



Federal Railroad Administration



**Medical Standards
for
Railroad Employees**

RSAC Briefing – January 26, 2005



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Objectives:

- Assemble information to assess need for medical standards in railroad industry
- Formulate options for a medical standards program
- Make recommendations on feasibility and appropriateness of medical standards program for US railroad industry



Overall Approach

Information Gathering

- US DOT regulations
- Foreign railroad regulations
- US railroad practices
- Dispute resolution procedures
- Medical literature
- Accident Data

Phase I

Analysis

- Identify gaps
- Identify relevant standards
- Determine resource requirements

Phase II

Recommendations

- Identify options
- Prepare final report

Phase III



Why are we doing this?

- There are many jobs in the railroad industry where workers perform tasks that would be considered “safety critical”.
- The tasks require certain physical and mental capabilities to be un-impeded by medical conditions that could lead to sudden incapacitation.
- Sudden incapacitation of employees doing these tasks could lead to immediate harm to themselves, other employees or the public.



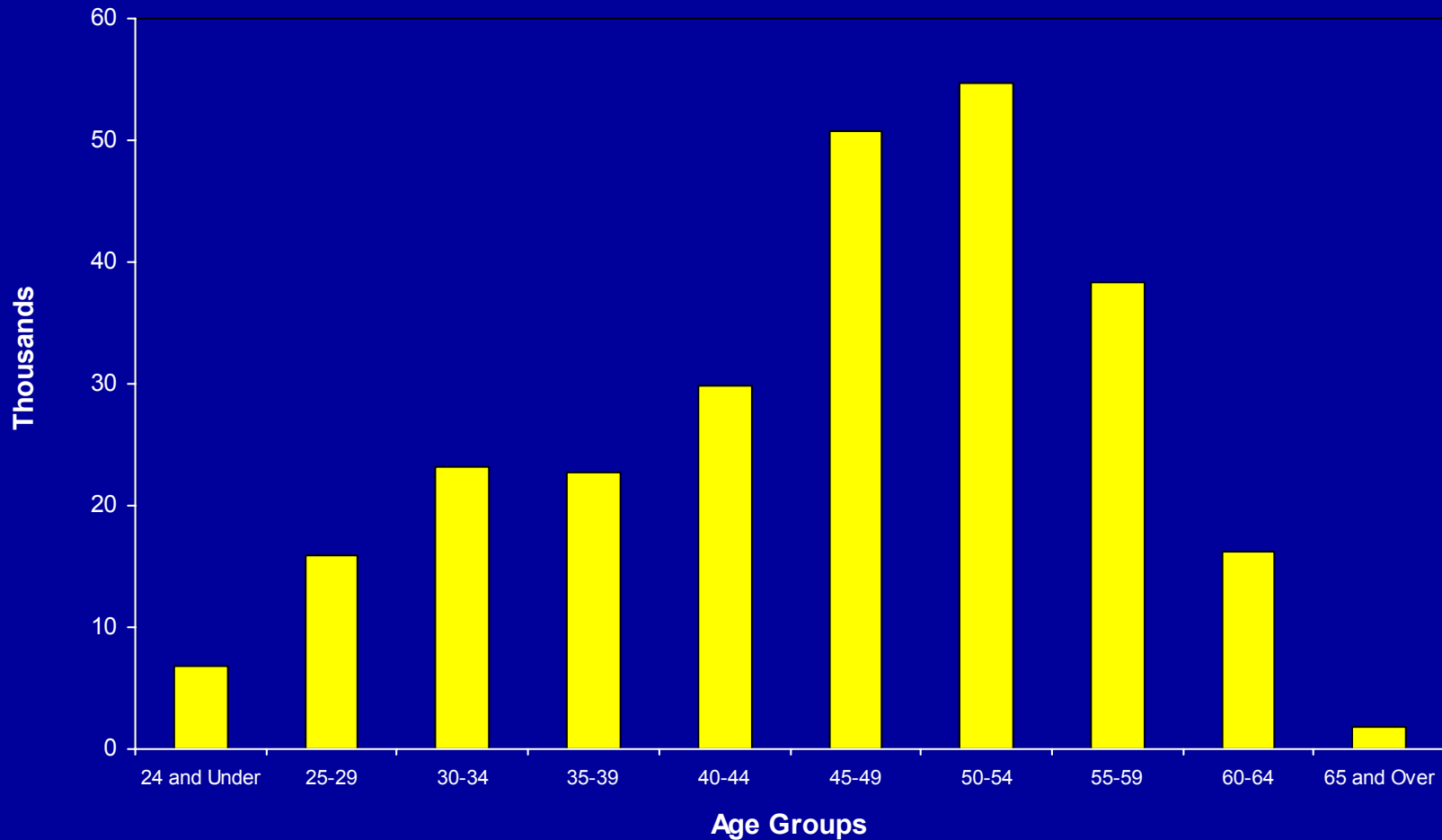
Why are we doing this?

- 70,825 of 154, 656 (46%) Class I railroad workers belong to UTU, BLE, BRS, ATDA or UTU-YMD
- RRB reports total US railroad employment = 222,500
- Potential population of safety-sensitive workers = 101,894 (46% of 222,500)



Why are we doing this?

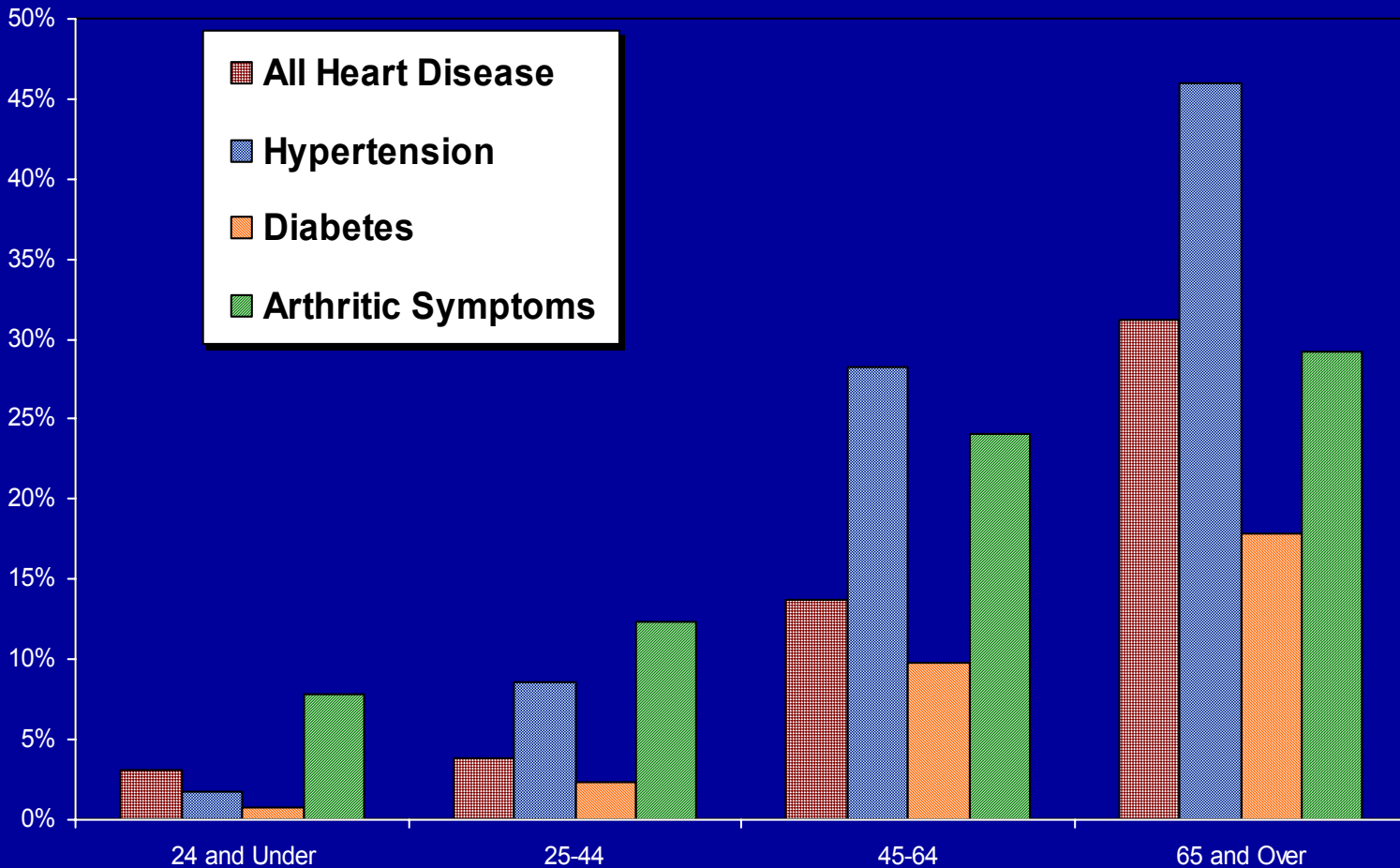
US Railroad Employees in 2002, by Age Group





Why are we doing this?

US Chronic Medical Conditions, % by Age Group

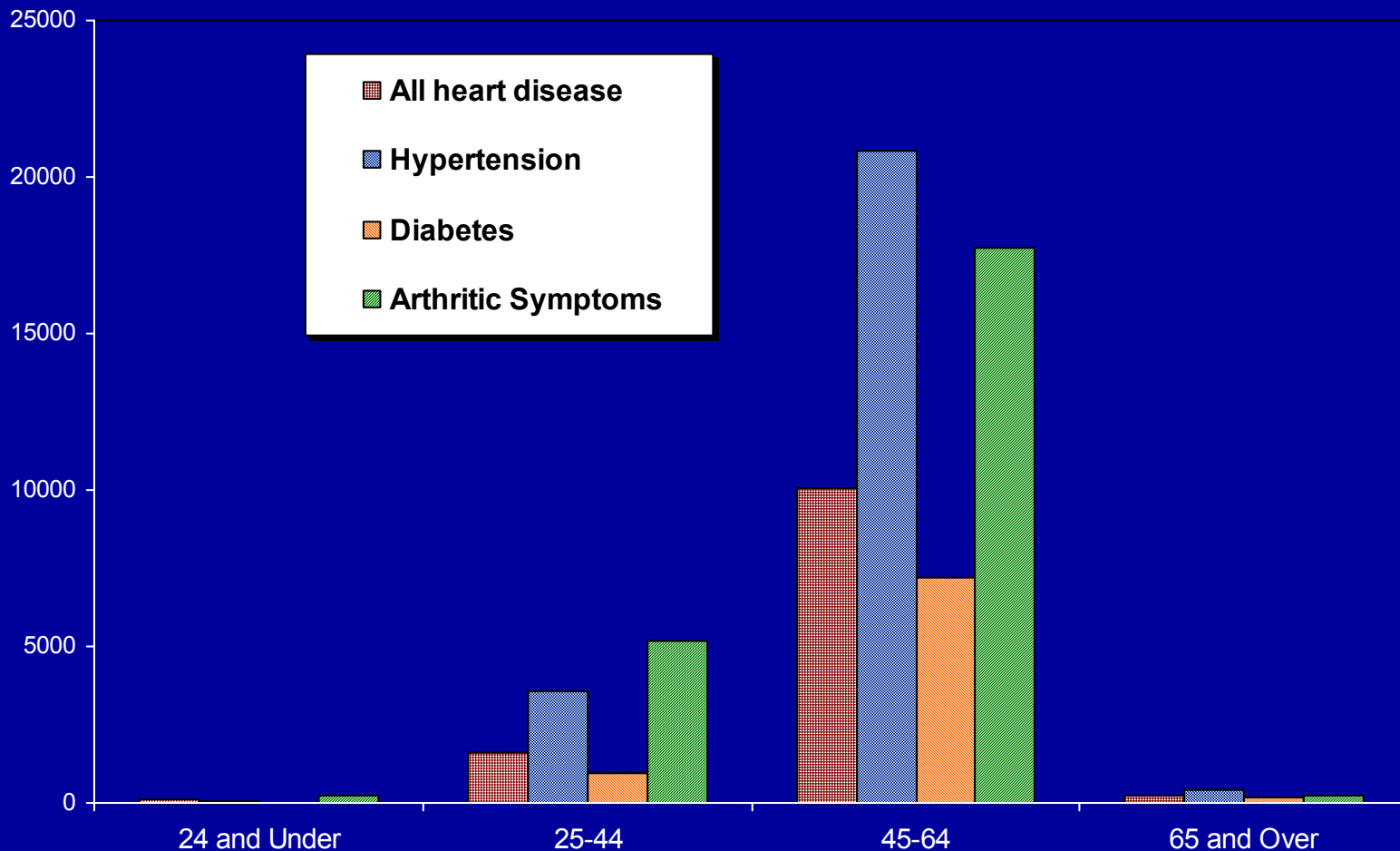




Why are we doing this?

US Railroad “Safety Sensitive” Population –

Possible Distribution of Chronic Medical Conditions, by Age Group





Why are we doing this?

To answer the following:

- Is there a need for publicly led or administered medical standards for the railroad industry?
- How compelling is the need?
- How narrow/broad should the standards be?
- Who will be covered?
- Who determines the criteria?
- Who decides fitness for duty?
- What appeals process is appropriate?



Why are we doing this?

The NTSB has recommended:

- “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).



Why are we doing this?

The NTSB has recommended:

- “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).



Why are we doing this?

The NTSB has recommended:

- “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).



What Other US DOT Modal Administrations Cover

Agency	Positions
FAA	Airman (pilot), Air Traffic Control Specialist
FMCSA	Motor Carrier Operator (Bus, Truck)
Coast Guard	Mariner (Commercial), Military



US DOT Modal Administrations Medical Standards Programs Summary

- FAA program most centralized and comprehensive. FAA program is also most resource intensive
- FAA, USCG and FMCSA have procedure for allowing employee who does not meet some regulations/guidelines to work.
- FRA allows railroad's CMO and Designated Supervisor of Locomotive Engineers to decide



US DOT Modal Administrations Medical Standards Programs Summary

- Pilot appeal process includes NTSB and courts
- FRA appeal process for current rules through LERB and courts
- USCG and FMCSA allow any state-licensed healthcare practitioner to perform exam.
- FAA and FRA require a physician
- All agencies provide some level of guidance to examiners



What Other US DOT Modal Administrations Cover

Mode	Occupation	Frequency of Evaluation	Medical Conditions/Systems Evaluated																			
			Alcohol Use	Allergies	Amputations	Cardiovascular	Color perception	Endocrine function (diabetes)	Epilepsy or loss of consciousness	Gastrointestinal	Genitourinary (chronic renal failure)	Hearing Acuity	Hypertension	Mental, nervous, organic, or functional brain disease	Neuromuscular	Orthopedic	Psychiatric disorders	Pulmonary/Respiratory	Review of use of prescribed medication	Use of illegal or habit forming drugs	Vision Acuity	Visual field
FAA	Class 1 Aimen Comm. Airline Pilots	6 mos.	Green	White	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
FAA	Class 2 Aimen - Pilots	1 year	Green	White	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
FAA	Air Traffic Controllers	2 years	Green	White	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
FMCSA	Commercial Drivers	2 years	Orange	White	Orange	Orange	White	Orange	Orange	White	White	Orange	Orange	Orange	Orange	Orange	Orange	Orange	Orange	Orange	Orange	Orange
USCG	Mariners	5 years	White	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
FRA	Locomotive Engineers	3 years	Pink	White	White	White	Pink	White	White	White	White	Pink	White	White	White	White	White	White	White	White	Pink	Pink



Foreign Railway Agencies/Organizations Medical Standards Programs

- Transport Canada
- UK Rail Safety Standards Board
- National Transport Commission
- Australia
- Secretaria de Comunicaciones y Transportes –
Mexico
- UIMC



Foreign Railway Agencies/Organizations Medical Standards Programs Summary

- All countries examined have more extensive medical standards programs than US
- Mexican is most centralized
- Australian, Canadian and UK programs allow railroads to select examiners and make final determination of medical fitness
- Railroad and labor representatives involved in development of Canadian and Australian standards
- Canada and Australia allow railroads discretion in identifying safety-sensitive positions
- Canada and Australia have public welfare systems to cover medically disqualified workers



What Foreign Railway Agencies Standards Cover

Agency	Country	Frequency of Evaluation- (Age Dependent Ranges)	Medical Conditions/Systems Evaluated																								
NTC	Australia	5-2 years	Alcohol Use	Allergies	Amputations	Cardiovascular	Cancer	Color perception	Endocrine function (diabetes)	Epilepsy or loss of consciousness	Gastrointestinal/Hepatic Disorders	Genitourinary (chronic renal failure)	HIV/AIDS	Hearing Acuity	Hypertension	Mental, nervous, organic, or functional brain disease	Neuromuscular	Orthopedic	Pregnancy	Psychiatric disorders	Pulmonary/Respiratory	Review of use of prescribed medication	Sleep Disorders	Use of illegal or habit forming drugs	Vision Acuity	Visual field	Full Medical Screening (Not otherwise Defined)
Transport Canada	Canada	5-3 years	Alcohol Use	Allergies	Amputations	Cardiovascular	Cancer	Color perception	Endocrine function (diabetes)	Epilepsy or loss of consciousness	Gastrointestinal/Hepatic Disorders	Genitourinary (chronic renal failure)	HIV/AIDS	Hearing Acuity	Hypertension	Mental, nervous, organic, or functional brain disease	Neuromuscular	Orthopedic	Pregnancy	Psychiatric disorders	Pulmonary/Respiratory	Review of use of prescribed medication	Sleep Disorders	Use of illegal or habit forming drugs	Vision Acuity	Visual field	Full Medical Screening (Not otherwise Defined)
HSC	United Kingdom	10-6-4-2 years	Alcohol Use	Allergies	Amputations	Cardiovascular	Cancer	Color perception	Endocrine function (diabetes)	Epilepsy or loss of consciousness	Gastrointestinal/Hepatic Disorders	Genitourinary (chronic renal failure)	HIV/AIDS	Hearing Acuity	Hypertension	Mental, nervous, organic, or functional brain disease	Neuromuscular	Orthopedic	Pregnancy	Psychiatric disorders	Pulmonary/Respiratory	Review of use of prescribed medication	Sleep Disorders	Use of illegal or habit forming drugs	Vision Acuity	Visual field	Full Medical Screening (Not otherwise Defined)
SCT	Mexico	2 years	Alcohol Use	Allergies	Amputations	Cardiovascular	Cancer	Color perception	Endocrine function (diabetes)	Epilepsy or loss of consciousness	Gastrointestinal/Hepatic Disorders	Genitourinary (chronic renal failure)	HIV/AIDS	Hearing Acuity	Hypertension	Mental, nervous, organic, or functional brain disease	Neuromuscular	Orthopedic	Pregnancy	Psychiatric disorders	Pulmonary/Respiratory	Review of use of prescribed medication	Sleep Disorders	Use of illegal or habit forming drugs	Vision Acuity	Visual field	Full Medical Screening (Not otherwise Defined)
FRA	USA	3 years	Alcohol Use	Allergies	Amputations	Cardiovascular	Cancer	Color perception	Endocrine function (diabetes)	Epilepsy or loss of consciousness	Gastrointestinal/Hepatic Disorders	Genitourinary (chronic renal failure)	HIV/AIDS	Hearing Acuity	Hypertension	Mental, nervous, organic, or functional brain disease	Neuromuscular	Orthopedic	Pregnancy	Psychiatric disorders	Pulmonary/Respiratory	Review of use of prescribed medication	Sleep Disorders	Use of illegal or habit forming drugs	Vision Acuity	Visual field	Full Medical Screening (Not otherwise Defined)

Bold/Yellow are additions to Conditions/Systems Evaluated



US Railroads Surveyed to Determine Current Practices

Category	Railroads
Class I	BN, CSX, KCS, NS, UP
Shortline/Regional	Belt Railway of Chicago, Florida East Coast, Holding company, Montana Rail Link, RailAmerica
Commuter	Metro-North, NJTransit



Current Practices in US Railroad Industry: Events requiring medical examination

- Medical exams conducted:
 - Post-offer
 - Promotion to safety critical position
 - Fitness to work (as appropriate)
- Return to work from medical leave requires review of treating physician's report. Length of absence necessitating review varies by railroad. May require exam.



Current Practices in US Railroad Industry: Procedures

- Some provide job description to physician
- Most have no written standards
- NJTransit and NS require periodic medical examinations
- Process for reporting of medical conditions does not clearly define drugs that must be reported
- Process for reporting use of prescription drugs does not clearly define conditions that must be reported



Medical Literature Review

- Evidence consistently supports performance impairment from hypoglycemia and certain medications (e.g., first generation antihistamines, some anti-depressants, pain medication)
- Some support that other medical conditions impair performance (e.g., seizures, heart disease, sleep disorders)
- Poorly controlled medical conditions also may impair performance (e.g.; diabetes, hypertension)
- Individuals and providers often unable to judge degree of impairment



Applicability of Existing Medical Standards Regimes to US Railroad Occupations

Railroad Occupation

Locomotive
Engineer

Conductor/
Trainman

Dispatcher

Signalman

Agency

FMCSA				
FAA - Airman				
FAA - ATCS				
USCG - Mariner				
Transport Canada				
NTC - Australia				
RSSB - UK				



Legal Considerations to be Addressed in any Rulemaking

- Union participation in program development will comply with any obligations under Railway Labor Act and facilitate acceptance in future negotiations
- Current tripartite board and arbitration/grievance process available to address dispute from decertified employee
- Providing examiner with brief description of employee's job responsibilities minimizes grounds for subsequent disputes



Conclusions

- The need exists for a consistent industry-wide medical standards program
- US Railroad medical standards program is significantly less comprehensive than those of other DOT modal agencies and foreign countries
- Medical literature supports performance impairment from hypoglycemia and certain medications; some support for other conditions



Recommendations

- FRA should expedite development to the extent possible
- A group representing stakeholders should be assembled to recommend program structure
- The program should have generally stated regulations with supporting medical guidelines
- Use existing resources and processes (RSAC) to facilitate program development and implementation
- Program must assure that examiners understand job requirements of safety-sensitive positions



Options for Program Elements

The following are a number of areas for consideration during the development of a regulation.

On the following pages:

1. Numbered items indicate a choice among alternatives
- Bulleted items indicate a group of items that should be included



Options for Program Elements

Element	Option(s)
Positions covered	<ol style="list-style-type: none"><li data-bbox="491 532 1705 668">1. All functions defined as safety-sensitive by 49 CFR § 209.303.<li data-bbox="491 704 1591 839">2. Require each railroad to conduct a risk analysis to identify covered positions.<li data-bbox="491 875 1721 1082">3. All functions defined as safety-sensitive by 49 CFR § 209.303 with procedure available for a railroad to justify otherwise.



Options for Program Elements

Element	Option(s)
Definition of medical criteria	<ul style="list-style-type: none">• Contained in regulations that are supported by guidelines
Development of medical criteria	<ol style="list-style-type: none">1. Done by railroad medical specialists2. Done by independent panel of medical specialists



Options for Program Elements

Element	Option(s)
Timing of exams	<ul style="list-style-type: none">• Post offer• Return to work following medical leave of absence• Fitness to work based on triggering event• Change to safety-sensitive or covered position• Periodically<ol style="list-style-type: none">1. At fixed interval2. Interval based on age



Options for Program Elements

Element	Option(s)
Examiners	<ol style="list-style-type: none">1. Any healthcare professional licensed to perform a medical exam2. Physician only
	<hr/> <ol style="list-style-type: none">1. Examiners trained and certified by organization that is approved by the FRA2. Examiners, with knowledge of railroading, selected by the railroad



Options for Program Elements

Element	Option(s)
Guidance for examiners	<ul style="list-style-type: none">• Standards and guidelines available via FRA web site• FRA issues update to railroad medical officers who are responsible for distributing to their examiners• FRA Medical Director/resource person available for healthcare practitioners with questions
Waivers	<ol style="list-style-type: none">1. FRA Medical Officer grants waiver2. FRA Medical Review Board grants waiver3. Railroad CMO makes decision in accordance with guidelines



Options for Program Elements

Element	Option(s)
Transferability of medical certification	<ol style="list-style-type: none">1. Medical certification for current employer only2. Medical certification for railroad industry3. Medical certification for railroad industry, but employer may request re-examination
Dispute resolution	<ul style="list-style-type: none">• Tripartite medical panel• Arbitration
Transition to new system	<ul style="list-style-type: none">• Phase-in period for periodic exams for current employees• All other exams use new standards immediately



Options for Program Elements

Element	Option(s)
Audit of examinations	<ol style="list-style-type: none"><li data-bbox="491 472 1725 579">1. Allow railroad personnel to do quality control on their examiners<li data-bbox="491 608 1744 715">2. Third party administrator hired by railroad does quality control
Program oversight	<ul style="list-style-type: none"><li data-bbox="491 765 1766 815">• FRA Industrial Hygienists audit process implementation
Review of medical standards	<ul style="list-style-type: none"><li data-bbox="491 943 1534 993">• Done by medical specialists on periodic basis
Program evaluation	<ul style="list-style-type: none"><li data-bbox="491 1150 1054 1200">• Reduction in accidents



FRA Role in Alternative Program Models

	A	B	C
Certify examiners	✓	Audit process	Audit process
Review results of exams	✓		
Review and permit employees not meeting regulations/guidelines to work	✓	✓	
Advise on resources examiner should use in making determination	✓	✓	
Convene medical panel to develop initial guidelines and update periodically	✓	✓	✓
Perform process oversight	✓	✓	✓



Benefits to the Carriers

- Protecting assets and training investments
- Reduced potential for losses from accidents due to health related performance decrements
- Consistent objective criteria for fitness for duty decisions



Benefits to Labor

- Prevention/early detection of illness
- Privacy and employment protections
- Consistent objective criteria for fitness for duty decisions



Benefits to the Public

- Safer railroad operations
- Reduced risk of accidents due to unrecognized medical conditions



- Next Steps???