carrier are subject to appropriate penalty if the driver operates a motor vehicle in interstate or foreign commerce without a current SPE certificate for his/her physical disability.

Diabetes
§ 391.41(b)(3)

A person is physically qualified to drive a commercial motor vehicle if that person:

Has no established medical history or clinical diagnosis of diabetes mellitus currently requiring insulin for control.

Diabetes mellitus is a disease which, on occasion, can result in a loss of consciousness or disorientation in time and space. Individuals who require insulin for control have conditions which can get out of control by the use of too much or too little insulin, or food intake not consistent with the insulin dosage. Incapacitation may occur from symptoms of hyperglycemic or hypoglycemic reactions (drowsiness, semiconsciousness, diabetic coma or insulin shock).

The administration of insulin is, within itself, a complicated process requiring insulin, syringe, needle, alcohol sponge and a sterile technique. Factors related to long-haul commercial motor vehicle operations, such as fatigue, lack of sleep, poor diet, emotional conditions, stress, and concomitant illness, compound the diabetic problem. Thus, because of these inherent dangers, the FMCSA has consistently held that a diabetic who uses insulin for control does not meet the minimum physical requirements of the FMCSRs.

Hypoglycemic drugs, taken orally, are sometimes prescribed for diabetic individuals to help stimulate natural body production of insulin. If the condition can be controlled by the use of oral medication and diet, then an individual may be qualified under the present rule.

(See Conference Report on Diabetic Disorders and Commercial Drivers and Insulin-Using Commercial Motor Vehicle Drivers at: *http://www.fmcsa.dot.gov/rulesregs/medreports.htm)*

Cardiovascular Condition
§ 391.41(b)(4)

A person is physically qualified to drive a commercial motor vehicle if that person:

Has no current clinical diagnosis of myocardial infarction, angina pectoris, coronary insufficiency, thrombosis or any other cardiovascular disease of a variety known to be accompanied by syncope, dyspnea, collapse or congestive cardiac failure.

The term "has no current clinical diagnosis of" is specifically designed to encompass: *"a clinical diagnosis of"* (l) a current cardiovascular condition, or (2) a cardiovascular condition which has not fully stabilized regardless of the time limit. The term *"known to be accompanied by"* is defined to include: a *clinical diagnosis of* a cardiovascular disease (1) which is

accompanied by symptoms of syncope, dyspnea, collapse or congestive cardiac failure; and/or (2) which is likely to cause syncope, dyspnea, collapse or congestive cardiac failure.

It is the intent of the FMCSRs to render unqualified a driver who has a current cardiovascular disease which is accompanied by and/or likely to cause symptoms of syncope, dyspnea, collapse, or congestive cardiac failure. However, the subjective decision of whether the nature and severity of an individual's condition will likely cause symptoms of cardiovascular insufficiency is on an individual basis and qualification rests with the medical examiner and the motor carrier. In those cases where there is an occurrence of cardiovascular insufficiency (myocardial infarction, thrombosis, etc.), it is suggested before a driver is certified that he or she have a normal resting and stress electrocardiogram (ECG), no residual complications and no physical limitations, and is taking no medication likely to interfere with safe driving.

Coronary artery bypass surgery and pacemaker implantation are remedial procedures and thus, not unqualifying. Coumadin is a medical treatment which can improve the health and safety of the driver and should not, by its use, medically disqualify the commercial driver. The emphasis should be on the underlying medical condition(s) which require treatment and the general health of the driver. The FMCSA should be contacted at (202) 366-1790 for additional recommendations regarding the physical qualification of drivers on coumadin.

(See Conference on Cardiac Disorders and Commercial Drivers at: http://www.fmcsa.dot.gov/rulesregs/medreports.htm)

Respiratory Dysfunction
§ 391.41(b)(5)

A person is physically qualified to drive a commercial motor vehicle if that person:

Has no established medical history or clinical diagnosis of a respiratory dysfunction likely to interfere with ability to control and drive a commercial motor vehicle safely.

Since a driver must be alert at all times, any change in his or her mental state is in direct conflict with highway safety. Even the slightest impairment in respiratory function under emergency conditions (when greater oxygen supply is necessary for performance) may be detrimental to safe driving.

There are many conditions that interfere with oxygen exchange and may result in incapacitation, including emphysema, chronic asthma, carcinoma, tuberculosis, chronic bronchitis and sleep apnea. If the medical examiner detects a respiratory dysfunction, that in any way is likely to interfere with the driver's ability to safely control and drive a commercial motor vehicle, the driver must be referred to a specialist for further evaluation and therapy. Anticoagulation therapy for deep vein thrombosis and/or pulmonary thromboembolism is not unqualifying once optimum dose is achieved, provided lower extremity venous examinations remain normal and the treating physician gives a favorable recommendation.

(See Conference on Pulmonary/Respiratory Disorders and Commercial Drivers at: http.//www.fmcsa.dot.gov/rulesregs/medreports.htm)

Hypertension
§ 391.41(b)(6)

A person is physically qualified to drive a commercial motor vehicle if that person:

Has no current clinical diagnosis of high blood pressure likely to interfere with ability to operate a commercial motor vehicle safely.

Hypertension alone is unlikely to cause sudden collapse; however, the likelihood increases when target organ damage, particularly cerebral vascular disease, is present. This regulatory criteria is based on FMCSA's Cardiac Conference recommendations, which used the report of the 1984 Joint National Committee on Detection, Evaluation, and Treatment of High Blood Pressure.

A blood pressure of 161-180 and/or 91-104 diastolic is considered mild hypertension, and the driver is not necessarily unqualified during evaluation and institution of treatment. The driver is given a 3-month period to reduce his or her blood pressure to less than or equal to 160/90; the certifying physician should state on the medical certificate that it is only valid for that 3-month period. If the driver is subsequently found qualified with a blood pressure less than or equal to 160/90, the certifying physician may issue a medical certificate for a 1-year period, but should confirm blood pressure control in the third month of this 1-year period. The individual should be certified annually thereafter. The expiration date must be stated on the medical certificate.

A blood pressure of greater than 180 systolic and/or greater than 104 diastolic is considered moderate to severe. The driver may not be qualified, even temporarily, until his or her blood pressure has been reduced to less than 181/105. The examining physician may temporarily certify the individual once the individual's blood pressure is below 181 and/or 105. For blood pressure greater than 180 and/or 104, documentation of continued control should be made every 6 months. The individual should be certified biannually thereafter. The expiration date must be stated on the medical certificate. Commercial drivers who present for certification with normal blood pressures but are taking medication(s) for hypertension should be certified on the same basis as individuals who present with blood pressures in the mild or moderate to severe range. Annual recertification is recommended if the medical examiner is unable to establish the blood pressure at the time of diagnosis.

An elevated blood pressure finding should be confirmed by at least two subsequent measurements on different days. Inquiry should be made regarding smoking, cardiovascular disease in relatives, and immoderate use of alcohol. An electrocardiogram (ECG) and blood profile, including glucose, cholesterol, HDL cholesterol, creatinine and potassium, should be made. An echocardiogram and chest x-ray are desirable in subjects with moderate or severe hypertension.

Since the presence of target damage increases the risk of sudden collapse, group 3 or 4 hypertensive retinopathy, left ventricular hypertrophy not otherwise explained (echocardiography or ECG by Estes criteria), evidence of severely reduced left ventricular function, or serum creatinine of greater than 2.5 warrants the driver being found unqualified to operate a commercial motor vehicle in interstate commerce.

Treatment includes nonpharmacologic and pharmacologic modalities as well as counseling to reduce other risk factors. Most antihypertensive medications also have side effects, the importance of which must be judged on an individual basis. Individuals must be alerted to the hazards of these medications while driving. Side effects of somnolence or syncope are particularly undesirable in commercial drivers.

A commercial driver who has normal blood pressure 3 or more months after a successful operation for pheochromo- cytoma, primary aldosteronism (unless bilateral adrenalectomy has been performed), renovascular disease, or unilateral renal parenchymal disease, and who shows no evidence of target organ may be qualified. Hypertension that persists despite surgical intervention with no target organ disease should be evaluated and treated following the guidelines set forth above.

(See Conference on Cardiac Disorders and Commercial Drivers at: http.//www.fmcsa.dot.gov/rulesregs/medreports.htm)

Rheumatic, Arthritic, Orthopedic, Muscular, Neuromuscular or Vascular Disease
§ 391.41(b)(7)

A person is physically qualified to drive a commercial motor vehicle if that person:

Has no established medical history or clinical diagnosis of rheumatic, arthritic, orthopedic, muscular, neuromuscular or vascular disease which interferes with ability to control and operate a commercial motor vehicle safely.

Certain diseases are known to have acute episodes of transient muscle weakness, poor muscular coordination (ataxia), abnormal sensations (paresthesia), decreased muscular tone (hypotonia), visual disturbances and pain which may be suddenly incapacitating. With each recurring episode, these symptoms may become more pronounced and remain for longer periods of time. Other diseases have more insidious onsets and display symptoms of muscle wasting (atrophy), swelling and paresthesia which may not suddenly incapacitate a person but may restrict his/her movements and eventually interfere with the ability to safely operate a motor vehicle. In many instances these diseases are degenerative in nature or may result in deterioration of the involved area.

Once the individual has been diagnosed as having a rheumatic, arthritic, orthopedic, muscular, neuromuscular or

vascular disease, then he/she has an established history of that disease. The physician, when examining an individual, should consider the following: (1) the nature and severity of the individual's condition (such as sensory loss or loss of strength); (2) the degree of limitation present (such as range of motion); (3) the likelihood of progressive limitation (not always present initially but may manifest itself over time); and (4) the likelihood of sudden incapacitation. If severe functional impairment exists, the driver does not qualify. In cases where more frequent monitoring is required, a certificate for a shorter time period may be issued. (See Conference on Neurological Disorders and Commercial Drivers at: http://www.fmcsa.dot.gov/rulesregs/medreports.htm)

Epilepsy
§ 391.41(b)(8)
A person is physically qualified to drive a commercial motor vehicle if that person:
Has no established medical history or clinical diagnosis of epilepsy or any other condition which is likely to cause loss of consciousness or any loss of ability to control a motor vehicle.
Epilepsy is a chronic functional disease characterized by seizures or episodes that occur without warning, resulting in loss of voluntary control which may lead to loss of consciousness and/or seizures. Therefore, the following drivers cannot be qualified: (l) a driver who has a medical history of epilepsy; (2) a driver who has a current clinical diagnosis of epilepsy; or (3) a driver who is taking antiseizure medication.

If an individual has had a sudden episode of a nonepileptic seizure or loss of consciousness of unknown cause which did not require antiseizure medication, the decision as to whether that person's condition will likely cause loss of consciousness or loss of ability to control a motor vehicle is made on an individual basis by the medical examiner in consultation with the treating physician. Before certification is considered, it is suggested that a 6-month waiting period elapse from the time of the episode. Following the waiting period, it is suggested that the individual have a complete neurological examination. If the results of the examination are negative and antiseizure medication is not required, then the driver may be qualified.

In those individual cases where a driver has a seizure or an episode of loss of consciousness that resulted from a known medical condition (e.g., drug reaction, high temperature, acute infectious disease, dehydration or acute metabolic disturbance), certification should be deferred until the driver has fully recovered from that condition and has no existing residual complications, and not taking antiseizure medication.
(See Conference on Neurological Disorders and Commercial Drivers at: http://www.fmcsa.dot.gov/rulesregs/medreports.htm)

Mental Disorders
§ 391.41(b)(9)
A person is physically qualified to drive a commercial motor vehicle if that person:
Has no mental, nervous, organic or functional disease or psychiatric disorder likely to interfere with ability to drive a motor vehicle safely.
Emotional or adjustment problems contribute directly to an individual's level of memory, reasoning, attention and judgment. These problems often underlie physical disorders. A variety of functional disorders can cause drowsiness, dizziness, confusion, weakness or paralysis that may lead to incoordination, inattention, loss of functional control and susceptibility to accidents while driving. Physical fatigue, headache, impaired coordination, recurring physical ailments and chronic "nagging" pain may be present to such a degree that certification for commercial driving is inadvisable. Somatic and psychosomatic complaints should be thoroughly examined when determining an individual's overall fitness to drive. Disorders of a periodically incapacitating nature, even in the early stages of development, may warrant disqualification.

Many bus and truck drivers have documented that "nervous trouble" related to neurotic, personality, emotional or adjustment problems is responsible for a significant fraction of their preventable accidents. The degree to which an individual is able to appreciate, evaluate and adequately respond to environmental strain and emotional stress is critical when assessing an individual's mental alertness and flexibility to cope with the stresses of commercial motor vehicle driving.

When examining the driver, it should be kept in mind that individuals who live under chronic emotional upsets may have deeply ingrained maladaptive or erratic behavior patterns. Excessively antagonistic, instinctive, impulsive, openly aggressive, paranoid or severely depressed behavior greatly interfere with the driver's ability to drive safely. Those individuals who are highly susceptible to frequent states of emotional instability (schizophrenia, affective psychoses, paranoia, anxiety or depressive neuroses) may warrant disqualification. Careful consideration should be given to the side effects and interactions of medications in the overall qualification determination. See Psychiatric Conference Report for specific recommendations on the use of these medications and potential hazards for driving.
(See Conference on Psychiatric Disorders and Commercial Drivers at: http://www.fmcsa.dot.gov/rulesregs/medreports.htm)

Vision
§ 391.41(b)(10)
A person is physically qualified to drive a commercial motor vehicle if that person:
Has distant visual acuity of at least 20/40 (Snellen) in each eye with or without corrective lenses or visual acuity separately corrected to 20/40 (Snellen) or better with corrective lenses, distant binocular acuity of at least 20/40 (Snellen) in both eyes with or without corrective lenses, field of vision of at least 70 degrees in the horizontal meridian in each eye, and the ability to recognize the colors of traffic signals and devices showing standard red, green, and amber.

The term "ability to recognize the colors of" is interpreted to mean if a person can recognize and distinguish among traffic control signals and devices showing standard red, green and amber, he or she meets the minimum standard, even though he or she may have some type of color perception deficiency. If certain color perception tests are administered, (such as Ishihara, Pseudoisochromatic, Yarn) and doubtful findings are discovered, a controlled test using signal red, green and amber may be employed to determine the driver's ability to recognize these colors.

Contact lenses are permissible if there is sufficient evidence to indicate that the driver has good tolerance and is well adapted to their use. Use of a contact lens in one eye for distance visual acuity and another lens in the other eye for near vision is not acceptable, nor telescopic lenses acceptable for the driving of commercial motor vehicles.

If an individual meets the criteria by the use of glasses or contact lenses, the following statement shall appear on the Medical Examiner's Certificate: "Qualified only if wearing corrective lenses".
(See Visual Disorders and Commercial Drivers at: http://www.fmcsa.dot.gov/rulesregs/medreports.htm)

Hearing
§ 391.41(b)(11)
A person is physically qualified to drive a commercial motor vehicle if that person:
First perceives a forced whispered voice in the better ear at not less than 5 feet with or without the use of a hearing aid, or, if tested by use of an audiometric device, does not have an average hearing loss in the better ear greater than 40 decibels at 500 Hz, 1,000 Hz, and 2,000 Hz with or without a hearing aid when the audiometric device is calibrated to American National Standard (formerly ASA Standard) Z24.5-1951.
Since the prescribed standard under the FMCSRs is the American Standards Association (ANSI), it may be necessary to convert the audiometric results from the ISO standard to the ANSI standard. Instructions are included on the Medical Examination report form.

If an individual meets the criteria by using a hearing aid, the driver must wear that hearing aid and have it in operation at all times while driving. Also, the driver must be in possession of a spare power source for the hearing aid.

For the whispered voice test, the individual should be stationed at least 5 feet from the examiner with the ear being tested turned toward the examiner. The other ear is covered. Using the breath which remains after a normal expiration, the examiner whispers words or random numbers such as 66, 18, 23, etc. The examiner should not use only sibilants (s-sounding test materials). The opposite ear should be tested in the same manner. If the individual fails the whispered voice test, the audiometric test should be administered.

If an individual meets the criteria by the use of a hearing aid, the following statement must appear on the Medical Examiner's Certificate "Qualified only when wearing a hearing aid".
(See Hearing Disorders and Commercial Motor Vehicle Drivers at: http://www.fmcsa.dot.gov/rulesregs/medreports.htm)

Drug Use
§ 391.41(b)(12)

A person is physically qualified to drive a commercial motor vehicle if that person:

Does not use a controlled substance identified in 21 CFR 1308.ll. Schedule I, an amphetamine, a narcotic, or any other habit-forming drug. Exception: A driver may use such a substance or drug, if the substance or drug is prescribed by a licensed medical practitioner who is familiar with the driver's medical history and assigned duties; and has advised the driver that the prescribed substance or drug will not adversely affect the driver's ability to safely operate a commercial motor vehicle.

This exception does not apply to methadone. The intent of the medical certification process is to medically evaluate a driver to ensure that the driver has no medical condition which interferes with the safe performance of driving tasks on a public road. If a driver uses a Schedule I drug or other substance, an amphetamine, a narcotic, or any other habit-forming drug, it may be cause for the driver to be found medically unqualified. Motor carriers are encouraged to obtain a practitioner's written statement about the effects on transportation safety of the use of a particular drug.

A test for controlled substances is not required as part of this biennial certification process. The FMCSA or the driver's employer should be contacted directly for information on controlled substances and alcohol testing under Part 382 of the FMCSRs.

The term "uses" is designed to encompass instances of prohibited drug use determined by a physician through established medical means. This may or may not involve body fluid testing. If body fluid testing takes place, positive test results should be confirmed by a second test of greater specificity. The term "habit- forming" is intended to include any drug or medication generally recognized as capable of becoming habitual, and which may impair the user's ability to operate a commercial motor vehicle safely.

The driver is medically unqualified for the duration of the prohibited drug(s) use and until a second examination shows the driver is free from the prohibited drug(s) use. Recertification may involve a substance abuse evaluation, the successful completion of a drug rehabilitation program, and a negative drug test result. Additionally, given that the certification period is normally two years, the examiner has the option to certify for a period of less than 2 years if this examiner determines more frequent monitoring is required.
(See Conference on Neurological Disorders and Commercial Drivers and Conference on Psychiatric Disorders and Commercial Drivers at:
http://www.fmcsa.dot.gov/rulesregs/medreports.htm)

Alcoholism
§ 391.41(b)(13)

A person is physically qualified to drive a commercial motor vehicle if that person:

Has no current clinical diagnosis of alcoholism.

The term "current clinical diagnosis of" is specifically designed to encompass a current alcoholic illness or those instances where the individual's physical condition has not fully stabilized, regardless of the time element. If an individual shows signs of having an alcohol-use problem, he or she should be referred to a specialist. After counseling and/or treatment, he or she may be considered for certification.

Medical Examination Report

FOR COMMERCIAL DRIVER FITNESS DETERMINATION

1. DRIVER'S INFORMATION Driver completes this section.

Driver's Name (Last, First, Middle)	Social Security No.	Birthdate M / D / Y	Age	Sex ☐ M ☐ F	☐ New certification ☐ Recertification ☐ Follow Up	Date of Exam

Address	City, State, Zip Code	Work Tel: ( ) Home Tel: ( )	Driver License No.	License Class ☐ A ☐ C ☐ B ☐ D ☐ Other	State of Issue

2. HEALTH HISTORY Driver completes this section, but medical examiner is encouraged to discuss with driver.

Yes	No		Yes	No		Yes	No	
☐	☐	Any illness or injury in last 5 years?	☐	☐	Lung disease, emphysema, asthma, chronic bronchitis	☐	☐	Fainting, dizziness
☐	☐	Head/Brain injuries, disorders or illnesses	☐	☐	Kidney disease, dialysis	☐	☐	Sleep disorders, pauses in breathing while asleep, daytime sleepiness, loud snoring
☐	☐	Seizures, epilepsy ☐ medication _____	☐	☐	Liver disease	☐	☐	Stroke or paralysis
☐	☐	Eye disorders or impaired vision (except corrective lenses)	☐	☐	Digestive problems	☐	☐	Missing or impaired hand, arm, foot, leg, finger, toe
☐	☐	Ear disorders, loss of hearing or balance	☐	☐	Diabetes or elevated blood sugar controlled by: ☐ diet ☐ pills ☐ insulin	☐	☐	Spinal injury or disease
☐	☐	Heart disease or heart attack; other cardiovascular condition ☐ medication _____	☐	☐	Nervous or psychiatric disorders, e.g., severe depression ☐ Medication _____	☐	☐	Chronic low back pain
☐	☐	Heart surgery (valve replacement/bypass, angioplasty, pacemaker)	☐	☐	Loss of, or altered consciousness	☐	☐	Regular, frequent alcohol use
☐	☐	High blood pressure ☐ medication _____				☐	☐	Narcotic or habit forming drug use
☐	☐	Muscular disease						
☐	☐	Shortness of breath						

For any YES answer, indicate onset date, diagnosis, treating physician's name and address, and any current limitation. List all medications (including over-the-counter medications) used regularly or recently.

_____

_____

_____

I certify that the above information is complete and true. I understand that inaccurate, false or missing information may invalidate the examination and my Medical Examiner's Certificate.

_____ Driver's Signature

_____ Date

Medical Examiners Comments on Health History (The medical examiner must review and discuss with the driver any "yes" answers and potential hazards of medications, including over-the-counter medications, while driving.)

_____

_____

_____

_____

_____

TESTING (Medical Examiner completes Section 3 through 7)

3. VISION

Standard: At least 20/40 acuity (Snellen) in each eye with or without correction. At least 70° peripheral in horizontal meridian measured in each eye. The use of corrective lenses should be noted on the Medical Examiner's Certificate.

INSTRUCTIONS: *When other than the Snellen chart is used, give test results in Snellen-comparable values. In recording distance vision, use 20 feet as normal. Report visual acuity as a ratio with 20 as numerator and the smallest type read at 20 feet as denominator. If the applicant wears corrective lenses, these should be worn while visual acuity is being tested. If the driver habitually wears contact lenses, or intends to do so while driving, sufficient evidence of good tolerance and adaptation to their use must be obvious. Monocular drivers are not qualified.*

Numerical readings must be provided.

ACUITY	UNCORRECTED	CORRECTED	HORIZONTAL FIELD OF VISION
Right Eye	20/	20/	Right Eye o
Left Eye	20/	20/	Left Eye o
Both Eyes	20/	20/	o

Applicant can recognize and distinguish among traffic control signals and devices showing standard red, green, and amber colors? ☐ Yes ☐ No

Applicant meets visual acuity requirement only when wearing:

☐ Corrective Lenses

Monocular Vision: ☐ Yes ☐ No

Complete next line only if vision testing is done by an ophthalmologist or optometrist

Date of Examination	Name of Ophthalmologist or Optometrist (print)	Tel No.	License No./State of Issue	Signature

4. HEARING

Standard: a) Must first perceive forced whispered voice ≥ 5 ft., with or without hearing aid, or b) average hearing loss in better ear ≤ 40 dB

☐ Check if hearing aid used for tests. ☐ Check if hearing aid **required** to meet standard.

INSTRUCTIONS: *To convert audiometric test results from ISO to ANSI, -14 dB from ISO for 500 Hz, -10 dB for 1,000 Hz, -8.5 dB for 2,000 Hz. To average, add the readings for 3 frequencies tested and divide by 3.*

Numerical readings must be recorded.

a) Record distance from individual at which forced whispered voice can first be heard.	Right Ear Feet	Left Ear Feet

b) If audiometer is used, record hearing loss in decibels. (acc. to ANSI Z24.5-1951)	Right Ear			Left Ear		
	500 Hz	1000 Hz	2000 Hz	500 Hz	1000 Hz	2000 Hz
	Average:			Average:		

5. BLOOD PRESSURE / PULSE RATE

Numerical readings must be recorded.

Blood Pressure	Systolic	Diastolic

Driver qualified if ≤ 160/90 on initial exam.

Pulse Rate	☐ Regular ☐ Irregular

GUIDELINES FOR BLOOD PRESSURE EVALUATION

On initial exam	Within 3 months	Certify
If 161-180 and/or 91-104, Qualify 3 mos. only →	If ≤ 160 and/or 90, Qualify for 1 yr. Document Rx & control the 3rd month →	Annually if acceptable BP is maintained
If > 180 and/or 104, not qualified until reduced to < 181/105. Then qualify for 3 mos. only. →	If ≤ 160 and/or 90, qualify for 6 mos. Document Rx & control the 3rd month →	Biannually

Medical examiner should take at least 2 readings to confirm blood pressure.

6. LABORATORY AND OTHER TEST FINDINGS

Numerical readings must be recorded.

Urinalysis is required. Protein, blood or sugar in the urine may be an indication for further testing to rule out any underlying medical problem.

URINE SPECIMEN	SP. GR.	PROTEIN	BLOOD	SUGAR

Other Testing (*Describe and record*)

7. P[illegible]CAL EXAMINATION

Height: _____(in.) Weight: _____

The presence of a certain condition may not necessarily disqualify a driver, particularly if the condition is controlled adequately, is not likely to worsen or is readily amenable to treatment. Even if a condition does not disqualify a driver, the medical examiner may consider deferring the driver temporarily. Also, the driver should be advised to take the necessary steps to correct the condition as soon as possible particularly if the condition, if neglected, could result in more serious illness that might affect driving.

Check YES if there are any abnormalities. Check NO if the body system is normal. Discuss any YES answers in detail in the space below, and indicate whether it would affect the driver's ability to operate a commercial motor vehicle safely. Enter applicable item number before each comment. If organic disease is present, note that it has been compensated for.
See Instructions To The Medical Examiner for guidance.

BODY SYSTEM	CHECK FOR:	YES*	NO	BODY SYSTEM	CHECK FOR:	YES*	NO
1. General Appearance	Marked overweight, tremor, signs of alcoholism, problem drinking, or drug abuse.			7. Abdomen and Viscera	Enlarged liver, enlarged spleen, masses, bruits, hernia, significant abdominal wall muscle weakness.		
2. Eyes	Pupillary equality, reaction to light, accommodation, ocular motility, ocular muscle imbalance, extraocular movement, nystagmus, exophthalmos, strabismus uncorrected by corrective lenses, retinopathy, cataracts, aphakia, glaucoma, macular degeneration.			8. Vascular system	Abnormal pulse and amplitude, carotid or arterial bruits, varicose veins.		
3. Ears	Middle ear disease, occlusion of external canal, perforated eardrums.			9. Genito-urinary system,	Hernias.		
4. Mouth and Throat	Irremediable deformities likely to interfere with breathing or swallowing.			10. Extremities - Limb Impaired. Driver may be subject to SPE certificate if otherwise qualified.	Loss or impairment of leg, foot, toe, arm, hand, finger. Perceptible limp, deformities, atrophy, weakness, paralysis, clubbing, edema, hypotonia. Insufficient grasp and prehension in upper limb to maintain steering wheel grip. Insufficient mobility and strength in lower limb to operate pedals properly.		
5. Heart	Murmurs, extra sounds, enlarged heart, pacemaker.			11. Spine, other musculoskeletal	Previous surgery, deformities, limitation of motion, tenderness.		
6. Lungs and chest, not including breast examination.	Abnormal chest wall expansion, abnormal respiratory rate, abnormal breath sounds including wheezes or alveolar rales, impaired respiratory function, dyspnea, cyanosis. Abnormal findings on physical exam may require further testing such as pulmonary tests and/or xray of chest.			12. Neurological	Impaired equilibrium, coordination or speech pattern; paresthesia, asymmetric deep tendon reflexes, sensory or positional abnormalities, abnormal patellar and Babinski's reflexes, ataxia.		

* COMMENTS: _____

_____

_____

_____

Note certification status here. See Instructions to the Medical Examiner for guidance.

- ☐ Meets standards in 49 CFR 391.41; qualifies for 2 year certificate
- ☐ Does not meet standards
- ☐ Meets standards, but periodic evaluation required.
  - Due to _____ driver qualified only for:
    - ☐ 3 months ☐ 1 year
    - ☐ 6 months ☐ Other
- ☐ Temporarily disqualified due to (condition or medication): _____
  - Return to medical examiner's office for follow up on _____
- ☐ Wearing corrective lenses
- ☐ Wearing hearing aid
- ☐ Accompanied by a _____ waiver/exemption
- ☐ Skill Performance Evaluation (SPE) Certificate
- ☐ Driving within an exempt intracity zone.
- ☐ Qualified by operation of 49 CFR 391.64

Medical Examiner's Signature _____

Medical Examiner's Name (print) _____

Address _____

Telephone Number _____

If meets standards, complete a Medical Examiner's Certificate according to 49 CFR 391.43(h). (Driver must carry certificate when operating a commercial vehicle.)

- **Transit operators work early mornings, late nights and weekends.** Our transit system provides service every day, many hours each day. Non-standard work hours are essential to providing this service. You will be required to work outside the "normal" Monday through Friday, 8 to 5 work schedule. You will be required to work during some holidays, in bad weather and during national and local emergencies. This will likely be true during most of your career as an operator.

- **Your personal schedule must adapt to your work schedule.** Your work schedule may require sleeping at unusual hours, eating at different times and having fewer opportunities to be with your friends and family.

- **Adapting your personal schedule to the job can be stressful.** Coping with transit shiftwork will require a commitment from you and your family. Some people find it very difficult to adapt to working late-night/early morning shifts.

- **You must be ready to rest at work when you have the chance.** Your schedule will provide breaks. But you may find yourself at a location where food or toilet facilities are not available. When working this type of route you must plan ahead and bring food with you. Proper nutrition and hydration are important in maintaining alertness at the controls of your vehicle. END T

Medical Examination

New hire physicals provide an opportunity to screen candidates for undiagnosed or untreated sleep disorders. The Federal Motor Carrier Safety Administration (FMCSA) developed a health screening procedure for commercial drivers who operate interstate. A similar procedure is suitable for transit operators. Although bus drivers in nearly all states must hold a Commercial Driver's License (CDL), few require a physical to obtain or maintain this license.

The FMCSA regulations stipulate that the certifying physician must review specific medical factors with the candidate and report the findings on the "Medical Examination Report for Commercial

Driver Fitness Determination" (49 CFR Part 391). The operator must obtain this medical certification every 2 years to maintain a current CDL. The FMCSA form includes a "health history" section that the driver must complete. Specifically, the driver must indicate on the form whether or not s/he has any of the listed medical problems including, "Sleep disorders, pauses in breathing while asleep, daytime sleepiness, loud snoring." The instructions that accompany this form advise the physician to review the employee's responses under "health history" and to discuss any "yes" responses with the employee. This procedure encourages the physician to explore and resolve any potential sleep problems with the employee. If the physician finds that the individual has "an established medical history or clinical diagnosis of a respiratory dysfunction likely to interfere with his ability to control and drive a commercial motor vehicle safely," then the individual does not meet the physical qualifications for a CDL. This type of medical screening of operator candidates will identify those who are at risk of reduced alertness behind the wheel. The ability to maintain alertness is a bona fide occupational qualification for transit operators and as such should not create the risk of violating the Americans with Disabilities Act. New hire candidates who do not meet the physical qualifications can be deferred until the sleep disorder is no longer likely to interfere with the individual's ability to safely operate a transit vehicle.

This medical examination procedure is suitable for both new hires and periodic examinations for existing operators. The FMSCA requires operators of interstate commercial motor vehicles to pass the physical examination every 2 years. In developing a policy regarding re-examination of transit operators, transit agencies can use the FMCSA requirement as a guide. Transit agencies should explore whether or not their medical disability policies apply in cases where a current operator develops a sleep disorder.

A copy of the "Medical Examination Report for Commercial Driver Fitness Determination" appears on the CD that accompanies this document.

New Hire Training

The new hire training program should educate new operators regarding the principles of sleep and fatigue and the performance consequences of inadequate rest. Training on techniques and strategies to minimize the risk of fatigue on the job is also

Specific elements of the toolbox relating to the recruitment and hiring of new operators include:

- Suggestions for recruiting literature that will inform the prospective operator of the nature of transit work schedules and articulate the employee's obligation to get the rest and sleep necessary to report for scheduled duty as required.
- Recommendations to ensure that the required pre-employment medical examination includes all the screens necessary to determine that potential sleep disorders are not overlooked.
- Recommendations for the training of new employees to ensure that they have been indoctrinated regarding appropriate sleep hygiene and personal habits to help ensure that they will be rested and ready and able to provide safe service to the agency's customers.

Job Preview

Recruitment and screening of new operators provides an opportunity for the candidate to develop an understanding of the requirements of the job and the work schedule that s/he is likely to have. When prospective employees consider a job as a transit operator they should understand that they may regularly work unusual hours. They will need to adapt their lives to meet the schedule of the job. The amount of adaptation required will vary from agency to agency and from time to time. It is important for any novice operator to also understand lifestyle adjustments that the job may necessitate.

This tool is a job preview handout designed for distribution to operator candidates. It emphasizes key points concerning scheduling that the prospective operator should understand.

The Lifestyle of a Transit Operator: Is It for You?

- **You must be ready to work.** As a transit operator, the lives of our customers and the public are in your hands. You must be alert and vigilant while operating a transit vehicle. You must arrive at work promptly, properly rested and ready to work.

DEPARTMENT OF TRANSPORTATION U.S. COAST GUARD	**Application for License as an Officer, Staff Officer, or Operator and for Merchant Mariner's Document**	OMB-2115-0514
CG-719B (Rev 11/02)		Page 1

Section I - Personal Data

(For CG Use Only) Date Application Received

Name (Last, First, Middle) (Maiden Name if applicable)			Social Security Number
Date of Birth (Month, Day, Year) ____ / ____ / ____	Place of Birth (City, State, Country)		Country of Citizenship
Color of Eyes	Color of Hair	Height ____ft____in	Weight ____lbs
Mailing Address, City, State, Zip Code (PO Boxes are acceptable)		Phone Number ( ) -	
		FAX Number ( ) -	
		E-mail Address	
Next of Kin's Name and Mailing Address, City, State, Zip Code		Relationship	
		Next of Kin's Phone Number ( ) -	
		Next of Kin's E-mail Address	

Parental or Guardian's Consent

☐ I am under 18 years old and a notarized statement of parental/guardian consent is attached.

Section II - Type of Transaction

Transaction	Original	Renewal	Raise in Grade	Endorsement	Duplicate*
☐ License	☐	☐	☐	☐	☐
☐ Merchant Mariner's Document (MMD)	☐	☐	☐	☐	☐
☐ STCW Certificate	☐	☐	☐	☐	☐
☐ Certificates of Registry	☐	☐	☐	☐	☐
☐ Certificate of Discharge Sea Service					

***If requesting a duplicate for a lost or stolen License/MMD attach a signed statement explaining how, when and where your credentials were lost or stolen and your efforts to recover them.**

Applying for:

Grade of License (include tonnage, waters, propulsion mode, horsepower, etc.); or MMD rating (Able Seaman, QMED-Oiler, etc.)

State Current or Previous License/Merchant Mariner's Document

Description of License/Merchant Mariner's Document	Place of Issue	Date of Issue

Section III - Narcotics, DWI/DUI, and Conviction Record

Conviction means found guilty by judgment or by plea and includes cases of deferred adjudication (no contest, adjudication withheld, etc.) or where the court required you to attend classes, make contribution of time or money, receive treatment, submit to any manner of probation or supervision, or forgo appeal of a trial court finding. Expunged convictions must be reported unless the expungement was based upon a showing that the court's earlier conviction was in error.

Yes (X)	No (X)	Indicate your answers to the following questions; sign and date at the bottom of this section.
		Have you ever been convicted of violating a dangerous drug law of the United States, District of Columbia, or any state, or territory of the United States? (This includes marijuana.) ***(If yes, attach statement)***
		Have you ever been a user of/or addicted to a dangerous drug, including marijuana? ***(If yes, attach statement)***
		Have you ever been convicted by any court – including military court – for an offense other than a minor traffic violation? ***(If yes, attach statement)***
		Have you ever been convicted of: 1) A traffic violation arising in connection with a fatal traffic accident; 2) Reckless driving or racing on the highway; or 3) Operating a motor vehicle while under the influence of, or impaired by, alcohol or a controlled substance? ***(If yes, attach statement)***
		Have you ever had your driver's license revoked or suspended for refusing to submit to an alcohol or drug test? ***(If yes, attach statement)***
		Have you ever been given a Coast Guard Letter of Warning or been assessed a civil penalty for violation of maritime or environmental regulations? ***(If yes, attach statement)***
		Have you ever had any Coast Guard license or document held by you revoked, suspended or voluntarily surrendered? ***(If yes, attach statement)***

I have attached a statement of explanation for all areas marked "yes" above. I signed this section with full understanding that a false statement is grounds for denial of the application as well as criminal prosecution and financial penalty. I understand that failure to answer *every* question will delay my application.

X Signature of Applicant agreeing to the above statement	Date

Section IV – Character References (For Original License Applicants Only)

☐ **I am an Original License Applicant and have attached three letters of written recommendation**

Section V - Mariner's Consent

National Driver Registry (NDR) (Mandatory): I authorize the National Driver Registry to furnish the U.S. Coast Guard (USCG) information pertaining to my driving record. This consent constitutes authorization for a single access to the information contained in the NDR to verify information provided in this application. I understand the USCG will make the information received from the NDR available to me for review and written comment prior to taking any action against my License or Merchant Mariner's Document. Authority: 46 U. S. C. 7101(g) and 46 U. S. C. 7302(c).

X Signature of Applicant	Date

Mariner's Tracking System (Optional): I consent to voluntary participation in the Mariner's Tracking System to be used by the Maritime Administration (MARAD) in the event of a national emergency or sealift crisis. In such an emergency, MARAD would disseminate my contact information to an appropriate maritime employment office to determine my availability for possible employment on a sealift vessel. Once consent is given, it remains effective until revoked in writing. Send signed notice of revocation to the USCG National Maritime Center (NMC-4A), 4200 Wilson Blvd., Suite 630, Arlington, VA 22203-1804

X Signature of Applicant	Date

Section VI - Certification and Oath

Certification (Mandatory)

Whoever, in any manner within the jurisdiction of any department or agency of the United States, knowingly and willfully falsifies, conceals or covers up by any trick, scheme, or device a material fact, or makes any false, fictitious or fraudulent statements or representations, or makes or uses any false writing or document knowing the same to contain any false, fictitious or fraudulent statement or entry, violates the U. S. Criminal Code at Title 18 U. S. C. 1001 which subjects the violator to Federal prosecution and possible incarceration, fine or both.

I certify that the information on this application is true and correct and that I have not submitted any application of any type to the Officer-in-Charge, Marine Inspection in any port and been rejected or denied within 12 months of this application.

X Signature of Applicant agreeing to the above statement	Date

Oath (For originals only. Coast Guard official must witness applicant signature.)

I do solemnly swear or affirm that I will faithfully and honestly, according to my best skill and judgment, and without concealment and reservation, perform all the duties required of me by the laws of the United States. I will faithfully and honestly carry out the lawful orders of my superior officers aboard a vessel.

X Signature of Applicant	Date	Signature of Coast Guard Official	Date

U.S. Coast Guard Use Only

Section VII – REC Application Approval

Signature of Approving Official	REC	(Application has been approved on this date) Date

Section VIII – REC Citizenship Verification & Credential Issuance

Indicate Proof of Citizenship below (For non U.S. also include I.N.S. Alien Registration #)

License Endorsement(s) Issued		Document Rating(s) Issued
Issue Number	License Serial Number	MMD Serial Number
Expiration Date		Expiration Date

☐ Check box if corresponding STCW certificate was issued.

Signature of Issuing Official	REC	Date

Section IX – NMC Verification of Duplicate Transactions

Ratings/Endorsements Authorized

Signature of Approving NMC Official: _____ Date: _____

PRIVACY ACT STATEMENT

In accordance with 5 U. S. C. 552a(e)(3), THE FOLLOWING INFORMATION IS PROVIDED TO YOU WHEN SUPPLYING PERSONAL INFORMATION TO THE U.S. COAST GUARD.

1. AUTHORITY WHICH AUTHORIZED THE SOLICITATION OF INFORMATION
   - A. 46 U. S. C. 7302, 7305, 7314, 7316, 7319, AND 7502
   - B. SEE 46 CFR PARTS 10 AND 12.

2. PRINCIPLE PURPOSES FOR WHICH INFORMATION IS INTENDED TO BE USED.
   - A. TO ESTABLISH ELIGIBILITY FOR A MERCHANT MARINER'S DOCUMENT, DUPLICATE DOCUMENTS, OR ADDITIONAL ENDORSEMENTS ISSUED BY THE COAST GUARD.
   - B. TO ESTABLISH AND MAINTAIN A CONTINUOUS RECORD OF THE PERSONS DOCUMENTATION TRANSACTIONS.
   - C. PART OF THE INFORMATION IS TRANSFERRED TO A FILE MANAGEMENT COMPUTER SYSTEM FOR A PERMANENT RECORD.

3. THE ROUTINE USES WHICH MAY BE MADE OF THE INFORMATION:
   - A. TO MAINTAIN RECORDS REQUIRED BY 46 U. S. C. 7319 AND 7502.
   - B. TO ENABLE ELIGIBLE PARTIES (*i.e. the mariner's heirs or properly designated representative*) TO OBTAIN INFORMATION.
   - C. TO PROVIDE INFORMATION TO THE U.S. MARITIME ADMINISTRATION FOR USE IN DEVELOPING MANPOWER STUDIES AND TRAINING BUDGET NEEDS.
   - D. TO DEVELOP INFORMATION AT THE REQUEST OF COMMITTEES OF CONGRESS.
   - E. TO PROJECT BILLET ASSIGNMENTS AT COAST GUARD MARINE INSPECTION/SAFETY OFFICES.
   - F. TO PROVIDE INFORMATION TO LAW ENFORCEMENT AGENCIES FOR CRIMINAL OR CIVIL LAW ENFORCEMENT PURPOSES.
   - G. TO ASSIST U.S. COAST GUARD INVESTIGATING OFFICERS AND ADMINISTRATIVE LAW JUDGES IN DETERMINING MISCONDUCT, CAUSES OF CASUALTIES, AND APPROPRIATE SUSPENSION AND REVOCATION ACTIONS.
4. WHETHER OR NOT DISCLOSURE OF SUCH INFORMATION IS MANDATORY OR VOLUNTARY (Required by law or optional) AND THE EFFECTS ON THE INDIVIDUAL, IF ANY, OF NOT PROVIDING ALL OR PART OF THE REQUESTED INFORMATION IS VOLUNTARY, DISCLOSURE OF THIS INFORMATION IS VOLUNTARY, BUT FAILURE TO P ROVIDE MAY RESULT IN NON-IISUANCE OF THE REQUESTED DOCUMENT(S).

"An agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number."
"The Coast Guard estimat es that the average burden for this report is 10 minutes. You may submit any comments concerning the accuracy of this burden estimate or any suggestions for reducing the burden to: Commandant (G-CIM), U. S. Coast Guard, 2100 2nd Street, SW, Washington, DC 20593-0001 or Office of Management and Budget, Paperwork Reduction Project (2115-0514), Washington, DC 20503."

Instructions

If you are applying for:

1. **ORIGINAL LICENSE AND/OR QUALIFIED RATING DOCUMENT (i.e., *First Rating* of Able Seaman, Qualified Member of the Engine Department, and Tankerman) – Submit this report, completed by your physician.**

2. **RENEWAL OF LICENSE AND/OR QUALIFIED RATING DOCUMENT – You may:**
   - **Submit this report, completed by your physician; or**
   - **Submit a certification by a physician in accordance with Title 46, CFR, 10.209(d) or 12.02-27(d).**

3. **RAISE-IN-GRADE (LICENSES) – You may:**
   - **Submit this report, completed by your physician; or**
   - **Submit a certification by a physician in accordance with Title 46, CFR, 10.207(e).**

Instructions for Licensed Physician / Physician Assistant / Nurse Practitioner

The U. S. Coast Guard requires a physical examination / certification be completed to ensure that all holders of Licenses and Merchant Mariner Documents are physically fit and free of debilitating illness and injury. Physicians completing the examination should ensure that mariners:

- Are of sound health.
- Have no physical limitations that would hinder or prevent performance of duties.
- Are physically and mentally able to stay alert for 4 to 6-hour shifts.
- Are free from any medical conditions that pose a risk of sudden incapacitation, which would affect operating, or working on vessels.

Below is a partial list of physical demands for performing the duties of a merchant mariner in most segments of the maritime industry:

- Working in cramped spaces on rolling vessels.
- Maintaining balance on a moving deck.
- Rapidly donning an exposure suit.
- Stepping over doorsills of 24 inches in height.
- Opening and closing watertight doors that may weigh up to 56 pounds.
- Pulling heavy objects, up to 50 lbs. in weight, distances of up to 400 feet.
- Climbing steep stairs or vertical ladders without assistance.
- Participating in firefighting and lifesaving efforts, including wearing a self-contained breathing apparatus (SCBA), and lifting/controlling fully charged fire hoses.

1. Detailed guidelines on potentially disqualifying medical conditions are contained in Navigation and Vessel Inspection Circular (NVIC) 02-98. Physicians should be familiar with the guidelines contained within this document. NVIC 02-98 may be obtained from www.uscg.mil/hq/g-m/indexor by calling the nearest USCG Regional Examination Center.

2. Examples of physical impairment or medical conditions that could lead to disqualification include impaired vision, color vision or hearing; poorly controlled diabetes; multiple or recent myocardial infarctions; psychiatric disorders; and convulsive disorders. In short, any condition that poses an inordinate risk of sudden incapacitation or debilitating complication, and any condition requiring medication that impairs judgment or reaction time are potentially disqualifying and will require a detailed evaluation.

3. Engineer Officer, Radio Officer, Offshore Installation Manager, Barge Supervisor, Ballast Control Operator, QMED and Tankerman applicants need only to have the ability to distinguish the colors **red, green, blue** and **yellow**. The physician should indicate in Section IV the method used to determine the applicant's ability to distinguish these colors.

4. This applicant should present photo identification before the physical examination/certification.

Privacy Act Statement

As required by Title 5 United States Code (U.S.C.) 552a(e)(3), the following information is provided when supplying personal information to the U. S. Coast Guard.

1. Authority for solicitation of the information: 46 U.S.C. 2104(a), 7101(c)-(e), 7306(a)(4), 7313(c)(3), 7317(a), 8703(b), 9102(a)(5).

2. Principal purposes for which information is used:
   a. To determine if an applicant is physically capable of performing shipboard duties.
   b. To ensure that a duly licensed Physician/Physician Assistant/Nurse Practitioner conducts the applicant's physical examination/certification and to verify the information as needed.

3. The routine uses which may be made of this information:
   a. This form becomes a part of the applicant's file as documentary evidence that regulatory physical requirements have been satisfied and the applicant is physically competent to hold a merchant mariner license or document.
   b. The information becomes part of the total license or document file and is subject to review by federal agency casualty investigators.
   c. This information may be used by the U. S. Coast Guard and an Administrative Law Judge in determining causation of marine casualties and appropriate suspension and revocation action.

4. Disclosure of this information is voluntary, but failure to provide this information will result in non-issuance of a license and/or merchant mariner's document.

Section I – Applicant Information

Name (Last, First, Middle) of Applicant

Date of Birth (Month, Day, Year)	Social Security Number

Section II - Physical Information

Eye Color	Hair Color	Weight	Distinguishing Marks
		_____lbs	

Height	Blood Pressure	Pulse Resting
_____ft_____in	Systolic _____ / Diastolic _____	_____ ☐ Regular ☐ Irregular

Section III - Vision (if you have corrected vision, BOTH uncorrected & corrected MUST be shown)

UNCORRECTED	CORRECTABLE TO	FIELD OF VISION
Right 20 / _____	Right 20 / _____	☐ Normal
Left 20 / _____	Left 20 / _____	☐ Abnormal

The applicant must have **100** degrees horizontal field of vision

Section IV – Color Vision

☐ **PASS** ☐ **FAIL**

Deck Officers/Ratings (masters, mates, pilots, operators, able-seaman) must be tested using one of the following tests. For all other licenses/ratings, see page 1, note 3.

Pseudoisochromatic Plates

- ☐ Divorine - 2nd Edition
- ☐ AOC
- ☐ AOC Revised Edition
- ☐ AOC - HRR
- ☐ Ishihara 16, 24, 38 Plate Edition
- ☐ Eldridge - Green Perception Lantern
- ☐ Farnsworth Lantern (FALANT)
- ☐ Keystone Orthoscope
- ☐ Keystone Telebinocular
- ☐ SAMCTT- School of Aviation Medicine
- ☐ Titmus Optical Vision Test
- ☐ Williams Lantern

Section V - Hearing

☐ **NORMAL** ☐ **IMPAIRED (If impaired, complete Audiometer and Functional Speech Discrimination Test)**

Audiometer (Threshold Value)	500 Hz	1000 Hz	2000 Hz	3000 Hz
Right Ear (Unaided)				
Left Ear (Unaided)				
Right Ear (Aided)				
Left Ear (Aided)				

Functional Speech Discrimination Test at 55 dB

Right Ear (Unaided) _____% **Left Ear (Unaided)** _____%

Right Ear (Aided) _____% **Left Ear (Aided)** _____%

Section VI - Medications

List all current medications, including dosage and possible side effects.
State the condition(s) for which the medication(s) are taken.

☐ **NO PRESCRIPTION MEDICATIONS**

Section VII – Certification of Physical Impairment or Medical Conditions

Does the applicant have or ever suffered from any of the following?
If YES, PROVIDE TEST RESULTS, AS INDICATED.

If YES:
- **Identify the condition**
- **Any limitations**
- **Is condition controlled**
- **Date of diagnosis**
- **Prognosis**

Yes	No		Remarks (Please Print)
		1. Circulatory System	
		a. Heart disease **(Stress Test within the past year)**	
		b. Hypertension **(Recent BP reading)**	
		c. Chronic renal failure	
		d. Cardiac surgery **(Stress Test within the past year)**	
		e. Blood disorder/vascular disease	
		2. Digestive System	
		a. Severe digestive disorder	
		3. Endocrine System	
		a. Thyroid dysfunction **(TSH level within the past year)**	
		b. Diabetes **(State effects on vision & HgbAlc w/in 30 days)**	
		4. Infectious	
		a. Communicable disease	
		b. Hepatitis A, B or C	
		c. HIV	
		d. Tuberculosis	
		5. Mental System	
		a. Psychiatric disorder	
		b. Depression	
		c. Attempted suicide	
		d. Alcohol abuse	
		e. Drug abuse	
		f. Loss of memory	
		6. Musculoskeletal System	
		a. Amputations	
		b. Impaired range of motion	
		c. Impaired balance/coordination	
		7. Nervous System	
		a. Epilepsy/seizure	
		b. Dizziness/unconsciousness	
		c. Paralysis	
		8. Respiratory System	
		a. Asthma **(PFT results within the past year)**	
		b. Lung disease **(PFT results within the past year)**	
		9. Other	
		a. Debilitating allergies	
		b. Other eye disease **(Corrected/Uncorrected Visual acuity)**	
		c. Glaucoma **(Pressure test results within the past year)**	
		d. Recent or repetitive surgery	
		e. Sleepwalking	
		f. Severe speech impediment	
		g. Other illness or disability not listed	

Considering the findings in this examination, and noting the physical demands that may be placed upon the applicant, I consider the applicant **(please check one)**

☐ **Competent** ☐ **Not competent** ☐ **Needing further review**

Name of Physician/Physician Assistant/Nurse Practitioner	License Number	Telephone Number	Office Address, City, State, Zip

Signature of Physician/Physician Assistant/Nurse Practitioner **Date**

I certify that all information provided by me is complete and true to the best of my knowledge

Signature of Applicant **Date**

Appendix 6

Appendix 7

E-10.03 Patient-Physician Relationship in the Context of Work-Related and Independent Medical Examinations.

When a physician is responsible for performing an isolated assessment of an individual's health or disability for an employer, business, or insurer, a limited patient-physician relationship should be considered to exist. Both "Industry Employed Physicians" (IEPs), who are employed by businesses or insurance companies for the purpose of conducting medical examinations, and "Independent Medical Examiners" (IMEs), who are independent contractors providing medical examinations within the realm of their specialty, may perform such medical examinations.

Despite their ties to a third party, the responsibilities of IEPs and IMEs are in some basic respects very similar to those of other physicians. IEPs and IMEs have the same obligations as physicians in other contexts to:

(1) Evaluate objectively the patient's health or disability. In order to maintain objectivity, IEPs and IMEs should not be influenced by the preferences of the patient-employee, employer, or insurance company when making a diagnosis during a work-related or independent medical examination.

(2) Maintain patient confidentiality as outlined by Opinion 5.09, Industry Employed Physicians and Independent Medical Examiners.

(3) Disclose fully potential or perceived conflicts of interest. The physician should inform the patient about the terms of the agreement between himself or herself and the third party as well as the fact that he or she is acting as an agent of that entity. This should be done at the outset of the examination, before health information is gathered from the patient-employee. Before the physician proceeds with the exam, he or she should ensure to the extent possible that the patient understands the physician's unaltered ethical obligations, as well as the differences that exist between the physician's role in this context and the physician's traditional fiduciary role.

IEPs and IMEs are responsible for administering an objective medical evaluation but not for monitoring patients' health over time, treating patients, or fulfilling many other duties traditionally held by physicians. Consequently, a limited patient-physician relationship should be considered to exist during isolated assessments of an individual's health or disability for an employer, business, or insurer.

The physician has a responsibility to inform the patient about important health information or abnormalities that he or she discovers during the course of the examination. In addition, the physician should ensure to the extent possible that the patient understands the problem or diagnosis. Furthermore, when appropriate, the physician should suggest that the patient seek care from a qualified physician and, if requested, provide reasonable assistance in securing follow-up care. (I) Issued December 1999 based on the report "Patient-Physician Relationship in the Context of Work-Related and Independent Medical Examinations," adopted June 1999.

Last updated: Jul 18, 2002

E-5.09 Confidentiality: Industry-Employed Physicians and Independent Medical Examiners.

Where a physician's services are limited to performing an isolated assessment of an individual's health or disability for an employer, business, or insurer, the information obtained by the physician as a result of such examinations is confidential and should not be communicated to a third party without the individual's prior written consent, unless required by law. If the individual authorized the release of medical information to an employer or a potential employer, the physician should release only that information which is reasonably relevant to the employer's decision regarding that individual's ability to perform the work required by the job.

When a physician renders treatment to an employee, with a work-related illness or injury, the release of medical information to the employer as to the treatment provided may be subject to the provisions of worker's compensation laws. The physician must comply with the requirements of such laws, if applicable. However, the physician may not otherwise discuss the employee's health condition with the employer without the employee's consent or, in the event of the employee's incapacity, the appropriate proxy's consent.

Whenever statistical information about employees' health is released, all employee identities should be deleted. (IV) Issued December 1999 based on the report "Patient-Physician Relationship in the Context of Work-Related and Independent Medical Examinations," adopted June 1999.

Last updated: Aug 07, 2002

Skip Navigation

United States Department of Health & Human Services

Fact Sheet

March 3, 2003

Contact: HHS Press Office
(202) 690-6343

ADMINISTRATIVE SIMPLIFICATION UNDER HIPAA: NATIONAL STANDARDS FOR TRANSACTIONS, SECURITY AND PRIVACY

Overview: *To improve the efficiency and effectiveness of the health care system, the Health Insurance Portability and Accountability Act (HIPAA) of 1996 included a series of "administrative simplification" provisions that required the Department of Health and Human Services (HHS) to adopt national standards for electronic health care transactions. By ensuring consistency throughout the industry, these national standards will make it easier for health plans, doctors, hospitals and other health care providers to process claims and other transactions electronically. The law also requires the adoption of security and privacy standards in order to protect personal health information. HHS is issuing the following major regulations:*

- *Electronic health care transactions (final rule issued);*
- *Health information privacy (final rule issued);*
- *Unique identifier for employers (final rule issued);*
- *Security requirements (final rule issued);*
- *Unique identifier for providers (proposed rule issued; final rule in development);*
- *Unique identifier for health plans (proposed rule in development); and*
- *Enforcement procedures (proposed rule in development).*

Although the HIPAA law also called for a unique health identifier for individuals, HHS and Congress have indefinitely postponed any effort to develop such a standard.

Under HIPAA, most health plans, health care clearinghouses and health care providers who engage in certain electronic transactions have two years from the time the final regulation takes effect to implement each set of final standards. More information about the HIPAA standards is available at http://aspe.hhs.gov/admnsimp/ and http://www.cms.gov/hipaa.

BACKGROUND

Today, health plans, hospitals, pharmacies, doctors and other health care entities use a wide array of systems to process and track health care bills and other information. Hospitals and doctor's offices treat patients with many different types of health insurance and must spend time and money ensuring that each claim contains the format, codes and other details required by each insurer. Similarly, health plans spend time and money to ensure their systems can handle transactions from various health care providers and clearinghouses.

Enacted in August 1996, HIPAA included a wide array of provisions designed to make health insurance more affordable and accessible. With support from health plans, hospitals and other health care businesses, Congress included provisions in HIPAA to require HHS to adopt national standards for certain electronic health care transactions, codes, identifiers and security. HIPAA also set a three-year deadline for Congress to enact comprehensive privacy legislation to protect medical records and other personal health information. When Congress did not enact such legislation by August 1999, HIPAA required HHS to issue health privacy regulations.

Security and privacy standards can promote higher quality care by assuring consumers that their personal health information will be protected from inappropriate uses and disclosures.

In addition, uniform national standards will save billions of dollars each year for health care businesses by lowering the costs of developing and maintaining software and reducing the time and expense needed to handle health care transactions.

COVERED ENTITIES

In HIPAA, Congress required health plans, health care clearinghouses, and those health care providers who conduct certain financial and administrative transactions electronically (such as eligibility, referral authorizations and claims) to comply with each set of final standards. Other businesses may voluntarily comply with the standards, but the law does not require them to do so.

COMPLIANCE SCHEDULE

In general, the law requires covered entities to come into compliance with each set of standards within two years following adoption, except for small health plans, which have three years to come into compliance. For the electronic transaction rule only, Congress in 2001 enacted legislation allowing a one-year extension for most covered entities provided that they submit a plan for achieving compliance. As a result, covered entities that qualify for the extension will have until Oct. 16, 2003 to meet the electronic transaction standards instead of the original Oct. 16, 2002 deadline. (Small health plans must still meet the Oct. 16, 2003 compliance date and are not eligible for an extension under the new law.) The legislative extension does not affect the compliance dates for the health information privacy rule, which remains April 14, 2003 for most covered entities (and April 14, 2004 for small health plans).

DEVELOPING STANDARDS

Under HIPAA, HHS must adopt recognized industry standards when appropriate. HHS works with industry standard-setting groups to identify and develop consensus standards for specific requirements. For each set of standards, HHS first develops proposed requirements to obtain public feedback. After analyzing public comments, HHS makes appropriate changes before issuing a final set of standards. The law also allows HHS to propose appropriate changes to the HIPAA regulations to ensure that the standards can be implemented effectively and be maintained over time to continue to meet industry needs.

ELECTRONIC TRANSACTION STANDARDS

In August 2000, HHS issued final electronic transaction standards to streamline the processing of health care claims, reduce the volume of paperwork and provide better service for providers, insurers and patients. HHS adopted modifications to some of those standards in final regulations published on Feb. 20, 2003. Overall, the new standards establish standard data content, codes and formats for submitting electronic claims and other administrative health care transactions. By promoting the greater use of electronic transactions and the elimination of inefficient paper forms, these standards are expected to provide a net savings to the health care industry of $29.9 billion

over 10 years. All health care providers will be able to use the electronic format to bill for their services, and all health plans will be required to accept these standard electronic claims, referral authorizations and other transactions.

In December 2001, Congress adopted legislation that allows most covered entities to obtain a one-year extension to comply with the standards, from Oct. 16, 2002 to Oct. 16, 2003. To qualify for the extension, the covered entity must submit a plan for achieving compliance by the new deadline. (The legislation did not change the compliance date for small health plans, which remains Oct. 16, 2003.) HHS' Centers for Medicare & Medicaid Services (CMS) issued a model compliance plan that covered entities may use to obtain an extension.

PRIVACY STANDARDS

In December 2000, HHS issued a final rule to protect the confidentiality of medical records and other personal health information. The rule limits the use and release of individually identifiable health information; gives patients the right to access their medical records; restricts most disclosure of health information to the minimum needed for the intended purpose; and establishes safeguards and restrictions regarding disclosure of records for certain public responsibilities, such as public health, research and law enforcement. Improper uses or disclosures under the rule are subject to criminal and civil sanctions prescribed in HIPAA.

After considering public comment on the final rule, HHS Secretary Tommy G. Thompson allowed it to take effect as scheduled, with compliance for most covered entities required by April 14, 2003. (Small health plans have an additional year.) In March 2002, HHS proposed specific changes to the privacy rule to ensure that it protects privacy without interfering with access to care or quality of care. After considering public comments, HHS issued a final set of modifications on Aug. 14, 2002. Detailed information about the privacy rule is available at *http://www.hhs.gov/ocr/hipaa*.

SECURITY STANDARDS

In February 2003, HHS adopted final regulations for security standards to protect electronic health information systems from improper access or alteration. Under the security standards, covered entities must establish procedures and mechanisms to protect the confidentiality, integrity and availability of electronic protected health information. The rule requires covered entities to implement administrative, physical and technical safeguards to protect electronic protected health information in their care. The standards use many of the same terms and definitions as the privacy rule to make it easier for covered entities to comply. Most covered entities must comply with the security standards by April 21, 2005, while small health plans as defined by HIPAA will have an additional year to come into compliance.

EMPLOYER IDENTIFIER

In May 2002, HHS issued a final rule to standardize the identifying numbers assigned to employers in the health care industry by using the existing Employer Identification Number (EIN), which is assigned and maintained by the Internal Revenue Service. Businesses that pay wages to employees already have an EIN. Currently, health plans and providers may use different ID numbers for a single employer in their transactions, increasing the time and cost for routine activities such as health plan enrollments and health plan premium payments. Most covered entities must comply with the EIN standard by July 30, 2004. (Small health plans have an additional year to comply.)

ADDITIONAL STANDARDS

Led by CMS, HHS is currently developing other administrative simplification standards. HHS has published proposed regulations for national identifiers for health care providers - and is now

reviewing public comments and preparing final regulations. HHS also is working to develop other proposed standards, including a national health plan identifier and additional electronic transaction standards. In addition, HHS is developing regulations related to enforcement of the adopted standards. The status of key standards required under HIPAA follows:

National provider identifier. In May 1998, HHS proposed standards to require hospitals, doctors, nursing homes, and other health care providers to obtain a unique identifier when filing electronic claims with public and private insurance programs. Providers would apply for an identifier once and keep it if they relocated or changed specialties. Currently, health care providers are assigned different ID numbers by each different private health plan, hospital, nursing home, and public program such as Medicare and Medicaid. These multiple ID numbers result in slower payments, increased costs and a lack of coordination.

National health plan identifier and other HIPAA regulations. HHS is working to propose standards that would create a unique identifier for health plans, making it easier for health care providers to conduct transactions with different health plans. HHS is also working to develop additional transaction standards for attachments to electronic claims and for a doctor's first report of a workplace injury. In addition, HHS is developing a proposed rule on enforcement of the HIPAA requirements. As with other HIPAA regulations, HHS will first consider public comment on each proposed rule before issuing any final standards.

Personal identifier on hold. Although HIPAA included a requirement for a unique personal health care identifier, HHS and Congress have put the development of such a standard on hold indefinitely. In 1998, HHS delayed any work on this standard until after comprehensive privacy protections were in place. Since 1999, Congress has adopted budget language to ensure no such standard is adopted without Congress' approval. HHS has no plans to develop such an identifier.

###

Note: All HHS press releases, fact sheets and other press materials are available at *http://www.hhs.gov/news*.

Last Revised: March 3, 2003

Skip Navigation

United States Department of Health & Human Services

Fact Sheet

FOR IMMEDIATE RELEASE
Monday, April 14, 2003

Contact: HHS Press Office
(202) 690-6343

PROTECTING THE PRIVACY OF PATIENTS' HEALTH INFORMATION

Overview: *The first-ever federal privacy standards to protect patients' medical records and other health information provided to health plans, doctors, hospitals and other health care providers took effect on April 14, 2003. Developed by the Department of Health and Human Services (HHS), these new standards provide patients with access to their medical records and more control over how their personal health information is used and disclosed. They represent a uniform, federal floor of privacy protections for consumers across the country. State laws providing additional protections to consumers are not affected by this new rule.*

Congress called on HHS to issue patient privacy protections as part of the Health Insurance Portability and Accountability Act of 1996 (HIPAA). HIPAA included provisions designed to encourage electronic transactions and also required new safeguards to protect the security and confidentiality of health information. The final regulation covers health plans, health care clearinghouses, and those health care providers who conduct certain financial and administrative transactions (e.g., enrollment, billing and eligibility verification) electronically. Most health insurers, pharmacies, doctors and other health care providers were required to comply with these federal standards beginning April 14, 2003. As provided by Congress, certain small health plans have an additional year to comply. HHS has conducted extensive outreach and provided guidance and technical assistant to these providers and businesses to make it as easy as possible for them to implement the new privacy protections. These efforts include answers to hundreds of common questions about the rule, as well as explanations and descriptions about key elements of the rule. These materials are available at http://www.hhs.gov/ocr/hipaa.

PATIENT PROTECTIONS

The new privacy regulations ensure a national floor of privacy protections for patients by limiting the ways that health plans, pharmacies, hospitals and other covered entities can use patients' personal medical information. The regulations protect medical records and other individually identifiable health information, whether it is on paper, in computers or communicated orally. Key provisions of these new standards include:

- **Access To Medical Records.** Patients generally should be able to see and obtain copies of their medical records and request corrections if they identify errors and mistakes. Health plans, doctors, hospitals, clinics, nursing homes and other covered entities generally should provide access these records within 30 days and may charge patients for the cost of copying and sending the records.

- **Notice of Privacy Practices.** Covered health plans, doctors and other health care providers must provide a notice to their patients how they may use personal medical information and their rights

under the new privacy regulation. Doctors, hospitals and other direct-care providers generally will provide the notice on the patient's first visit following the April 14, 2003, compliance date and upon request. Patients generally will be asked to sign, initial or otherwise acknowledge that they received this notice. Health plans generally must mail the notice to their enrollees by April 14 and again if the notice changes significantly. Patients also may ask covered entities to restrict the use or disclosure of their information beyond the practices included in the notice, but the covered entities would not have to agree to the changes.

- **Limits on Use of Personal Medical Information.** The privacy rule sets limits on how health plans and covered providers may use individually identifiable health information. To promote the best quality care for patients, the rule does not restrict the ability of doctors, nurses and other providers to share information needed to treat their patients. In other situations, though, personal health information generally may not be used for purposes not related to health care, and covered entities may use or share only the minimum amount of protected information needed for a particular purpose. In addition, patients would have to sign a specific authorization before a covered entity could release their medical information to a life insurer, a bank, a marketing firm or another outside business for purposes not related to their health care.

- **Prohibition on Marketing.** The final privacy rule sets new restrictions and limits on the use of patient information for marketing purposes. Pharmacies, health plans and other covered entities must first obtain an individual's specific authorization before disclosing their patient information for marketing. At the same time, the rule permits doctors and other covered entities to communicate freely with patients about treatment options and other health-related information, including disease-management programs.

- **Stronger State Laws.** The new federal privacy standards do not affect state laws that provide additional privacy protections for patients. The confidentiality protections are cumulative; the privacy rule will set a national "floor" of privacy standards that protect all Americans, and any state law providing additional protections would continue to apply. When a state law requires a certain disclosure -- such as reporting an infectious disease outbreak to the public health authorities -- the federal privacy regulations would not preempt the state law.

- **Confidential communications.** Under the privacy rule, patients can request that their doctors, health plans and other covered entities take reasonable steps to ensure that their communications with the patient are confidential. For example, a patient could ask a doctor to call his or her office rather than home, and the doctor's office should comply with that request if it can be reasonably accommodated.

- **Complaints.** Consumers may file a formal complaint regarding the privacy practices of a covered health plan or provider. Such complaints can be made directly to the covered provider or health plan or to HHS' Office for Civil Rights (OCR), which is charged with investigating complaints and enforcing the privacy regulation. Information about filing complaints should be included in each covered entity's notice of privacy practices. Consumers can find out more information about filing a complaint at http://www.hhs.gov/ocr/hipaa or by calling (866) 627-7748.

HEALTH PLANS AND PROVIDERS

The privacy rule requires health plans, pharmacies, doctors and other covered entities to establish policies and procedures to protect the confidentiality of protected health information about their patients. These requirements are flexible and scalable to allow different covered entities to implement them as appropriate for their businesses or practices. Covered entities must provide all the protections for patients cited above, such as providing a notice of their privacy practices and limiting the use and disclosure of information as required under the rule. In addition, covered entities must take some additional steps to protect patient privacy:

- **Written Privacy Procedures.** The rule requires covered entities to have written privacy procedures, including a description of staff that has access to protected information, how it will be used and when it may be disclosed. Covered entities generally must take steps to ensure that any business associates who have access to protected information agree to the same limitations on the use and disclosure of that information.

- **Employee Training and Privacy Officer.** Covered entities must train their employees in their privacy procedures and must designate an individual to be responsible for ensuring the procedures are followed. If covered entities learn an employee failed to follow these procedures, they must take appropriate disciplinary action.

- **Public Responsibilities.** In limited circumstances, the final rule permits -- but does not require -- covered entities to continue certain existing disclosures of health information for specific public responsibilities. These permitted disclosures include: emergency circumstances; identification of the body of a deceased person, or the cause of death; public health needs; research that involves limited data or has been independently approved by an Institutional Review Board or privacy board; oversight of the health care system; judicial and administrative proceedings; limited law enforcement activities; and activities related to national defense and security. The privacy rule generally establishes new safeguards and limits on these disclosures. Where no other law requires disclosures in these situations, covered entities may continue to use their professional judgment to decide whether to make such disclosures based on their own policies and ethical principles.

- **Equivalent Requirements For Government.** The provisions of the final rule generally apply equally to private sector and public sector covered entities. For example, private hospitals and government-run hospitals covered by the rule have to comply with the full range of requirements.

OUTREACH AND ENFORCEMENT

HHS' Office for Civil Rights (OCR) oversees and enforces the new federal privacy regulations. Led by OCR, HHS has issued extensive guidance and technical assistance materials to make it as easy as possible for covered entities to comply with the new requirements. Key elements of OCR's outreach and enforcement efforts include:

- **Guidance and technical assistance materials.** HHS has issued extensive guidance and technical materials to explain the privacy rule, including an extensive, searchable collection of frequently asked questions that address major aspects of the rule. HHS will continue to expand and update these materials to further assist covered entities in complying. These materials are available at http://www.hhs.gov/ocr/hipaa/assist.html.

- **Conferences and seminars.** HHS has participated in hundreds of conferences, trade association meetings and conference calls to explain and clarify the provisions of the privacy regulation. These included a series of regional conferences sponsored by HHS, as well as many held by professional associations and trade groups. HHS will continue these outreach efforts to encourage compliance with the privacy requirements.

- **Information line.** To help covered entities find out information about the privacy regulation and other administrative simplification provisions of the Health Insurance Portability and Accountability Act of 1996, OCR and HHS' Centers for Medicare & Medicaid Services have established a toll-free information line. The number is (866) 627-7748.

- **Complaint investigations.** Enforcement will be primarily complaint-driven. OCR will investigate complaints and work to make sure that consumers receive the privacy rights and protections required under the new regulations. When appropriate, OCR can impose civil monetary penalties for violations

of the privacy rule provisions. Potential criminal violations of the law would be referred to the U.S. Department of Justice for further investigation and appropriate action.

- **Civil and Criminal Penalties.** Congress provided civil and criminal penalties for covered entities that misuse personal health information. For civil violations of the standards, OCR may impose monetary penalties up to $100 per violation, up to $25,000 per year, for each requirement or prohibition violated. Criminal penalties apply for certain actions such as knowingly obtaining protected health information in violation of the law. Criminal penalties can range up to $50,000 and one year in prison for certain offenses; up to $100,000 and up to five years in prison if the offenses are committed under "false pretenses"; and up to $250,000 and up to 10 years in prison if the offenses are committed with the intent to sell, transfer or use protected health information for commercial advantage, personal gain or malicious harm.

###

Note: All HHS press releases, fact sheets and other press materials are available at *http://www.hhs.gov/news*.

Last Revised: April 14, 2003

U.S. Department of Health & Human Services • 200 Independence Avenue, S.W. • Washington, D.C. 20201

AAPS

1601 N. Tucson Blvd. Suite 9
Tucson, AZ 85716-3450
Phone: (800) 635-1196
Hotline: (800) 419-4777

Association of American Physicians and Surgeons, Inc.
A Voice for Private Physicians Since 1943
Omnia pro aegroto

Statement of the
Association of American Physicians and Surgeons
On
The Confidentiality of Patient Records

Submitted to: Subcommittee on Health, House Ways and Means Committee
February 17, 2000

The Association of American Physicians and Surgeons (AAPS), founded in 1943 to protect private medicine and the patient-physician relationship, represents physicians in all specialties nationwide.

Both Congress and the White House have expressed well-founded concerns about the privacy of medical records. However, proposed legislation, as well as the standards on "the privacy of individually identifiable health information" recently promulgated by the Department of Health and Human Services as mandated by the Health Insurance Portability and Accountability Act, would have an effect opposite to the stated intention of protecting patient confidentiality. Both the proposed regulations and various legislative proposals establish procedures *permitting* and *facilitating* the disclosure of information for which disclosure is now either *prohibited* or *practically impossible.*

The objective of writing standards for the electronic transmission of data has been subverted into a pretext for changing the fundamental ethics of the patient-physician relationship and the purpose of medical records.

In the tradition of Hippocrates, the physician serves the patient, who trusts him to abide by the precept that "All that may come to my knowledge in the exercise of my profession or outside of my profession or in daily commerce with men, which ought not to be spread abroad, I will keep secret and never reveal." The traditional medical record consists of the physicians' notes and other data, such as laboratory reports, related to the specific, narrow purpose of providing optimal care to the individual patient. The actual information in the record belongs to the patient, who traditionally has had control over the dissemination of that information.

The proposed regulations overturn these basic principles. The patient's right to refuse consent to release his records is abrogated. All patients (or at least those who have any medical records in electronic format) are thus required to serve administratively determined societal objectives: "health services research" as well as medical research; the detection and prosecution of violations of any law, rule, or regulation; monitoring physician compliance with practice "guidelines"; and central allocation of resources. All of these are generally irrelevant to and may actually be contrary to the best interests of the patient. "National priorities," undefined or vaguely defined, are held, at the discretion of an administrative agency, to override the individual's right to liberty (as the liberty

to seek care from a physician who guards patients' privacy). Individual Fourth Amendment rights are easily swept aside by assertion of a collective "need." Vastly expanded administrative powers trump the requirement for judicial procedure to obtain a search warrant.

While medical professionals will be placed in the dilemma of violating their professional ethics or committing a federal crime by not releasing data, they will also be held responsible, under pain of prison and enormous fines, for monitoring behavior of other entities with which they contract but over which they have little control. Additionally, they will be required to implement costly and onerous notification and other paperwork requirements that actually provide no meaningful patient protection.

In short, proposed rules and laws serve the interest of expanded use rather than real protections. The expanded use may serve some narrow special interests as well as regulators and prosecutors but will be of very questionable medical or scientific value, especially since accuracy will be compromised by the withholding of sensitive information.

We recommend the following:

1. A moratorium on the proposed regulations. (Comments submitted to HHS are appended.)

2. Legislation that embodies the following basic principles:

    a. The right of all Americans to seek medical treatment outside of any medical insurance plan in which they may be enrolled should be explicitly guaranteed-especially (but not exclusively) if the plan requires electronic data storage or transmission as a condition of coverage.

    2. Electronic data storage or transmission should require the patient's explicit, fully informed consent-before the data are entered.

    3. No medical professional may be required to perform any act that violates his conscience as a condition of being permitted to practice his profession or specialty.

    4. Patients should have a cause of civil action against any *individual*, including an agent of the government, who causes him harm by the misuse of computerized data. To this end, any electronic data processing system established under this Act should include a mechanism for tracking all individuals who access identifiable records.

Jane M. Orient, M.D., Executive Director

AAPS Statement on Confidentiality of Patient Records, p. 3

Appendix 8

Executive Summary

On November 15, 2001, about 5:54 a.m., Eastern Standard Time, Canadian National/Illinois Central Railway (CN/IC) southbound train 533 and northbound train 243 collided near Clarkston, Michigan. The collision occurred on the CN/IC Holly Subdivision at a switch at the south end of a siding designated as the Andersonville siding.

Train 533 had been operating in a southward direction through the siding and was traveling at 13 mph when it struck train 243. Signal 14LC at the turnout for the siding displayed a stop indication, but train 533 did not stop before proceeding onto the mainline track. Train 243 was operating northward on a proceed signal on the single main track about 30 mph when the trains collided. Both crewmembers of train 243 were fatally injured; the two crewmembers of train 533 sustained serious injuries. The total cost of the accident was approximately $1.4 million.

The National Transportation Safety Board determines that the probable cause of the November 15, 2001, Canadian National/Illinois Central Railway accident in Clarkston, Michigan, was the train 533 crewmembers. fatigue, which was primarily due to the engineer's untreated and the conductor's insufficiently treated obstructive sleep apnea.

In its investigation of this accident, the Safety Board examined one safety issue:

- The adequacy of rail industry standards and procedures for identifying and reporting potentially incapacitating medical conditions.

As a result of its investigation of this accident, the Safety Board makes safety recommendations to the Canadian National Railway (parent organization of the CN/IC) and the Federal Railroad Administration.

To the Canadian National Railway:
Require all your employees in safety-sensitive positions to take fatigue awareness training and document when employees have received this training. (R-02-23)

To the Federal Railroad Administration:
Develop a standard medical examination form that includes questions regarding sleep problems and require that the form be used, pursuant to 49 *Code of Federal Regulations* Part 240, to determine the medical fitness of locomotive engineers; the form should also be available for use to determine the medical fitness of other employees in safety-sensitive positions. (R-02-24)

Require that any medical condition that could incapacitate, or seriously impair the performance of, an employee in a safety-sensitive position be reported to the railroad in a timely manner. (R-02-25)

Require that, when a railroad becomes aware that an employee in a safety-sensitive position has a potentially incapacitating or performance-impairing medical condition, the railroad prohibit that employee from performing any safety-sensitive duties until the railroad's designated physician determines that the employee can continue to work safely in a safety-sensitive position. (R-02-26)

Appendix 9

Affect of Medical Conditions on Employee's Performance

Statement of Work

The Office of Safety's fatigue program is structured on addressing a multitude of factors and concerns that affect the safety of the railroad industry's employees and their quality of life. Among these factors or concerns is the role of medical conditions, including prescription and over-the-counter (OTC) medications, on an employee's performance. In view of an industry's requirement for 24/7 operations, demanding customer schedules, and the constant movement of heavy machinery, it is essential that an employee be fully alert at all times. The National Transportation Safety Board (NTSB), the Federal Railroad Administration (FRA), and rail labor and management, are deeply concerned that the performance of employees (and their safety) may be influenced by various medical conditions and/or the use of medications. In fact, the NTSB, by letter of November 27, 2002, has directed FRA to take action in response to three recommendations dealing with the relationship between medical conditions (including medications) and the performance of employees.

This Statement of Work represents one more initiative in the Office of Safety's compendium of possible solutions to the fatigue threat within the industry. Specifically, this initiative necessitates complying and reviewing of current regulations/policies and procedures utilized within the transportation community to monitor medical conditions that may incapacitate or significantly impair the performance of employees in safety-sensitive positions. Particular attention will be directed toward obstructive sleep apnea conditions and reporting by an employee's private physician to a carrier's physician of applicable medications concerns. Both these two stipulations were embodied in the NTSB's recommendations.

Time Lines and Deliverables

30 days after the project is funded

- A preliminary compilation of documents related to regulations/policies and procedures utilized within the transportation community to monitor medical conditions that may incapacitate or significantly impair the performance of employees in safety-sensitive positions.

- A draft report summarizing the findings.

45 days after the project is funded

- A draft report on communication procedures between private health care providers and transportation company physicians when employees are diagnosed and/or treated for sleep disorders or other medical conditions that may impair their performance.

60 days after the project is funded

- A summary of regulation/policies and procedures utilized within the transportation community to monitor medical conditions that may incapacitate or significantly impair the performance of employees in safety-sensitive positions.

- A summary of policies and practices governing communications between private and transportation company physicians on employees with sleep disorders or other medical conditions that may impair their performance. (Specific attention must be given to sleep disorder conditions, e.g., obstructive sleep apnea, etc.)

- A complete compendium of relevant documents related to procedure for handling sleep disorders by transportation mode.

- A final report and evaluation of which (combination of) procedure(s) has the greatest potential for reducing the safety risks associated with employees who suffer from sleep disorders.

NOTICE OF SAFETY ADVISORY 98-3 - Recommended practices for the safe use of prescription and over-the-counter drugs by safety-sensitive railroad employees.

On December 24, 1998, FRA published a Notice of Safety Advisory 98-3 in the Federal Register (Vol. 63, No. 247), addressing recommended practices for the safe use of prescription and over-the-counter drugs by safety-sensitive railroad employees. It reads as follows:

FRA issues this advisory in support of DOT's efforts to ensure that transportation employees safely use prescription and over-the-counter (OTC) drugs. Safe rail operations depend upon alert and fully functional professionals who have not been adversely affected by drug use, whether medically appropriate ("legal") or not. FRA has always prohibited illicit drug use and unauthorized use of controlled substances by safety-sensitive employees, but is equally concerned about the potentially adverse side effects from other prescription drugs and OTC products. Because DOT and FRA testing (including FRA's post-accident program) targets only alcohol and controlled substances, FRA does not have a clear picture of the extent to which the performance of safety-sensitive employees is adversely affected by legal drug use.

Accordingly, although not specifically addressed in its alcohol and drug testing regulations (49 CFR part 219), FRA strongly recommends that rail employers and safety-sensitive employees follow § 219.103 guidelines when considering the use of all prescription and OTC drugs. Simply stated, in the interest of safety, FRA strongly recommends that either a treating medical professional or a railroad-designated physician make a fitness-for-work determination concerning all prescription and OTC drug use prior to permitting an employee to return to work in safety sensitive service. This determination should also be made whenever an employee currently performing safety-sensitive functions is concerned about possible effects on his or her job performance from the use of prescription or OTC drugs.

Section 219.103(b) authorizes railroads to establish reporting and approval procedures for all prescription and OTC drugs which may have detrimental effects on safety. Additionally, FRA recommends that railroads educate their employees on these reporting and approval procedures and, most importantly, on how to use prescription and OTC medications safely.

FRA will take all appropriate action to continue reducing the negative impact from inappropriate use of all prescription and OTC medications. Moreover, FRA strongly encourages the rail industry to voluntarily develop programs on safe prescription and OTC drug use before such programs are mandated or directed through legislation.

Issued in Washington, D.C., by George Gavalla, Acting Associate Administrator for Safety.

#

Affect of Medical Conditions on Employee's Performance
(DTFR53-03-00101)

Statement of Work

The Office of Safety's fatigue program is structured on addressing a multitude of factors and concerns that affect the safety of the railroad industry's employees and their quality of life. Among these factors or concerns is the role of medical conditions, including prescription and over-the-counter (OTC) medications, on an employee's performance. In view of an industry's requirement for 24/7 operations, demanding customer schedules, and the constant movement of heavy machinery, it is essential that an employee be fully alert at all times. The National Transportation Safety Board (NTSB), the Federal Railroad Administration (FRA), and rail labor and management, are deeply concerned that the performance of employees (and their safety) may be influenced by various medical conditions and/or the use of medications. In fact, the NTSB, by letter of November 27, 2002, has directed FRA to take action in response to three recommendations dealing with the relationship between medical conditions (including medications) and the performance of employees.

This Statement of Work represents one more initiative in the Office of Safety's compendium of possible solutions to the fatigue threat within the industry. Specifically, this initiative necessitates complying and reviewing of current regulations/policies and procedures utilized within the transportation community to monitor medical conditions that may incapacitate or significantly impair the performance of employees in safety-sensitive positions. Particular attention will be directed toward obstructive sleep apnea conditions and reporting by an employee's private physician to a carrier's physician of applicable medications concerns. Both these two stipulations were embodied in the NTSB's recommendations.

Time Lines and Deliverables

<u>30 days after the project is funded</u>

- A preliminary compilation of documents related to regulations/policies and procedures utilized within the transportation community to monitor medical conditions that may incapacitate or significantly impair the performance of employees in safety-sensitive positions.

- A draft report summarizing the findings.

This interim report includes regulation/policy documents from three modes of transportation: air, highway, and waterways. Medical conditions/qualifications for locomotive engineers are covered under 49 CFR § 240, which has vision, hearing and substance abuse provisions but does not address a number of other medical conditions or medications that could impair performance. Part 240 does not extend to other railroad employees who may be working in other safety-sensitive positions.

The following table summarizes the (medical) forms and policies included with this report. While we feel that many of the most important documents have been identified and included in this report, other may be identified and appended to future reports. The most medically regulated form of transportation appears to be air, followed by highways (CDL drivers), and finally marine. It should be noted that many transit vehicle operators are required to maintain medical certification under 49 CFR § 391.

In addition to the information included on CDL drivers, we have obtained information on practices and medical oversight procedures for non-commercial drivers from several state licensing agencies. While states may vary on policies and procedures, it appears that many, if not all, have some medical oversight procedures to address licensing of individuals with medical conditions that may result in loss of consciousness or other conditions that pose a safety risk. It appears as though there is a heavy reliance on self-reporting; however, conditions reported by relatives, friends, other drivers and agency personnel are also investigated.

MODE OF TRANSPORTATION	Medical policy statement (Regulatory agency)	Standard application forms (medical)	Standard medical exam forms	Exam procedures covering impairing conditions	Procedures for addressing sleep disorders	Procedures for withholding certification	Requirements for reporting impairing conditions	Medical review procedures (for reinstatement)	Identification & monitoring of substance abuse	Waivers for contact with applicants physician(s)	Waivers may be granted
Air	X	X	X	X	X	X	X	X	X	X	X
Highway – Commercial drivers	X	X	X	X	X	X	X	X	X		X
Highway – Non-Commercial	X			X		X		X			X
Waterways	X	X	X	X		X			X		
Railroads	P			P		X	P	X	X		X

P = partial

This table is subject to modification as information becomes available.

The documents appended to this report are presented in the following order:

- First by mode of transportation
    - Air
    - Highways
    - Waterways
    - Railroads

- Then in the following document order
    - Policy documents
    - Applications for medical certification
    - Medical examination forms
    - Related documents

We note, regardless of the content and specificity of medical procedures and examination forms, there appears to be a heavy reliance on self-reporting of conditions (including sleep disorders) that affect operator performance. 14 CFR § 67.53 requires airmen to take themselves out-of-service if they have a medical condition or are taking medication that could impair performance and affect safety.

Much of the research for this report was conducted on the Internet. We have made several attempts to discuss issues with personnel of various regulatory agencies with mixed results. A letter written to the Federal Air Surgeon in January 2003 has not been responded to, as yet, in spite of two follow-up telephone conversations.

We have had some success with obtaining information from Aviation Medical Examiners (AME's) regarding medicals issues/procedures for airmen. A second questionnaire has been prepared for gathering information from railroad companies and will be circulated the first week in April 2003. Further information on these initiatives will be provided as it becomes available.

Affect of Medical Conditions on Employee's Performance
(DTFR53-03-00101)

Statement of Work

The Office of Safety's fatigue program is structured on addressing a multitude of factors and concerns that affect the safety of the railroad industry's employees and their quality of life. Among these factors or concerns is the role of medical conditions, including prescription and over-the-counter (OTC) medications, on an employee's performance. In view of an industry's requirement for 24/7 operations, demanding customer schedules, and the constant movement of heavy machinery, it is essential that an employee be fully alert at all times. The National Transportation Safety Board (NTSB), the Federal Railroad Administration (FRA), and rail labor and management, are deeply concerned that the performance of employees (and their safety) may be influenced by various medical conditions and/or the use of medications. In fact, the NTSB, by letter of November 27, 2002, has directed FRA to take action in response to three recommendations dealing with the relationship between medical conditions (including medications) and the performance of employees.

This Statement of Work represents one more initiative in the Office of Safety's compendium of possible solutions to the fatigue threat within the industry. Specifically, this initiative necessitates complying and reviewing of current regulations/policies and procedures utilized within the transportation community to monitor medical conditions that may incapacitate or significantly impair the performance of employees in safety-sensitive positions. Particular attention will be directed toward obstructive sleep apnea conditions and reporting by an employee's private physician to a carrier's physician of applicable medications concerns. Both these two stipulations were embodied in the NTSB's recommendations.

Time Lines and Deliverables

45 days after the project is funded

A preliminary report on communication procedures between private health care providers and transportation company medical physicians when employees are diagnosed and/or treated for sleep disorders or other medical conditions that may impair their performance.

This interim report includes copies of two survey (questionnaire) instruments, a tally sheet of responses from Aviation Medical Examiners (AME) that responded to the survey, and findings from document review and interviews with company and/or "personal" physicians. Our 30-day deliverables report indicated a finding that there is heavy reliance of self-reporting of medical conditions that could impair operator performance and potentially compromise safety. Consequently, if individuals are not required to meet medical standards, or if they elected not to report a condition (either

out of concern that such a condition may result in medical disqualification, or because they lack specific knowledge that they suffer from a potentially disabling condition) it is highly unlikely that there would be any communication between company and applicant's personal physician.

We find that the following circumstances determine, or have an effect on, the level and nature of communications between company and personal physicians:

- If applicants for licenses/certificates to operate vehicles (planes, ships, trains, trucks, automobiles, etc) are required by rule, regulation, or company policy to report (pre)existing medical conditions as a part of the application process.

- If licensed/certified operators required to notify/report medical conditions, or the use of medications, that may develop during the term of the individual's license/certification.

- If applicants are asked specific questions regarding conditions that could impair their performance on an application or medical examination form, or during the medical examination procedures.

- If applicants are required to report visits to "health professions" for a specified period of time prior to (re)certification examinations. (This is a requirement of applicants seeking Airman Medical Certificates. See page 8, tab 2 in the 30-day deliverables report.)

- If applicants are required to sign authorizations for release of personal medical information to company (or authorized) medical personnel. (In some cases transportation companies would rely on communications between their medical departments and personal physicians and in other cases such communications may occur be between "authorized" medical examiners and an applicant's personal physician.)

- Policies of governing agencies, such as state motor vehicle departments. Some have requirements for reporting potentially debilitating conditions, while others allow or encourage physician to file reports by protecting physicians from liability and by having strict confidentiality rules, with respect to access and use of medical data. In most cases this information would only be available to medical review boards and/or the driver license applicant who's license is in question.

- Questions of patient confidentiality and medical ethics, which vary widely on both an individual and institutional/organizational basis. The 30-day deliverables report contains at least one example, page 5 and 8, tab 4 of the report. These references are from the Merchant Mariner application and physical examination report.

With respect to medications, it appears as though each mode of transportation is concerned about the use of mediations, both prescription and non-prescription, by

equipment operators. However, there doesn't appear to a single policy, rule or regulation regarding procedures for reporting the use of medications by equipment operators, which medications/substances may or may not be used (other than alcohol and elicit drugs), and/or how medical examiners handle or are required to deal with the use of medications by equipment operators. In aviation, the medical standards and certification rules state, under Part 67.113 (c):

No medication or other treatment that the Federal Air Surgeon, based on the case history and appropriate, qualified medical judgment relating to the medication or other treatment involved, finds –

(1) Makes the person unable to safely perform the duties or exercise the privileges of the airman certificate applied for or held: or

(2) May reasonable be expected, for the maximum duration of the airman medical certificate applied for or held, to make the person unable to perform those duties or exercise those privileges.

Medical examination forms, instructions, and procedures for equipment operators required to carry a Commercial Drivers License (CDL) make specific reference to both medications and sleep disorders, while other modes of transportation make general reference to the subject of sleep disorders.

In the General Information section - "Instructions to the Medical Examiner" of the medical examination form for a CDL medical, examiners are to:

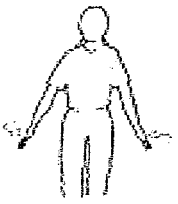
"In addition to reviewing the Health History section with the driver and conducting the physical examination, the medical examiners should discuss common prescriptions and over-the-counter medication relative to the side effects and hazards of these medications while driving. Educate driver to read warning labels on all medications."

In the examination form itself, Section 2. Health History, which the driver is required to fill out, driver applicants are asked to respond "yes" or "no" to the following questions on medical conditions and list medications for several conditions:

- Seizures, epilepsy – medication _____
- Heart disease or heart attach; other cardiovascular condition – medication _____
- High blood pressure – medication _____
- Nervous or psychiatric disorders, e.g., severe depression – medication _____
- Sleep disorders, pauses in breathing while asleep, daytime sleepiness, loud snoring

For any YES answer, indicate onset date, diagnosis, treating physician's name and address, and any current limitation. List all medication (including over-the-counter medications) used regularly or recently. **(See tab 3 or the 30-day deliverables report, pages 4-8.)**

Upper Arm and Lower Back



Stand up tall, stretching rib cage away from hips. Stretch your elbow upwards. Hold your stretch until tension goes away. Bend SLIGHTLY to opposite side, if needed, to increase stretch.

Tips for People Leading Stretches

Tell everyone that we have a new stretching routine to start using. It is based on some of the stretches we have used before and has been updated to cover all the major body areas, using techniques that should be both convenient and effective. When leading group stretches, be sure no one is bouncing or using extreme twisting motions as they stretch. You may want to diplomatically provide some corrective suggestions to people you see who seem to be having trouble understanding or doing any of the stretches.

Remind people that stretching is not a competition to see who can do the most or go the farthest. People have different levels of flexibility, and we need to respect these differences in ourselves, allowing each person to experience benefits at their own pace. It took your whole life to reach the level of flexibility (or inflexibility) you now have, so you should expect benefits to be gradual as you stretch regularly over time.

Remind people to check with their physician if they have particular problems with stretching, and to do only what they feel comfortable doing in the meantime.

S-26.0 Policies

S-26.1 Conflict of Interest

No officers or employees of the company may have personal interests which might conflict or appear to conflict with the interests of the company or its affiliates or which might influence or appear to influence their judgment in performing their duties. The outside activities and affairs of all officers and employees should be conducted so as to avoid loss or embarrassment to the company and its affiliates.

Employees must not engage in another business or occupation that would create a conflict of interest with their employment on the railroad or would interfere with their availability for service or the proper performance of their duties.

This policy is designed to foster a standard of conduct which reflects credit in the eyes of the public on the company, its officers, and its employees, and which protects the reputation and financial well-being of the company. There is no intent to interfere with the personal interests or activities of officers and employees.

S-26.3 Medical Examinations

The Medical Department will determine when medical examinations are necessary, the content of such examinations, and requirements for participation as the needs arise. Employees subject to these examinations must follow any and all requirements as issued.

S-26.4 Sexual Harassment

Employees on duty or on railroad property must not sexually harass others. Sexual harassment includes unwelcome sexual advances, requests for sexual favors, or other verbal or physical sexual conduct given under the following conditions:

1. An individual must submit to the conduct as a term or condition of employment.
2. If an individual submits to or rejects the conduct, that action is used to influence decisions affecting the individual's employment.

   or

Appendix 10

NOTICE OF SAFETY ADVISORY 98-3 - Recommended practices for the safe use of prescription and over-the-counter drugs by safety-sensitive railroad employees.

On December 24, 1998, FRA published a Notice of Safety Advisory 98-3 in the Federal Register (Vol. 63, No. 247), addressing recommended practices for the safe use of prescription and over-the-counter drugs by safety-sensitive railroad employees. It reads as follows:

FRA issues this advisory in support of DOT's efforts to ensure that transportation employees safely use prescription and over-the-counter (OTC) drugs. Safe rail operations depend upon alert and fully functional professionals who have not been adversely affected by drug use, whether medically appropriate ("legal") or not. FRA has always prohibited illicit drug use and unauthorized use of controlled substances by safety-sensitive employees, but is equally concerned about the potentially adverse side effects from other prescription drugs and OTC products. Because DOT and FRA testing (including FRA's post-accident program) targets only alcohol and controlled substances, FRA does not have a clear picture of the extent to which the performance of safety-sensitive employees is adversely affected by legal drug use.

Accordingly, although not specifically addressed in its alcohol and drug testing regulations (49 CFR part 219), FRA strongly recommends that rail employers and safety-sensitive employees follow § 219.103 guidelines when considering the use of all prescription and OTC drugs. Simply stated, in the interest of safety, FRA strongly recommends that either a treating medical professional or a railroad-designated physician make a fitness-for-work determination concerning all prescription and OTC drug use prior to permitting an employee to return to work in safety sensitive service. This determination should also be made whenever an employee currently performing safety-sensitive functions is concerned about possible effects on his or her job performance from the use of prescription or OTC drugs.

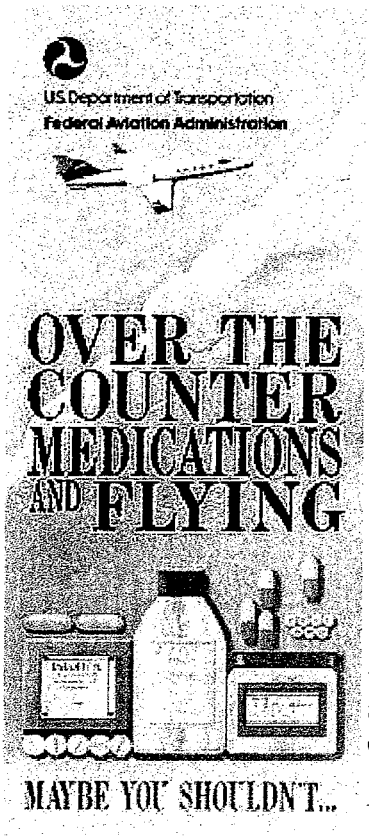
Section 219.103(b) authorizes railroads to establish reporting and approval procedures for all prescription and OTC drugs which may have detrimental effects on safety. Additionally, FRA recommends that railroads educate their employees on these reporting and approval procedures and, most importantly, on how to use prescription and OTC medications safely.

FRA will take all appropriate action to continue reducing the negative impact from inappropriate use of all prescription and OTC medications. Moreover, FRA strongly encourages the rail industry to voluntarily develop programs on safe prescription and OTC drug use before such programs are mandated or directed through legislation.

Issued in Washington, D.C., by George Gavalla, Acting Associate Administrator for Safety.

#

FAA OFFICE OF AVIATION MEDICINE
CIVIL AEROMEDICAL INSTITUTE
PUBLICATIONS
OVER-THE-COUNTER MEDICATIONS



A commonly held belief is that medicine cures all that ails.

Whether medicine is prescribed by a doctor or is an over-the-counter medication that you have selected, as a pilot you must consider the effect it will have on your performance.

When you are given a prescription, your doctor explains the possible side-effects of the medication you are about to take. Your pharmacist also outlines them when filling the prescription.

However, when you treat yourself with a non-prescription medication, you become your own doctor and pharmacist. Therefore, you must inform yourself of the possible adverse reactions that you might encounter. The following will help you understand some of the basics that you will need to successfully accomplish this task.

OTCs Defined

Over-the-counter medications (OTCs) are any legal, non-prescription substance taken for the relief of discomforting symptoms. This may include capsules, tablets, powders, or liquids.

Underlying Medical Condition

When you are not feeling well, your best action is to ground yourself and wait until you have recovered before resuming your pilot duties. There may be times, however, when you feel that you must fly and will be tempted to doctor yourself with OTCs. At these times it is good to remember that the OTCs only hide your symptoms for a while. They do not usually "cure" the condition, and you will not be at peak physical performance while you fly.

Problems With Medications

There are two main areas of concern about unwanted reactions to medications.

Possible allergy.

Allergy is a rare and unpredictable reaction to a substance. If you know that you are allergic to something, you should carefully read the list of ingredients of any OTC to assure that none of the substance is included in its formulation.

Possible unexpected side-effects.

These can take many forms, including drowsiness, impairment of judgment, upset stomach or bowels, disturbance of vision, or even itching. Any of these could cause an impairment that might lead to incapacitation while flying.

Decongestants and caffeine (contained in coffee, tea, cola, chocolate) are both strong stimulants in some individuals. Mixed together, they can make you "hyperactive." Note also that some cough syrups contain a decongestant.

Summary Advice

- READ and follow label directions for use of medication.
- If the label warns of side-effects, do not fly until twice the recommended dosing interval has passed. So, if the label says "take every 4-6 hours," then wait at least 12 hours to fly.
- Remember, the condition you are treating may be as disqualifying as the medication.
- When in doubt, ask your physician or Aviation Medical Examiner for advice.
- As a pilot, you are responsible for your own personal "pre-flight." Be wary of any illness that requires medicine to make you feel better.
- If an illness is serious enough to require medication, it is also serious enough to prevent you from flying.
- Do not fly if you have a cold - changes in atmospheric pressures with changes in altitude could cause serious ear and sinus problems.
- Avoid mixing decongestants and caffeine.
- Beware of medications that use alcohol as a base for the ingredients.

	Medications	Side-Effects	Interactions
PAIN RELIEF/ FEVER	**ASPIRIN** Alka-Seltzer Bayer Aspirin	Ringing in ears, nausea, stomach ulceration, hyperventillation	Increase effect of blood thinners
	ACETAMINOPHEN Tylenol	Liver toxicity (in large doses)	
	IBUPROFEN Advil Motrin Nuprin	Upset stomach; dizziness, rash, itching	Increase effect of blood thinners
COLDS/ FLU	**ANTIHISTAMINES** Actifed Dristan Benadryl Dixoral Cheracol-Plus Nyquil Chlortrimeton Sinarest Contac Sinutab Dimetapp	Sedation, dizziness, rash, impairment of coordination, upset stomach, thickening of bronchial secretions, blurring of vision	Increase sedative effects of other medications
	DECONGESTANTS Afrin Nasal Spray Sine-Aid Sudafed	Excessive stimulation dizziness, difficulty with	Aggravate high blood pressure, heart disease, and prostate

		urination, palpitations	problems
	COUGH SUPPRESSANTS Benylin Robitussin CF/DM Vicks Formula 44	Drowsiness, blurred vision, difficulty with urination, upset stomach	Increase sedative effects of other medications
BOWEL PREPARATIONS	**LAXATIVES** Correctol Ex-Lax	Unexpected bowel activity at altitude; rectal itching	
	ANTI-DIARRHEALS Imodium A-D Pepto-Bismol	Drowsiness, depression, blurred vision (See Aspirin)	
APPETITE SUPPRESSANTS	Acutrim Dexatrim	Excessive stimulation, dizziness, palpitations, headaches	Increased stimulatory effects of decongestants. Interfere with high blood pressure medications
SLEEPING AIDS	Nytol Somined	(Contain antihistamine) Prolonged drowsiness, blurred vision	Cause excessive drowsiness when used with alcohol
STIMULANTS	**CAFFEINE** Coffee, tea, cola, chocolate	Excessive stimulation, tremors, palpitations, headache	Interfere with high blood pressure medications.

This table lists the common OTCs and outlines some of their possible side-effects that could affect your flying abilities. As with all drugs, side-effects may vary with the individual and with changes in altitude and other flight conditions.

MEDICAL FACTS FOR PILOTS

Publication AM-400-92/1
Prepared by: Federal Aviation Administration
Civil Aeromedical Institute
Aeromedical Education Division, AAM-400
Oklahoma City, Oklahoma 73125

Home Back

Other Info

The Honorable John A. Hammerschmidt
Acting Chairman
National Transportation Safety Board
490 L'Enfant Plaza East, S.W.
Washington, D.C. 20594

Dear Mr. Chairman:

This is in response to National Transportation Safety Board's (Safety Board) former Acting Chairman Carol J. Carmody's letter concerning Safety Recommendations R-02-24, -25 and -26 which were addressed to the Federal Railroad Administration (FRA). These safety recommendations arose from the Safety Board's investigation of the November 15, 2001, head-on collision which occurred between two Canadian National/Illinois Central Railway trains near Clarksville, Michigan, resulting in the deaths of the two crew members of the northbound train and serious injuries to the crew members of the southbound train.

During your investigation, it was determined that the probable cause of the collision was attributable to "crewmembers' fatigue, which was primarily due to the engineer's untreated and the conductor's insufficiently treated obstructive sleep apnea." These crewmembers were on the southbound train and failed to comply with a stop signal indication thus, striking the northbound train and resulting in fatalities. Consequently, the following Safety Recommendations were issued to the FRA:

> "Develop a standard medical examination form that includes questions regarding sleep problems and require that the form be used, pursuant to 49 Code of Federal Regulations Part 240, to determine the medical fitness of locomotive engineers; the form should also be available for use to determine the medical fitness of other employees in safety-sensitive positions." (R-02-24).
>
> "Require that any medical condition that could incapacitate, or seriously impair the performance of an employee in a safety-sensitive position be reported to the railroad in a timely manner." (R-02-25).
>
> "Require that, when a railroad becomes aware that an employee in a safety-sensitive position has a potentially incapacitating or performance-impairing medical condition, the railroad prohibit that employee from performing any safety-sensitive duties until the railroad's designated physician determines that the employee can continue to work safely in a safety-sensitive position. (R-02-26).

Introduction

We share the same concern and commitment expressed by the Safety Board that more stringent attention and awareness should be focused on the issue of medical conditions of employees and the possible resulting impairment of their performance. FRA, in partnerships with rail labor and management, seeks to pursue a comprehensive and proactive approach to safety. This approach includes the identification of fatigue-related problems and solutions thereto.

While we have made significant progress over the past years in understanding fatigue issues, we also recognize that significant efforts are still needed before conditions contributing to fatigue and lack of alertness are adequately addressed within the industry. Sleep-related disorders (obstructive sleep apnea, narcolepsy, and others) seriously impact the ability of employees to perform in a safe manner.

While we concur with the objectives of Recommendations 02-24, 25 and 26, we must also bear in mind considerations pertinent to their achievement. These considerations reflect three factors.

First, as illustrated by the terms of Recommendation R-02-26, the issue of sleep-related disorders is part of a larger complex of issues relating to medical standards for safety-sensitive employees. FRA's exercise of regulatory authority to directly address medical conditions or afflictions affecting employees' performance (fitness-to-work determinations) is presently limited to the provisions cited in the Code of Federal Regulations (CFR), Part 240.121, Criteria for Vision and Hearing Acuity Data and CFR Part 219, Control of Alcohol and Drug Use. When the Safety Board has raised this issue in the past, FRA has noted the presence of medical qualifications programs administered by the railroads, the significant effort that would be required to develop useful and acceptable Federal standards, and the priority then being accorded to regulatory and compliance initiatives with a greater potential for near-term reductions in railroad accidents and casualties.

FRA recognizes that significant time has passed since the Safety Board first presented this complex of issues through earlier recommendations, and FRA is pleased that much of the work toward development of regulations claiming higher priority has now been addressed. FRA also appreciates that the environment within which the railroads are addressing medical conditions continues to change, as the Americans with Disabilities Act is applied by employers and the courts. Further, advances in medical science offer greater opportunities for risk reduction today, and the advancing age of the rail employee population makes this issue increasingly important. At the same time, this remains a very demanding area of work for any regulatory agency and one that can consume substantial resources. If an agency elects to regulate in the field of medical standards, that agency must both apply expertise, to ensure it is effective, and invoke good judgment, to avoid denying employees the right to pursue their profession without a sound basis.

Second, it will not come as a surprise to the Safety Board that the long-standing opposition of rail labor and management to further Federal intervention in the area of medical standards and fitness-for-duty determinations continues to the present day. Although opposition is never a satisfactory excuse for failure

to act where the public interest requires action, the difficulty associated with this effort must be considered as an opportunity cost (potentially diverting resources from or disrupting other safety programs). Third, as you know from your work with other transportation modes, it is extremely difficult to balance public- and employee-safety considerations, on the one hand, with individual expectations of privacy with respect to medical records and the policy of confidentiality between an employee and his/her physician, on the other. If possible, we should avoid requirements that threaten communication between the patient and health care professional so that persons are encouraged to seek evaluation, diagnosis and appropriate treatment. The issue of sleep-related disorders may be particularly sensitive to this concern, given the fact that most people appear to perceive that they are able to "work through" the effects of these disorders.

Issues Raised by Individual Recommendations

Considerations specific to the individual recommendations are discussed below.

Safety Recommendation R-02-24

Recommendation 02-24 calls for adoption of requirements for use of a medical examination form for locomotive engineers. The recommendation implies that standard medical (fitness) disqualification criteria would be applied using the information derived from the form, including criteria related to "sleep problems." The form would be available for use, but would not be required to be used, for other employees in safety-sensitive service. Clearly, this recommendation is about much more than a standard form.

Safety Recommendation R-02-25

This recommendation would require that any medical condition that could incapacitate or impair the employee be reported to the railroad in a timely manner. Again, medical qualification standards are implied. The recommendation does not address who would conduct medical examinations, how disputes regarding medical findings would be resolved, how FRA would enforce reporting requirements on private health care providers, or whether self-reporting is intended.

Safety Recommendation R-02-26

This recommendation would require that a railroad remove the employee from service upon being notified that the employee has a "potentially incapacitating or performance-impairing condition" until the railroad's own designated physician determines the employee can continue to work safely. Again, the recommendation must assume the presence of medical standards, or alternatively must assume that

enormous discretion will be conferred on the railroad-designated physician (discretion of the sort that FRA is unlikely to delegate in view of legal considerations).[1]

General Discussion

FRA agrees that it is time for a fresh look at the issue of medical standards for safety-sensitive railroad employees. However, it is by no means clear what the outcome of that effort will be. The discussion that follows identifies issues that FRA will need to examine in order to determine an appropriate course of action.

The Safety Board cites examples of salutary efforts to address this issue in other modes of transportation. We do not currently have available literature that would reflect on the success of those efforts as they relate to sleep-related disorders. FRA appreciates the information provided by the Board and will seek to develop additional information to help guide our thinking.

The Safety Board raises this issue in the context of fatigue countermeasures. Management of fatigue encompasses a multitude of concerns in addition to those associated with medical conditions, e.g., work/rest scheduling, predictability, staffing, pay determinations, off-duty behavior, etc. Under the present tenets of public policy applicable to this area, the principal opportunities available to FRA for addressing fatigue involve cooperative efforts with the railroads and rail labor organizations. Regulatory efforts focused on mandatory reporting of medical conditions could seriously strain or even sever the bonds being formed in contexts such as the North American Rail Alertness Partnership and Safety Assurance and Compliance Programs.

If mandatory reporting of sleep-related disorders were to be required, it is not immediately obvious what the effect would be. The Safety Board has understandably focused on a case involving two employees with diagnosed problems that had not been properly managed. Undoubtedly there have been a number of previous accidents investigated by the Board where sleep-related disorders played a role, but no diagnosis had been made. So I am confident the Safety Board would not wish to discourage evaluation and diagnosis that might reduce the number of these events.

Under the current state of medical practice, sleep-related disorders are unlikely to be noted absent initiative by the patient to call out symptoms and request an evaluation. Ironically, perhaps the most effective local intervention that has come to FRA's attention in the railroad industry was a program commissioned by the railroad under which a third party assisted in the initial evaluation of employees who volunteered to participate. Employees who were referred for formal evaluation and care did so with the

---

[1]As pointed out by the Safety Board's letter, there are a wide range of medical conditions that could "potentially" affect employee fitness, including uncontrolled diabetes, heart disease, and seizure disorders. Many prescription medications carry warning of a wide range of potential (if low probability) side effects that could be deleterious to the conduct of the employee's duties if realized.

confidence that the employer would not be advised of the results of the evaluation or the fact that they were in treatment. The effort resulted in the identification of a number of cases of sleep apnea, and employees expressed satisfaction that their treatment outcomes positively affected their lives. Many of the railroads' medical plans include coverage of sleep related conditions (including the use of Continuous Positive Airway Pressure devices), and the industry is actively making its employees aware of the coverages that are available. Should we be striving to achieve broader and more effective use of these approaches, which we believe are leading to positive results, or should we be relying on more directive approaches without knowing what the effects will be?

FRA Actions

Considerations such as those outlined above suggest the following strategies for responding to the concerns underlying the Safety Board's recommendations:

Short-term

FRA will continue to encourage and assist, as appropriate, the industry's efforts to educate its members on the issues associated with fatigue, including sleep problems.

FRA will issue a Safety Advisory highlighting the relationships between medical conditions (particularly sleep problems) and impaired performance. As a start, FRA will encourage employees to make their treating health care professionals aware of their safety-sensitive duties and to discuss potentially impairing conditions (including use of prescribed and over-the-counter medications) with those providers.

Mid-term

Subject to the availability of funding, FRA will contract for a comprehensive study of the issues attendant to issuance of requirements for medical qualifications programs. The study will determine the state of existing railroad qualification programs, survey Federal and State programs for potentially applicable models, identify applicable standards, estimate prospects for program effectiveness, determine resource requirements, evaluate the impact of required disclosure requirements on the decision to seek evaluation and treatment, and provide options for future action.

In order to determine the magnitude of benefits that might be claimed by action in this field, FRA will include in this study an element designed to obtain estimates of the prevalence of sleep disorders in railroad employees assigned safety-sensitive duties.

Long-term

Based upon the results of the study, and advice obtained through the Railroad Safety Advisory Committee, FRA will determine whether to issue proposed rules for medical standards, assist in the publication of recommended guidelines for industry, or take other appropriate action including education and awareness efforts.

Of course, we would welcome the opportunity to remain in conversation with the Safety Board and its staff regarding other actions we might undertake toward the same ends.

It is requested that the Safety Board classify Recommendations R-02-24, -25, and -26 as "Open-Acceptable Response." We will continue to advise the Safety Board on our progress in responding to these recommendations.

Sincerely,

Allan Rutter
Administrator

bcc: RRS-1, 2, 3, 5 (Kaye), 10 (Pritchard, Taylor, Portsche, Misiaszek), 20
Retyped by Cblair, RPA-20, x36022, March 14, 03
RCC-1, 2, 10 (Smith, Kasminoff)
RDV-1, 2, 30, 32 (Orth, Raslear)
RRS-4/SKaye:493-6303:01/15/03editedbyGCothen2/14/03
Control Number: **021202-003109**
cc: ROA-20, RCC
W:\Controls\'02\02-003109.wpd

08/18/2003

FEDERAL RAILROAD ADMINISTRATION

Executive Secretariat

PRIORITY: Appropriate/Information
DUE DATE:

S-10 CONTROL #:

CONTROL NUMBER: FRA-030818-005035

ANALYST: CBLAIR

ACTION OFFICE: RRS (Safety)
SIGNATURE: AH (Appropriate Handling)

8/20/03
George Gavalla
Grady Gothen
Ed Pritchard
Scott Kaye
Alan Misiaszek

WRITER'S NAME: Engleman, Ellen G.
ORGANIZATION: National Transportation Safety Board
TITLE: Chairman
ADDRESS:

Washington, DC 20594

SUBJECT: Places Safety Recommendations R-02-24, R-02-25, & R-02-26 in Open--Acceptable response status

REMARKS: Scott: Our initial reply indicated "FRA will issue a Safety Advisory." Who has this responsibility? Also, please note the Board awaits advise concerning when FRA has awarded the contract. IF we have progressed any of these aspects, can you formulate a draft update to the Board. Bert P.

XREF: 003109
COORDINATION:

DISTRIBUTION: RCC

ROUTING INFORMATION

DATE	TIME	REFERRED TO	PERSON	REMARKS	INITIAL
08/12/2003	4:17 p.m.	RPA-20			
08/18/2003	09:27:46 AM	RRS		Blair out the office 8/12-14, 2003	
8/19/03		RRS-11	Portsche	For action	SKaye
8/20/03		RRS-4	Kaye	For Action	RLP

National Transportation Safety Board
Washington, D.C. 20594

Office of the Chairman

JUL 31 2003

Honorable Allan Rutter
Administrator
Federal Railroad Administration
Washington, D.C. 20590

Dear Mr. Rutter:

Thank you for your March 17, 2003, response to the National Transportation Safety Board regarding Safety Recommendations R-02-24 through -26, stated below. These recommendations were issued to the Federal Railroad Administration (FRA) as a result of the Safety Board's investigation of a head-on collision that occurred between two Canadian National/Illinois Central Railway trains near Clarkston, Michigan, on November 15, 2001, in which two crewmembers were fatally injured and the other two crewmembers sustained serious injuries.

R-02-24

> Develop a standard medical examination form that includes questions regarding sleep problems and require that the form be used, pursuant to 49 *Code of Federal Regulations* [CFR] Part 240, to determine the medical fitness of locomotive engineers; the form should also be available for use to determine the medical fitness of other employees in safety-sensitive positions.

R-02-25

> Require that any medical condition that could incapacitate, or seriously impair the performance of, an employee in a safety-sensitive position be reported to the railroad in a timely manner.

R-02-26

> Require that, when a railroad becomes aware that an employee in a safety-sensitive position has a potentially incapacitating or performance-impairing medical condition, the railroad prohibit that employee from performing any safety-sensitive duties until the railroad's designated physician determines that the employee can continue to work safely in a safety-sensitive position.

The Safety Board appreciates the response and consideration of the Board's recommendations, and we note that the FRA concurs with the objectives of these

recommendations. The Board is particularly gratified by the FRA's expressed intent to study the issue of medical qualifications programs, but believes that progress related to this issue can be made independent of such a study. Pending such progress and the timely completion of the proposed study, the Board classifies Safety Recommendations R-02-24, -25, and -26 "Open—Acceptable Response." Several statements in your letter merit additional discussion.

The Safety Board has often commended the FRA and the industry for the initiatives that have been undertaken to educate employees about fatigue and how it affects employee performance. We are pleased that the FRA shares our concern that more attention needs to be focused on medical conditions, including sleep disorders, which can also impair performance. The Board continues to believe that limiting a railroad's required medical regulation of employees with safety-sensitive duties to only issues of medication use, vision, and hearing, fails to address a range of medical conditions that, at a certain level of severity, can incapacitate or significantly affect employee performance. The fatalities and injuries sustained by the crewmembers in the Clarkston, Michigan, accident could have been avoided, in the Board's opinion, if decisions regarding the employees' medical conditions and their possible performance impairment had been made by a qualified medical professional employed by the railroad rather than by the employees. Please note that the Board is not asking the FRA to establish specific standards for medical fitness; it is expected that such standards will continue to be applied, as noted in your response, through programs administered by individual railroads. The Board's recommendations are aimed at improving the information that railroads use to make their medical certification decisions, including a standard form and a reporting requirement. Such standard forms and reporting requirements are common in the transportation industry, and are typically crafted to strike a balance between public safety and individual privacy issues.

In the accident that prompted these recommendations, the engineer's physicians noted repeatedly in his records that they were concerned about his continued operation of a locomotive. This information never reached the railroad, nor was there any requirement for it to do so. Moreover, given the FRA's specific educational efforts with regard to sleep disorders, it seems likely that the engineer would have been appropriately treated and scheduled had his sleep apnea been reported to the railroad. The Safety Board continues to investigate rail accidents involving safety-sensitive employees with serious medical conditions. A recent non-fatal train collision, investigated jointly with the FRA, involved an engineer diagnosed with manic depression and treated with impairing medications. The railroad's examination form did not ask about the engineer's psychiatric condition or treatment; the form is not even required under current regulations. There is no mechanism currently in place to ensure that safety-sensitive employees with even the most potentially severe impairing or incapacitating conditions are routinely identified, evaluated, and appropriately treated.

The FRA notes a number of specific concerns regarding these recommendations. These concerns seem mainly directed at the Safety Board's failure to address specifics of the programs being recommended. It has long been the policy of the Board to permit recommendation recipients the maximum possible flexibility in responding to our recommendations by leaving many of the details of implementation to those recipients. However, we would be pleased to provide assistance in the evaluation of reasonable options for responding to our recommendations. The Board's

Medical Officer, Dr. Mitchell A. Garber, can be reached at (202) 314-6508; he is available to discuss such options with your staff.

The Safety Board eagerly awaits specific progress in the evaluation and appropriate disposition of potentially impairing or incapacitating medical conditions in safety-sensitive railroad employees, and in particular, would appreciate being informed when the FRA has awarded the contract for the study of issues attendant to issuance of requirements for medical qualifications programs. The Board believes, however, that substantial progress on these recommendations can be made independent of such a study, and asks that if the Board and staff can be of any assistance in these endeavors, you do not hesitate to contact us.

Sincerely,

Ellen G. Engleman
Chairman

cc: Ms. Linda Lawson, Director
Office of Safety, Energy, and Environment
Office of Transportation Policy

Mike Perel
Human Factors Team Leader
(202) 366-5675
mike.perel@nhtsa.dot.gov

Human factors research supports the research being done under all four other IVI platforms (light, commercial, transit, and specialty vehicles). When designing and testing IVI technologies, a thorough understanding of driver performance and behavior is required to help maximize system effectiveness and minimize driver distraction. Such in-vehicle technologies include vehicle collision warning systems, wireless telephones, in-vehicle computers, route guidance/navigation systems, etc. Further information on the human factors program is available at: http://www.its.dot.gov/ivi/ivihf/index.html.

Wireless Phone On-Road Study: In this quarter (April – June, 2002), a study at the Vehicle Research and Test Center (VRTC) on the effects of hand-held versus hands-free phones on drivers behavior neared completion. Vehicles were equipped to monitor 10 members of the general public during their normal driving. Preliminary findings suggest that drivers have difficulty with hands-free phones due to complications with speaking and being heard by the device. Some drivers chose to bypass voice dialing, which indicates that drivers find hands-free dialing inconvenient or difficult. Subjects looked forward more during handheld conversation, possibly reducing driver awareness of sudden changes in peripheral vision. Hands-free conversation is associated with more time spent looking left and right. However, significant glance time was spent looking at the phone during hands-free conversation.

Voice Interface Test Track Study: Another VRTC project related to driver distraction effects also neared completion this quarter. This study is being conducted cooperatively between the National Highway Traffic Safety Administration (NHTSA) and Transport Canada. A comparison of voice versus manual interfaces was studied for phone dialing, radio tuning, and e-mail retrieval. Subjects were asked to drive around a track while performing the aforementioned tasks. The level of distraction was quantified by the driver's ability to follow a car with fluctuating speeds and to respond to flashing lights in his or her peripheral vision every few seconds. Overall, the voice-based interface did not have significantly less distraction effects than the visual/manual interface. This could be a result of the voice interface design. Future voice interface research is underway to examine how distraction measures are influenced by various parameters, such as menu length, menu depth, message length, and voice quality.

The results from the above two projects were presented at the driver distraction session of the Society of Automotive Engineers (SAE) Government Industry Meeting. More information about these projects may be found at the following website: http://www-nrd.nhtsa.dot.gov/pdf/nrd-01/SAE/SAE2002/RGarrott_distract.pdf.

Utah 511 Review: In another related study, the human factors team reviewed a real-time traffic information telephone hotline called "Utah 511" to identify potential safety concerns. This quarter, some preliminary observations were made. Drivers unfamiliar with the system are required to listen to about 20 seconds of introductory material before requesting conditions on a particular road. Further interaction with the system can take several minutes depending on the number of segments and reportable items per segment. In terms of understandability, the 511 voice was very clear, although the system did not always understand commands coming from

the speakerphone. In reporting incidents (e.g., accidents and construction work areas), little or no indication of the severity of the problem or impact on traffic delay was provided. Additionally, no "repeat" option is available for drivers who might not have understood the information the first time around; the driver would have to restart from the beginning of the menu.

Naturalistic Driving Study: Virginia Tech is equipping 100 cars with devices to record driver behavior and performance in pre-crash and near crash situations. The experimental design was completed this quarter, and the scope of the project has been expanded to include how air-bag activation affects drivers, how drivers interact with heavy vehicles, and how headlight glare affects drivers.

In-Vehicle Display Icons: There are many devices in cars designed by many different vendors. The objective of this project is to facilitate the standardization of in-vehicle display icons to help minimize confusion. This quarter, Battelle is finalizing their report.

Driver Workload Metrics: This initiative is another project under CAMP. The objective is to determine which devices should be accessible to drivers while they are driving. The idea is to develop valid measures of distraction that can be used by manufacturers to make decisions regarding what devices should be operable while the vehicle is in motion. An annual report is coming out shortly.

PROJECT SUMMARY MED-TOX Online

Executive Summary of the Denver Police & Firefighter Medical Screening Study

Prepared by:

MED-TOX HEALTH SERVICES

Executive Summary

Project Overview

The purpose of this study was to determine and document the physical demands and working conditions associated with two City and County of Denver Civil Service classifications: Police Officer and Firefighter. This study was also conducted to provide information useful to the Civil Service Commission and to assist in its efforts to comply with the Americans with Disabilities Act of 1990. According to this law only those disabilities which bear a demonstrable relationship to the job may be used as a basis for medical disqualification. Similarly, Section 504 of the federal Vocational Rehabilitation Act of 1973 prohibits employment discrimination in publicly funded programs by reason of a person's physical disability.

The job analysis procedures used in this study followed there recommendations of the *Uniform Guidelines on Employee Selection Procedures*. While the Americans with Disabilities Act of 1990 does not require that employers follow the *Uniform Guidelines* in conducting a job analysis or devising medical screening programs, they are of significance because the *Uniform Guidelines* offer the only legally proscribed guidance on job analysis and the validation of requirements for jobs.

Whether one is developing minimum educational (or minimum physical requirements) for a given job, similar principles of industrial psychology must be followed. The *Uniform Guidelines*have also been followed because there is no particular logic to performing work at a lessor standard that those set forth in the *Guidelines*. Moreover, since the job analysis results of this study could be challenged under various laws baring employment discrimination on the basis of gender or state laws on the basis of

handicap, the Civil Service Commission should be able to demonstrate that professionally accepted methods were utilized to document the relationship between the physical demands of both jobs and the medical screening decision under challenge.

Summary of the Job Analysis

Physical Ability Analysis

Both the classifications of Firefighter and Police Officer were studied in a systematic and ordered manner. During the Spring of 1993, MED-TOX met with incumbents from both classifications to identify tasks typically required of incumbent workers. During group interviews a list of 292 physically demanding Firefighter tasks were identified. In separate interviews 319 physically demanding tasks for Police Officers were assembled.

Next, these tasks were reviewed and modified by additional groups of Police Officers and Firefighters and a linkage activity was performed. The purpose of the linkage activity was to ensure that each physically demanding task was clearly identified as involving one or more physical abilities that had already been identified in the scientific literature of ergonomics, human factors, exercise physiology, and occupational medicine.

As industrial psychologists have pointed out, it is seldom of value to have incumbents describe or define human abilities since they are not often trained in cognitive psychology or exercise physiology. Rather it is preferred to have incumbents describe their work and consider which constructs or abilities are utilized from a list of scientifically accepted definitions. This was the approach MED-TOX chose.

The linkage activity involved groups of Police Officers and Firefighters independently considering each task and each ability and deciding which abilities were needed to perform each task. This activity resulted in the clear delineation of which human abilities were necessary to perform unambiguous and physically demanding tasks. The human physical abilities that were assessed included:

Table1

Physical Abilities Assessed

Strength Abilities	Static Strength, Explosive Strength, Dynamic Strength, Trunk Strength
Flexibility	Extent Flexibility, Dynamic Flexibility

Body Movement	Stamina, Whole Body Coordination, Whole Body Equilibrium, Speed of Limb Movement
Use of Arms and Hands	Arm-Hand Steadiness, Manual Dexterity, Finger Dexterity, Multi-Limb Coordination
Visual Abilities	Near Vision, Far Vision, Peripheral Vision, Color Vision
Hearing Abilities	Hear-Quiet, Hearing-Noise, Hearing- Location, Hearing-Discrimination

Having developed a comprehensive list of physically demanding tasks and having determined the physical abilities necessary to perform them, MED-TOX next requested further verification from experienced incumbents who rated each list as a whole in terms of how well the list described the entire physical portion of each job. These incumbents also rated on a seven-point effort scale how demanding each individual task was. These Police Officers and Firefighters were also given the opportunity to comment on the list and offer suggestions. Both Police Officers and Firefighters agreed that the list of physically demanding tasks were reasonable descriptions of their jobs. The effort ratings for each task across Police and Firefighter raters were summed. This data was useful since this allowed further examination of only the most physically demanding tasks of the initial task lists. A report comprising all of the tasks and summed effort ratings was forwarded to the City and County of Denver.

After determining which tasks were the most physically demanding, it was next necessary to ascertain how much of each physical ability was needed to perform the task, how often each task was performed, and how important successful task completion was.

In order to collect this information a representative sample of incumbents was selected by the Civil Service Commission to complete two surveys. The first survey asked incumbents to consider the 66 most demanding tasks they performed and determine how much ability (static strength for example) was necessary to perform the task, how often the task was performed and how important successful task performance was.

The sample of incumbents completing the ratings was balanced across all racial groups and gender. Ratings were performed by incumbents who used standard behaviorally anchored rating scales to assess amount of ability required, frequency of task performance and task importance.

Working Conditions Analysis

A questionnaire designed to measure working conditions was developed and used in this study. The questionnaire included several environmental hazards such as Organic Dusts, Smoke from Fires, Blood and Body Fluids and other chemical hazards. A complete listing of the working conditions assessed during this project is shown in Table 2:

Table 2

Working Conditions and Environmental Hazards

Inside	Video Display Terminals
Outside	Job Complexity
Low Temperature Changes	Role Ambiguity
High Temperature	Irregular Work Hours
Sudden Temperature Changes	Violent or Combative Persons
Low Humidity	Allergenics
High Humidity	Infections
Wetness, Rain & Snow	Blood & Body Fluids
Heights	Chemical Irritants
High Altitude	Nuisance Dusts
Noise	Asbestos Dust
Vibration	Inorganic Dusts or Powders
Oil or Grease	Organic Dusts
Body Injuries	Metals, Metal Fumes or Metal Powders
Burns	Industrial Gases

Electrical Hazards	Solvents
Awakward Body Positions	Corrosive Substances
Slippery Surfaces	Petrochemicals & Coal Derivatives
Ionizing Radiation	Pesticides
Non-ionizing Radiation	Plastics
Underground	Smoke from Fires
Moving Objects	Respirators
Driving	Explosive Materials or Equipment

The profiles which show the results of the task ratings and the working conditions survey are contained in the validation study. The tasks, the ratings collected,and the working conditions analysis information collected and summarized in the validation study are specific to the City and County of Denver and have **no** applicability to PoliceOfficers or Firefighters in any other jurisdiction.

Development of Medical Screening Guidelines

Having described both the Denver Police Officer and Firefighter job in terms of the specific job tasks and the working conditions under which such work is performed, MED-TOX next set out to develop and refine medical screening guidelines that would be appropriate for both of the classifications studied.

Previous attempts by employers to write strict medical standards for particular positions have failed in the past and have few applications today. Turning individuals away from employment because they "failed a medical standard" is contrary to the spirit and intent of federal and state law and contrary to accepted practice in occupational medicine. The medical guidelines produced in this project embrace this change in medical screening.

The MED-TOX model of medical guideline utilization is based on the premise that in order to make a sound placement decision

the examining physician and the personnel officer need three distinct kinds of information including a job analysis, medical knowledge about the condition and its implications for work, and the physical examination results of a particular individual. This information is then used to make a placement decision. In some cases a medical guideline may be the basis for denial such as in the case of inadequate far visual acuity for Police Officers. In other cases a review of the applicant's past medical records, treatment regimen, prognosis, level of control, etc. may need to be individually considered.

Since under the *Americans with Disabilities Act of 1990* medical screening decisions and recommendations must be based on an individual evaluation of the applicant and the actual tasks, physical demands, and working conditions under which the job is performed; this program has been tailored to assist in compliance.

The central purpose of the job analysis information was to assist the medical examiner by focusing attention on the actual physical and environmental demands of each job. The MED-TOX guidelines and the job analysis information tie the demands of the job to the medical conditions to create the framework for job-related medical screening.

The medical guidelines provided to the City and County of Denver are not intended to replace competent medical opinion or to eliminate the reasonable accommodation of qualified disabled persons. The guidelines were designed to assist the medical examiner in screening-in individuals:

1. Who are medically capable of completing required training and achieving acceptable levels of performance on the job;

2. Who are free of contagious, infectious, or incapacitating medical conditions which would endanger the health and safety of the individual or others in performance of the job;

3. Whose medical condition will allow the individual reasonable attendance and tenure to meet the employer's essential business purposes.

The guidelines were written to permit employment of all individuals who, in light of existing medical condition(s) are capable of performing the job at the time of placement and show the probability of minimal risk of injury to themselves or others. The guidelines are designed to eliminate from placement all those individuals who cannot perform the job at the time of examination or who could do so only at an unduly high risk of injury to themselves or others.

Each section of the guidelines contains an introduction to the organ system and a summary of various disease states and their implications in the work place. While this information may be deemed obvious by experienced occupational medicine examining physicians, it was included to be informative to personnel and risk managers who are required by law to make the final hiring decision.

A uniform format was selected for the presentation of each medical guideline and its relationship to the job analysis data including the physical demands and working conditions associated with each job. An example of a medical guideline is shown below:

Hypertension, mild (diastolic 95 to 104 mm Hg on current regimen) is acceptable if the applicant is free of any organ

damage or complication and under the care of a knowledgeable physician. Placement must be carefully considered if the physical demands of the job exceed:

- 5.0 on Static Strength
- 5.0 on Explosive Strength
- 5.0 on Dynamic Strength
- 5.0 on Trunk Strength

Rationale: Continuous medical care is required even though hypertension can usually be controlled with diet, exercise, behavior modification, and medications because it becomes a life-long effort to control rather than cure hypertension. The aggravation of hypertension can cause irreversible, malignant (renovascular) and rapidly progressive damage to the arteries of the heart, brain, or kidneys. Medical monitoring can forestall these complications.

Note: Regular exercise has been shown to help hypertensives, therefore, Stamina is not considered to endanger the applicant. The examining physician needs to consider the age of the applicant, the length of time hypertension has been known to exist, the severity of the hypertension, the degree of control, the compliance with treatment, the applicant's blood pressure response to job stress, the presence of other risk factors and the presumptive laws that may exist with regard to safety classifications and cardiovascular diseases prior to making a recommendation. Consultation with the treating physician and the hiring authority is recommended prior to making a placement decision. If an applicant with controlled or mild hypertension is hired in a safety classification, compliance with the treating physician's recommendations should become a condition of employment and the applicant should have periodic blood pressure measurements made by the medical department to assure hypertension remains under control.

Upon presentation of an applicant with the above named medical condition, the physician examiner should consult the appropriate medical guideline and review the Physical Ability Final Data Profile and Working Conditions Profile the validation study. In this instance the physical demand levels for tasks that both Police Officers and Firefighters must perform exceed the recommended acceptance levels in the guidelines. The guidelines are, in effect, suggesting to the examiner that the placement of such a person into either job of Police Officer or Firefighter is very likely to be an improper job placement which has a significant risk of injury to the individual, the public, and other workers.

However, the guidelines emphasize that placement must be considered by the examiner and that an individual determination be made. If, in the physician's judgement, such an individual is acceptable, the physician should make such a recommendation. Conversely, if the examiner believes the individual will pose a direct threat to himself or others, the task lists upon which the physical ability ratings were made and the documented evidence of the environmental hazards form the job-based or "job-related" information necessary to make a valid medical analysis as required by the *Americans with Disabilities Act of 1990.* Medical screening decisions made in the abstract without benefit of valid job analysis information are virtually impossible to effectively defend.

The vision standards contained in the guidelines were transported from empirical experimental studies previously conducted by MED-TOX. For example, for Firefighter, Denver Firefighters perform several far visual acuity tasks that are considered critical to

successful job performance. These tasks included:

1. Recognize a hazardous materials placard at a distance of 100 feet.
2. From the ground, see people who are in the tenth floor window of a building.
3. See a steel bar joist near the ceiling of a room to check for structural weakness.

For Police Officers the critical far visual acuity tasks were:

1. In broad daylight, determine if a suspect has a gun in his/her hand at 7 yards.
2. While performing a pursuit drive, observe land marks in order to report your position to the dispatcher.
3. In broad daylight, determine if a suspect has a weapon in his/her hand at 15 yards.

Previous work by MED-TOX Health Services determined that Firefighters could effectively perform these vision tasks in an uncorrected state with a visual acuity of 20/100. Similarly, the Police Officer far vision tasks have been shown to require 20/40 or better uncorrected far visual acuity. Since MED-TOX had already validated these uncorrected far visual acuity standards, they were transported to Denver.

The primary task was to determine whether those tasks that had been identified in the previous studies were also performed in Denver and were critical to the successful performance of the Police Officer and Firefighter jobs. The validation study established that each of these tasks were critical far vision tasks for incumbent Police Officers and Firefighters.

The MED-TOX medical guidelines will be subject to continued review and modification over time. It is anticipated that further refinements of these medical guidelines will be available to MED-TOX clients at least annually. As new guidelines become available, they will be forwarded to the City and County of Denver.

Development of Medical Protocols

MED-TOX has recommended that Police Officers and Firefighters be given the examination as described below. The recommended procedures are as follows:

Procedures and Tests for Denver Police Officer

1. .Review Employee Medical Questionnaire **(See MED-TOX forms for appropriate screening documents)**
   - Personal Health History

- Family Health History
- Health Habit History
- Job History

2. Vital Signs
   - Height and Weight
   - Blood Pressure
   - Pulse(resting)
   - Temperature (oral)
   - Respiration

3. Conduct Physical Examination

4. Vision Screening (binocular - both eyes open)
   - Near- corrected - for wearers of soft and hard contacts and glasses - 20/20
   - Far -corrected - for wearers of soft and hard contacts and glasses 20/20
   - Far -uncorrected for wearers of hard contacts and glasses only - 20/40
   - Peripheral - 140degrees
   - Color - Ishihara/Farnsworth D-15

5. Audiogram - Pure tone thresholds in the unaided worst ear not worse than 25 dB at 500Hz, 1000Hz, or 2000Hz, ***and*** not worse than 35 dB loss at 3000Hz ***or*** no greater than 30 dB at any of the first three frequencies and an average loss of less than 30 dB for all four frequencies. Hearing aids are not permitted.

6. Chest X-Ray

7. Electrocardiogram - For persons under age 40 with no risk factors for heart disease.

8. Blood Chemistry Panel

9. Complete Blood Count

10. Urinalysis

11. Pulmonary Function Test

12. Treadmill {Bruce Protocol} - For all persons over age 40 or persons under age 40 with two or more cardiac risk factors

13. Immunization Status

Procedures and Tests for Denver Firefighters [*may be obtained from MED-TOX]*

CONCLUSION

This project involved the significant contribution of time and expertise of many members of both the Police and Fire Department. The Civil Service Commission was instrumental in providing necessary background information, support and direction during the project. The assistance and cooperation of all three departments made our on-site activities in Denver both efficient and productive.

MED-TOX is committed to further developing a relationship with the Denver Civil Service Commission in the future by providing periodic updates of the medical guidelines and being available for discussion and consultation regarding ADA matters and medical screening issues as they arise.

This project has provided the Denver Civil Service Commission with a means to assess individuals for physically demanding jobs and has provided the tools to make further assessments. It is anticipated that this program will reduce the possibility of employment discrimination on the basis of disability, improve the Commission's ability to manage the health and safety aspects of its personnel program, and reduce the potential for injuries due to improper job placement.

MED-TOX HEALTH SERVICES
LAW ENFORCEMENT RESOURCES

[E-MAIL MED-TOX]
[MED-TOX ONLINE]
[RECENT PROJECTS]
[PHYSICAL ABILITY TESTING]
[POLICE VISION SCREENING]
[PSYCHOLOGICAL SCREENING CRITERIA]
[L I N K S]
