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FRA Human Factors R&D Program

Critical Incident Stress Debriefing (CISD): Best Practices Study

RSAC Briefing, April 27, 2004



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CISD Best Practices Study: Background

- 1995: Grade Crossing Research Needs Workshop
- Concern about PTSD among locomotive engineers and train crews
- Impact of traumatic exposure to grade crossing and trespasser incidents
- Multiple exposures for some individuals



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CISD Best Practices Study: What is PTSD?

A clinical diagnosis characterized by:

- **T**raumatic event **T**
- Persistent **R**e-experienced **R**
- Persistent **A**voidance **A**
- Symptoms of Aro**U**sal **U**
- Duration is more than 1 **M**onth **M**
- **A**nxiety distress or impairment **A**



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Studies on Impact of PTSD

- Lower levels of productivity
- Avoidance of trauma circumstances and work areas
 - Layoffs, absenteeism, leave of absences
- Increased stress
- Less desire to continue working
- Disproportionate use of medical/mental health care system
- Higher use of EAP programs
- Marital difficulties, financial and health problems
- Reluctance to seek treatment



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Prevalence of PTSD

- PTSD estimated to affect 7.4% -- 12% of adult population
- Estimated that 6.3% of persons who experience trauma will develop PTSD
- Estimated up to 45% of MVA survivors develop PTSD
- Prevalence unknown among locomotive engineers and train crews



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CISD Current Practices

- Peer counseling
- Employees referred to EAP programs
- Informal supervisor counseling
- No counseling
- No industry standard



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History of CISD Study

- July, 1999: Budgeted in HF Program, Grant to University of Denver
- Late 1999: Informal Working Group formed
 - BLE, UTU, AAR, FRA R&D, FRA Office of Safety
 - Developed non-regulatory process to address issues
- 2000 – 2001: study designed and redesigned to address industry concerns
 - Focus on grade crossing and trespasser incidents
 - Emphasis on “best practices”
- 2002: Letter to CEO’s from Administrator Rutter
 - Invitation to participate in national study
 - Class I’s, Class II’s, Short Line’s, Commuter RR’s



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CISD Best Practices Study: Project Goals

Goals as revised by CISD Resource Group

1. Benchmark CISD programs in industry
2. Establish prevalence and incidence
3. Evaluate effectiveness of CISD components



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CISD Best Practices Study: Current Status

- 2003: Pilot Study on Amtrak
- 2003: Volpe study
 - Interviews of all key stakeholders (CISD Resource Group)
 - Identify “tangible results” of intended long term outcomes
 - Increase quality, effectiveness and utility of outcomes
 - Identify and employ implementation strategies
- 2004: Project implementation
 - Finalizing data analysis plan and implementation protocol
 - Begin collecting data