NORTH AMERICAN
FATIGUE MANAGEMENT PROGRAM
Development and Implementation

Roger Clarke, Alberta Transportation

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Consortium

- Sponsors:
  - Alberta Transportation (TRANS)
  - Alberta Employment & Immigration (OH&S)
  - Alberta Workers' Compensation Board (WCB)
  - Commission de la santé et de la securite du travail du Quebec (CSST)
  - Societe de l'assurance automobile du Quebec (SAAQ)
  - Transport Canada (TC)
  - Federal Motor Carrier Safety Administration
- In-kind, operational, and other financial support:
  - Alberta Motor Transport Association (AMTA)
  - American Transportation Research Institute (ATRI)
  - Canadian Trucking Alliance (CTA)

Why Fatigue Management

- Fatigue is under-represented in collision statistics
- Research varies but indication is that driver fatigue is a significant safety issue
  - Fatigue-related fatal commercial vehicle collisions estimated to be around 30% (U.S. DOT)
  - >50% of all single-vehicle collisions involving heavy trucks are fatigue-related (NTSB)
  - Fatigue is a significant factor in >20% of all commercial vehicle collisions (U.S. DOT)

Why Fatigue Management Con't

- Limitations of hours of service

  - Off duty behavior

  - Health and medical conditions

  - Corporate culture

  - Difficulty in enforcement

  - Poor operational "fit" for drivers

  - One example of a fatigue fatality

Why Fatigue Management Con't

- Canada/US study on hours of service (1999)

- Suggestion to develop a fatigue management program

Objectives of the NAFMP

- Conduct a literature review to determine which fatigue countermeasures hold promise

- Integrate all into a comprehensive approach to fatigue management

- Verify effectiveness in trucking operational setting

- Develop all materials, guidance, and support required to establish a fatigue management program and make available on a fatigue management website

- Effective implementation

Approach

- Within regulatory limits

- Variety of jurisdictions, geography, carriers

- Validated by research

- Public domain

- Voluntary

- Realistic and effective in a motor carriers operating environment

4 Phases of Development

1. Determine elements to include in a comprehensive program

2. Develop basic program elements and integration – test on a small number of drivers

3. Full implement and rigorous tests in an operational setting

4. Develop all materials, guidance and support for carriers who choose to implement – web based

New…..Implementation considerations

Elements

- Education and training
  - Family
  - Driver
  - Dispatch
  - Corporate
  - Client

- Corporate culture modification
- Sleep disorder screening and treatment
- Scheduling tools
- Fatigue measurement technology

Complexity Recognized (and learned)

- Dispersement of drivers
- Medical ethics – medical – legal issues
- Driver demands and scheduling
- Clinical availability – wait list
- Follow up on compliance (CPAP etc)
- Confidentiality
- Training time including family members
- Train the trainer approach
- Long term interest, retention and culture
- Long held attitude by dispatch
- Customer demands
- Trip delays

Research Team

- Phase 1 and 2
  - Canadian Sleep Institute, Adam Moscovitch

- Phase 3
  - Human Factors North, Alison Smiley
  - Alpha Logic, Diane Boivin
  - Saga Tech, John Remmers
  - Alertness Solutions, Mark Rosekind

Carriers

- Phase 1 and 2
  - Manteis Transport Ltd
  - Canadian Freightways Ltd
  - Greyhound Ltd
  - Grimshaw Trucking

- Phase 3
  - Quebec – Robert Transport
  - Alberta – ECL Group
  - California – JB Hunt

Research Goals & Results

- Phase 1, 2 and 3
  - Sesto Vespa, Transport Canada

Phase 4

Development of all materials, guidance and support information to provide carriers with

- Corporate culture

- Education and training

- Sleep disorder screening and treatment

- Scheduling and tools

- Fatigue maintaining and management technologies

Phase 4 Con't

Products Required

- Provide guidance for implementation

- Implement overall methodology project management procedures

- Address each of the key elements

- Provide a set of charts showing the relationships between deliverables

Phase 4 Con't

Products Required Con't

- Use a modular approach in website component

- Provide a methodology for incorporating

- Be scalable

NAFMP – What's Next?

- Estimated 12 - 14 month completion of Phase 4 materials, process and website
- Permanent site and management of growth/change
- Voluntary implementation
- Certification?
- Regulatory incentive potential?
- Carrier excellence model?
- Here to learn, get more ideas