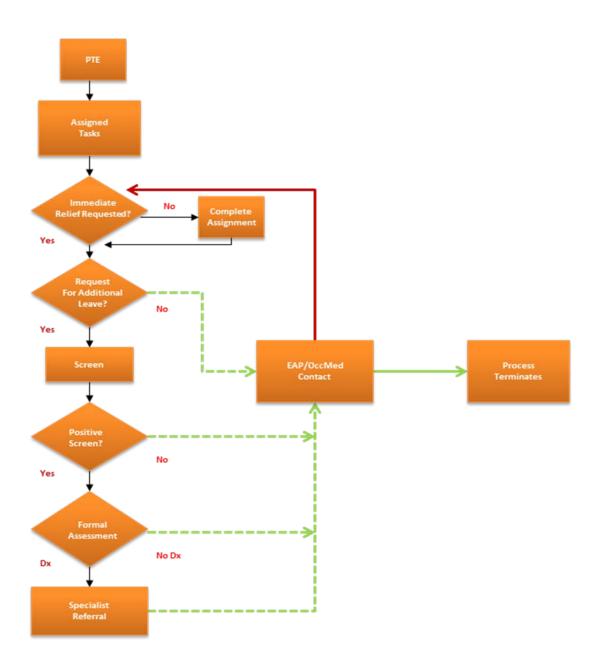


U.S. Department of Transportation

Federal Railroad Administration

# Proposed Key Elements of a Critical Incident Intervention Program for Reducing the Effects of Potentially Traumatic Exposure on Train Crews to Grade Crossing and Trespasser Incidents

Office of Research and Development Washington, DC 20590



DOT/FRA/ORD-14/06 Final Report
April 2014

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13. This independent report presents work conducted regarding project FR-RDD-0024-11-01 to advise and support the formulation of					

- 13. This independent report presents work conducted regarding project FR-RDD-0024-11-01 to advise and support the formulation of regulations and supporting materials concerning "critical incident" response plans for rail carriers covered by the Rail Safety Improvement Act of 2008, Sec. 410. This report addresses the following topics:
  - (a) Review of literature on established and emerging research findings with respect to occupational exposure to potentially traumatic events (PTEs);
  - (b) Review of literature on current best practices with respect to prevention, mitigation, early intervention, and evidence-based treatment of established sequelae from such exposures;
  - (c) Review of current practices by key rail carriers as reported through the Association of American Railroads (AAR) to determine level of consensus reflected in existing programs respecting critical requirements of the authorizing act (e.g., definition of "critical incident," release from duty of impacted employees, intervention design, and evaluation of outcomes);
  - (d) Preparation of a general guidance template outlining key features that might be expected in model programs, reflecting current best practices and existing consensus; and
  - (e) Comparison of reported features within existing carrier programs with critical elements of current best practices.

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## **METRIC/ENGLISH CONVERSION FACTORS**

#### **ENGLISH TO METRIC**

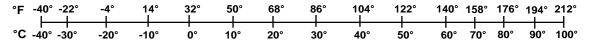
#### **METRIC TO ENGLISH**

LENGTH (APPROXIMATE)  1 inch (in) = 2.5 centimeters (cm)  1 foot (ft) = 30 centimeters (cm)  1 yard (yd) = 0.9 meter (m)  1 mille (mi) = 1.6 kilometers (km)  1 mille (mi) = 1.6 kilometers (km)  AREA (APPROXIMATE)  1 square inch (sq in, in²) = 6.5 square centimeters (cm²)  1 square yard (sq yd, yd²) = 0.8 square meter (m²)  1 square ward (sq yd, yd²) = 0.8 square meter (m²)  1 square mille (sq mi, mi²) = 2.6 square kilometers (km²)  1 square mille (sq mi, mi²) = 2.6 square kilometers (km²)  1 square mille (sq mi, mi²) = 2.6 square kilometers (km²)  1 square wille (sq mi, mi²) = 2.6 square kilometers (km²)  1 square wille (sq mi, mi²) = 0.45 kilogram (kg)  1 short ton = 2,000 pounds = 0.9 tonne (t)  VOLUME (APPROXIMATE)  1 teaspoon (tsp) = 5 milliliters (ml)  1 tablespoon (tsp) = 5 milliliters (ml)  1 pint (pt) = 0.47 liter (l)  1 quart (qt) = 0.96 liter (l)  1 cubic foot (cu ft, ft²) = 0.03 cubic meter (m²)  1 cubic foot (cu ft, ft²) = 0.03 cubic meter (m²)  1 cubic foot (cu ft, ft²) = 0.03 cubic meter (m²)  1 cubic vard (cu yd, yd³) = 0.76 cubic meter (m²)  1 cubic rot (cu ft, ft²) = 1.3 cubic yards (cu yd, yd³)  TEMPERATURE (EXACT)  [(y-32)(5/9)] °F = y °C  LENGTH (approximate) 1 millilimeter (mm) = 0.04 inch (in)  1 centimeter (cm²) = 0.4 inch (in)  1 meter (mm) = 0.4 inch (in)  1 meter (m) = 0.4 inch (in)  1 meter (m) = 0.4 inch (in)  1 square entimeter (cm²) = 0.6 smile (mi)  1 square centimeter (cm²) = 0.16 square inch (sq in, in²)  1 square centimeter (cm²) = 0.16 square inch (sq in, in²)  1 square entimeter (cm²) = 0.16 square inch (sq in, in²)  1 square centimeter (cm²) = 0.48 square meter (m²)  1 square entimeter (cm²) = 0.4 square mile (sq mi, mi²)  1 square entimeter (cm²) = 0.16 square inch (sq in, in²)  1 square centimeter (cm²) = 0.16 square inch (sq in, in²)  1 square centimeter (cm²) = 0.16 square inch (sq in, in²)  1 square centimeter (cm²) = 0.16 square inch (sq in, in²)  1 square centimeter (cm²) = 0.16 square inch (sq in, in²)  1 square centimeter (cm²) = 0.16 square inch (sq in, in²)  1 squ	LITOLIGIT	10 METIMO	
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AREA (APPROXIMATE)  1 square inch (sq in, in²) = 6.5 square centimeters (cm²)  1 square foot (sq ft, ft²) = 0.09 square meter (m²)  1 square yard (sq yd, yd²) = 0.8 square meter (m²)  1 square mile (sq mi, mi²) = 2.6 square kilometers (km²)  1 square mile (sq mi, mi²) = 2.6 square kilometers (km²)  1 square mile (sq mi, mi²) = 2.6 square kilometers (km²)  1 square mile (sq mi, mi²) = 2.6 square kilometers (km²)  1 square mile (sq mi, mi²) = 2.5 acres   MASS - WEIGHT (APPROXIMATE)  1 ounce (oz) = 28 grams (gm)  1 pound (lib) = 0.45 kilogram (kg)  1 short ton = 2,000 pounds = 0.9 tonne (t)  1 teaspoon (tsp) = 5 milliliters (ml)  1 tablespoon (tbsp) = 15 milliliters (ml)  1 cup (c) = 0.24 liter (l)  1 quart (qt) = 0.96 liter (l)  1 quart (qt) = 0.96 liter (l)  1 cubic foot (cu ft, ft²) = 0.03 cubic meter (m²)  1 cubic yard (cu yd, yd²) = 0.76 cubic meter (m²)  TEMPERATURE (EXACT)   AREA (APPROXIMATE)  1 square centimeter (cm²) = 0.16 square inch (sq in, in²)  1 square centimeter (cm²) = 0.16 square inch (sq in, in²)  1 square centimeter (cm²) = 0.16 square inch (sq in, in²)  1 square centimeter (cm²) = 0.16 square inch (sq in, in²)  1 square centimeter (cm²) = 0.4 square mile (sq mi, mi²)  1 square meter (m²) = 1.2 square yards (sq yd, yd²)  1 square meter (m²) = 1.2 square yards (sq yd, yd²)  1 square meter (m²) = 1.2 square meter (m²)  1 square meter (m²) = 1.2 square meter (m²) = 1 square meter (m²) = 1 square meter (m²) = 1 square meter (m²) = 1.5 quare meter (m²) = 1.2 square meter (m²) = 1.5 quare meter (m²) = 1	1 mile (mi)	= 1.6 kilometers (km)	1 meter (m) = 1.1 yards (yd)
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1 square yard (sq yd, yd²) = 0.8 square meter (m²) 1 square mile (sq mi, mi²) = 2.6 square kilometers (km²) 1 acre = 0.4 hectare (he) = 4,000 square meters (m²)  MASS - WEIGHT (APPROXIMATE)  1 ounce (oz) = 28 grams (gm) 1 pound (lb) = 0.45 kilogram (kg) 1 short ton = 2,000 pounds (lb)  VOLUME (APPROXIMATE)  1 teaspoon (tsp) = 5 milliliters (ml) 1 fluid ounce (fl oz) = 30 milliliters (ml) 1 cup (c) = 0.24 liter (l) 1 quart (qt) = 0.96 liter (l) 1 cubic foot (cu ft, ft³) = 0.03 cubic meter (m³) 1 square kilometer (km²) = 0.4 square mile (sq mi, mi²) 10,000 square meters (m²) = 1 hectare (ha) = 2.5 acres  MASS - WEIGHT (APPROXIMATE) 1 gram (gm) = 0.036 ounce (oz) 1 kilogram (kg) = 2.2 pounds (lb) 1 tonne (t) = 1,000 kilograms (kg) = 1.1 short tons  VOLUME (APPROXIMATE) 1 milliliter (ml) = 0.03 fluid ounce (fl oz) 1 liter (l) = 2.1 pints (pt) 1 liter (l) = 1.06 quarts (qt) 1 liter (l) = 0.26 gallon (gal) 1 cubic meter (m³) = 36 cubic feet (cu ft, ft³) 1 cubic meter (m³) = 1.3 cubic yards (cu yd, yd³)  TEMPERATURE (EXACT)	1 square inch (sq in, in²)	= 6.5 square centimeters (cm <sup>2</sup> )	1 square centimeter (cm²) = 0.16 square inch (sq in, in²)
1 square mile (sq mi, mi²)	1 square foot (sq ft, ft <sup>2</sup> )	= 0.09 square meter (m <sup>2</sup> )	1 square meter (m²) = 1.2 square yards (sq yd, yd²)
MASS - WEIGHT (APPROXIMATE)	1 square yard (sq yd, yd²)	= 0.8 square meter (m <sup>2</sup> )	1 square kilometer (km²) = 0.4 square mile (sq mi, mi²)
MASS - WEIGHT (APPROXIMATE)         MASS - WEIGHT (APPROXIMATE)           1 ounce (oz)         = 28 grams (gm)         1 gram (gm) = 0.036 ounce (oz)           1 pound (lb)         = 0.45 kilogram (kg)         1 kilogram (kg) = 2.2 pounds (lb)           1 short ton = 2,000 pounds (lb)         = 0.9 tonne (t)         1 tonne (t) = 1,000 kilograms (kg) = 1.1 short tons           VOLUME (APPROXIMATE)           1 teaspoon (tsp)         = 5 milliliters (ml)         1 milliliter (ml) = 0.03 fluid ounce (fl oz)           1 tablespoon (tbsp)         = 15 milliliters (ml)         1 liter (l) = 2.1 pints (pt)           1 fluid ounce (fl oz)         30 milliliters (ml)         1 liter (l) = 1.06 quarts (qt)           1 pint (pt)         0.47 liter (l)         1 liter (l) = 0.26 gallon (gal)           1 quart (qt)         0.96 liter (l)         1 cubic meter (m³) = 36 cubic feet (cu ft, ft³)           1 cubic yard (cu yd, yd³)         0.76 cubic meter (m³)         1 cubic meter (m³) = 1.3 cubic yards (cu yd, yd³)           TEMPERATURE (EXACT)	1 square mile (sq mi, mi²)	= 2.6 square kilometers (km²)	10,000 square meters (m <sup>2</sup> ) = 1 hectare (ha) = 2.5 acres
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$[(x-32)(5/9)] \circ F = y \circ C$ $[(9/5) y + 32] \circ C = x \circ F$	TEMPERA	TURE (EXACT)	TEMPERATURE (EXACT)
	[(x-32)(5/9)	]°F = y°C	[(9/5) y + 32] °C = x °F

# **QUICK INCH - CENTIMETER LENGTH CONVERSION**



## **QUICK FAHRENHEIT - CELSIUS TEMPERATURE CONVERSION**



For more exact and or other conversion factors, see NIST Miscellaneous Publication 286, Units of Weights and Measures. Price \$2.50 SD Catalog No. C13 10286

## **Acknowledgements**

Significant results for any project do not typically arise from the efforts of one single individual, nor do they tend to emerge quickly, smoothly, or seamlessly. The conclusion is often all that is long remembered and the final architect or author commonly receives far more credit than he or she truly deserves. The history of this project includes several quiet but perseverant contributors who should not pass unnoted.

This effort was inspired by the passion of labor organizations to ensure that members could expect consistent standards of compassionate care when confronted by what has become, unfortunately, a recurrent occupational nightmare. John Tolman of the Brotherhood of Locomotive Engineers and Trainmen, among others, has worked tirelessly for years to see that vision through to completion. FRA's Critical Incident Working Group invested several months, multiple meetings, and much active discussion facilitating final consensus.

Staff in the FRA's Office of Research and Development saw the significance of this effort many years ago and helped to emphasize the urgency of the project. Immediate intervention following on-the-job exposure to potentially traumatic events had become a prime example of the chasm between science and practice. Indeed, the gulf between common practice and empirical outcomes had become so pronounced that workable solutions were needed. Staff at the Volpe Center also made key contributions to the project, including ensuring that each draft considered all elements of stakeholder interest and input.

The Association of American Railroads (AAR) and its member carriers provided crucial input throughout the process. The matrix of current services created and supplied by AAR was the foundation for much of this work and indispensable to building a template by which to put the Rail Safety Improvement Act of 2008 into practical, efficient, and cost-effective application. Dr. Malva Reid, Maia Dalton-Theodore, and Steve Graham of Amtrak's Employee Assistance Program, along with representatives of their carrier's labor organizations, also provided gracious and superbly helpful feedback to help reconcile the salient findings of the research with the practicalities of serving employees in a rail carrier environment.

Chief Ron Siarnicki and the staff of the National Fallen Firefighters Foundation supplied critical support in managing the logistics of travel, reporting, document development, editing, and the other basic but essential procedural pieces required to bring the project to completion. Dr. JoEllen Kelly and Vickie Taylor of NFFF's Behavioral Health Initiative Team, Dr. Patricia Watson of the National Center for PTSD, Dr. Ken Ruggiero of the National Crime Victims Research and Treatment Center, and Dr. Chip Benight of University of Colorado-Colorado Springs Trauma Studies and Resource Center also contributed insight and feedback to the final report.

# **Contents**

Executive S	Summary	1
1.	Introduction	2
2.	Literature Review	3
3.1	Applicability to Railway Environment  Existing Carrier Programs	
4.	Defining a "Critical Incident"	7
5.	Relief from Duty	9
6.	CIWG Definition and Proposed Rule	10
7.	Proposed Model for Rail Industry Critical Incident Intervention Program	11
8.	Development, Evaluation, and Approval of Plans	14
9. 9.1	Articulation with Current Programs and Practices  Compatibility with Established Carrier Programs.	
10.	Conclusions	19
11.	References	20
Appendix A	A. Rail Safety Improvement Act of 2008, Sec. 410	25
Appendix 1	B. American Railroad Critical Incident Matrix	26
Abbreviation	ons and Acronyms	39

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# **Executive Summary**

Over the past decade, there has been substantial refinement in scientific and professional understanding of occupational traumatic exposure and reactivity. This refinement has led to a modification of objectives and methods for implementing and evaluating pilot intervention efforts and programs. Ideally, the results of such efforts will be used consistently by railroad carriers to mitigate potential negative effects on train crews of traumatic exposure to incidents on the tracks. Section 410 of the Rail Safety Improvement Act of 2008 mandated that the Federal Railroad Administration (FRA) define the term "critical incident" to clarify the situations in which such services would be needed and that all Class 1, intercity passenger, and commuter railroads develop plans to offer services to train crews following critical incidents. FRA issued a final rule on Critical Incident Stress Plans on March 25, 2014.

This report describes the critical incident plans that are currently in place with railroad carriers and proposes a model by which carriers may modify and strengthen their existing plans. Carrier programs summarized in the matrix provided by the Association of American Railroads (AAR) reflect a general consensus on key definitions and prescriptions sought by the Rail Safety Improvement Act of 2008. Programs in place typically contain most of the essential elements needed to devise a suitable plan for approval by FRA and mount a successful program of intervention and assistance.

Accordingly, a template for a model program is presented to help guide efforts to implement the requirements of the Rail Safety Improvement Act and the proposed rule by railroads, rail labor organizations, and other stakeholders. The template is grounded in practices currently in place, as indicated in the matrix provided by AAR (Appendix B). Specific recommendations are made to help incorporate current evidence-supported best practices with the specific intent of (a) ensuring all required elements of the Act are accommodated, (b) providing a soundly structured approach that can be efficiently and effectively executed, and (c) allowing carriers to build upon their current programs without undue cost or disruption.

Initial review of the proposed template with a major carrier helped refine process elements and identify additional inputs needed. Overall, the model was seen as an enhancement that could be accommodated without substantial difficulty and which would likely benefit both efficiency and effectiveness of the program. Of specific note were elements of interaction between operating elements and Employee Assistance Program (EAP)/Occupational medicine components that could help mitigate immediate impact and ensure ease, fidelity, and consistency of implementation in the field.

Next steps include support for pilot testing the model at a proposed railroad site, identification of implementation issues or challenges that may need to be overcome, and documentation of the model's effectiveness and impacts for lessons learned.

#### 1. Introduction

This report presents work conducted under an FRA grant (FR-RDD-0024-11-01) to advise and support the formulation of regulations and supporting materials respecting "critical incident" response plans for rail carriers covered by the Rail Safety Improvement Act of 2008, Sec. 410. In accordance with the Statement of Work for that project, the following elements are addressed:

- (a) Review of literature on established and emerging research findings with respect to occupational exposure to potentially traumatic events (PTEs);
- (b) Review of literature on current best practices with respect to prevention, mitigation, early intervention, and evidence-based treatment of established sequelae from such exposures;
- (c) Review of current practices by key rail carriers as reported through the Association of American Railroads (AAR) to determine level of consensus reflected in existing programs respecting critical requirements of the authorizing act (e.g., definition of "critical incident," release from duty of impacted employees, intervention design, and evaluation of outcomes):
- (d) Preparation of a general guidance template outlining key features that might be expected in model programs, reflecting current best practices and existing consensus;
- (e) Comparison of reported features within existing carrier programs with critical elements of current best practices.

This final report reflects discussions and inputs from *Critical Incident Working Group* (CIWG) meetings. Each session included presentation of both draft and modified text and a full presentation of revisions and additions to date; in addition, the working draft was circulated for comment and input prior to its final revision and presentation at the December CIWG meeting.

#### 2. Literature Review

The origins of most industry programs focused on occupational exposure to PTEs can be traced back to the rapid growth of "critical incident stress" interventions from the mid-1980s through the 1990s (Mitchell, 1983). The impetus for these programs was generated outside the world of refereed scientific and medical literature, and, hence, outside the more conservative restraints demanded in those venues with respect to documented safety, efficacy, and impact (Gist & Woodall, 2000; Gist, Woodall, & Magenheimer, 1999). It was not until the end of the 1990s that controlled empirical studies had been conducted and reported in sufficient numbers to allow clear findings to be articulated (see, for example, Bisson et al., 1997; Carlier et al., 1998; Deahl et al., 1994; Gist, Lubin, & Redburn, 1999; Griffith & Watts, 1992; Hobbs et al., 1996; Kenardy et al.; 1996; Lee, Slade, & Lygo, 1996; Mayou, Ehlers, & Hobbs, 2000). Meta-analyses of randomized controlled trials—the "gold standard" for determination of treatment efficacy—were first published in the early 2000s (Rose, Wessely, & Bisson, 2007; van Emmerik et al. 2002). Psychological debriefing, the central intervention of most critical incident programs, showed no preventive efficacy, and well-controlled studies suggested risk of impaired recovery for some participants, especially the most severely symptomatic (McNally, Bryant, & Ehlers, 2003). Other frequently prescribed elements (e.g., peer support, psychoeducation) lack direct empirical demonstrations of efficacy and, in some settings, have also raised concern (Lohr et al., 2003).

Such findings from independent empirical study contradicted beliefs of low risk and strong efficacy that had become ingrained among practitioners of these interventions (Mitchell & Everly, 1997). The consistency of these findings, however, led to growing consensus in the scientific and medical communities that these practices should be curtailed and more effective alternatives advanced (Brewin *et al.*, 2002; Gray & Litz, 2005; NIMH, 2002). Principal constructs in debriefing programs became subject to reexamination (Devilly & Cotton, 2003, 2004; Devilly, Gist & Cotton, 2006).

One such construct was a general assumption that a pathologic reaction was a common consequence of exposure to PTEs. Focused epidemiologic study of those exposed to natural disaster, occupational events, and similar impingements suggested that generalization from study of populations experiencing intense and/or protracted exposure to highly threatening events (e.g., military combat, rape, violent crime) severely overestimated decompensation and underestimated spontaneous recovery and resilience (Bonanno, 2004). Well-designed population studies of the impact of the 9/11 attacks on residents of Manhattan provided strong evidence for both the dominance of resiliency as a trajectory following exposure and the prevalence of spontaneous remediation of initial symptom presentations (Galea *et al.*, 2003; Galea *et al.*, 2004). The demonstrated paradoxical impact of debriefing on spontaneous recovery provided further impetus for its contraindication, and focus turned to less intrusive techniques with an emphasis on maintaining resiliency and supporting spontaneous resolution.

Another presumption inherent in interventions based on debriefing was that of strong preventive benefit from early ventilation. Derived from Freudian notions regarding psychic catharsis and well engrained in popularized notions of therapy, the idea that "what goes in must come out" led to an argument that compelling those exposed to confront their experience and express their reactions would yield preventive benefit. This, too, was contradicted in findings of controlled

studies, most especially with respect to those whose standard coping mechanisms centered on distancing or repression (Frasure-Smith *et al.*, 2002; Ginzburg, Solomon, & Bleich, 2002).

Systematic review of work with disaster victims resulted in published consensus surrounding five basic principles that held demonstrated positive impact on resiliency and resolution (Hobfoll, *et al.*, 2007):

- 1. restoring a sense of safety;
- 2. calming anxiety and agitation;
- 3. enhancing self-efficacy;
- 4. building connectedness; and
- 5. facilitating hope.

These principles provided the foundation for an evidence-informed approach to early assistance designed to facilitate resiliency and establish a basis for subsequent intervention based on systematic screening and stepped care, employing evidence based treatment as indicated. A series of well researched, public domain components is now available to support each step of early intervention and stepped care, including:

- (a) *Psychological First Aid*, a manualized approach to early assistance developed by the National Center for Post-Traumatic Stress Disorder (NCPTSD) and the Substance Abuse and Mental Health Services Administration (SAMHSA) (Brymer *et al.*, 2006);
- (b) Trauma Screening Questionnaire, a 10 item quick screen with documented sensitivity, specificity, and efficiency to identify those for whom further assessment and treatment may be indicated (Brewin *et al.*, 2002);
- (c) Web based approaches to clinician training to enable journeyman providers open access at little or no cost to training and consultation in evidence-based treatments for PTSD, anxiety, and depression (NCVC, 2005, 2009).

Used together, these approaches enable existing carrier programs to meet current standards of care. As a consequence, programs for fire and emergency medical services personnel have been substantially redesigned along parameters more consistent with empirical evidence respecting variability in individual reactivity and resilience; organizational roles in preparation, response, and recovery; and implementation of standards respecting screening, assessment, and specialty care (Gist & Taylor, 2008, 2009). Similar adaptations are underway in other workplace settings (van de Pol, Labardee, & Gist, 2006; van de Pol *et al.*, 2007).

# 3. Applicability to Railway Environment

Exposure of railway employees, particularly locomotive operators and conductors, to prototypical PTEs is well established (see Schartung *et al.*, 2011, for a recent analysis). Paramount among these are incursion events involving vehicular accidents at grade crossings and pedestrian incursions onto railroad right of way (sometimes as a method of suicide). Regulatory efforts and other safety measures have effected a significant decrease in the frequency of accidents (despite a sizable increase in the number of open crossings), but there has been an increase in both injury and fatality rates (Schartung *et al.*, 2011). Injuries sustained are often gruesome. Operators and conductors must often tend to the injured and secure the scene, which compounds proximity and duration of exposure to the traumatic event.

Systematic empirical study of the impact of this exposure on these personnel is limited. The best designed studies have been European (e.g., Cothereau *et al.*, 2004; Cox, Griffiths, & Houdmont, 2003; Farmer, O'Donnell, & Tranah, 1991; Farmer *et al.*, 1992; Karlehagen *et al.*, 1993; Lunt & Hartley, 2004; Malt *et al.*, 1993; Trannah & Farmer, 1994; Vatshelle & Moen, 2004; Webb, 2005) and show clinically diagnosed PTSD in 7–14 percent of those exposed; PTSD detected has been reported to be time limited in at least two recent studies (Cothereau *et al.*, 2004; Tranah & Farmer, 1994). Detailed empirical study of treatment efficacy and impact within this population is not easily found, presumably due to the relatively small population annually treated and the diversity of locations and systems involved in their identification and care.

### 3.1 Existing Carrier Programs

Most major American carriers have endeavored to provide their employees with assistance and intervention following these events. The AAR provided a matrix of existing programs (Appendix B) highlighting key elements of current endeavors. Most of these programs have been in existence for a number of years and most appear to operate under the aegis and direction of the carrier's Employee Assistance Program (EAP).

The descriptions of interventions, timing, delivery, and the like appear to reflect efforts to transplant design and key features found in "critical incident stress" programs created in fire, rescue, and emergency services venues in the 1980s and 1990s. These approaches, and especially elements built around "critical incident stress debriefing" and related interventions, have come under increased scrutiny as independent research has consistently reported core interventions to be inert with respect to preventive goals and to potentially evoke paradoxical inhibition of natural recovery for certain vulnerable participants (see McNally, Bryant, & Ehlers, 2003, or Devilly, Gist, & Cotton, 2006 for detailed review and discussion). Accordingly, most authoritative guidelines now caution against the routine application of these approaches and a number now lists them as directly contraindicated (Australian Centre for Posttraumatic Mental Health, 2007; National Institute for Clinical Excellence, 2005; Gray & Litz, 2005; Rose, Wessely, & Bisson, 2007; World Health Organization, 2013.) While several railroad EAP providers note that they have modified their programs in light of these data, a clear set of guidelines for appropriate, evidence-informed response has not been available to benchmark their efforts.

While there exist noteworthy variations between the programs outlined in the AAR matrix (Appendix B), there is also substantial consensus reflected with respect to the key elements sought in the authorizing act. Elements of particular importance treated in the following sections include:

- 1. Definition of "critical incident";
- 2. Relief for balance of duty tour
  - a. Employees directly involved
  - b. Employees witnessing the incident or its sequelae; and
- 3. Leave from normal duties to receive services.

# 4. Defining a "Critical Incident"

"Critical incident" and "critical incident stress" are not terms that have clinical significance or standard definitions in the scientific or medical literature. The term was coined by Flanagan (1954) in the early literature of industrial and organizational psychology to describe a specific method of job analysis.

Critical incidents, in the original formulation, were defining moments with respect to issues such as job performance, where the capacity to handle such an event was diagnostic of success or failure in the overall execution of a job's inherent responsibilities. Critical incident methodology enjoyed a strong following in areas such as industrial psychology, organizational development, and military science as a useful way to focus attention on those things that separate success from mediocrity or failure and to identify variables and test manipulations that might enhance successful performance. While this remains the understood meaning of the term in technical circles, the paltry 104 Google hits for "critical incident technique" or "critical incident method" are astronomically dwarfed by the more than 41,000 hits for its malapropos offshoot, "critical incident stress."

The definitions offered in trade literature promoting critical incident stress interventions are amorphous and essentially circular. A "critical incident," according to these formulations, is any event that provokes "critical incident stress." "Critical incident stress" is defined as the individual's reaction to exposure to a critical incident. Lists of presumed events that would qualify are often provided but there is no evidence of any empirical substantiation of an operational definition that would break this tautological circle.

The dominant allusion appears to be to Criterion A of the diagnostic rubric for PTSD but here, too, definitions are subjective rather than systematic or operational. For purposes of the Rail Safety Improvement Act of 2008, what is required is an operational definition that will establish for carriers when their required plan must be implemented. Since the clinical definitions of actual relevance depend on reactions of those exposed rather than the nature of the event itself, the prudent course appears to be establishment of an agreed operational minimum—a set of events for which the elements of the plan must be mobilized and made available to employees.

Current definitions reflected in the AAR matrix suggest that all carriers consider an incursion incident resulting in death or substantial injury to fall within the domain of their programs. Several also include major derailments resulting in death or injury; passenger carriers reasonably include death or injury to passengers as well. Where an affected employee is defined or a definition implied, those who witness or are charged to intervene are generally considered to be the employees of focus. A reasonable starting point toward consensus was therefore proffered to be:

Critical incidents are defined as incursions or other right of way events in which railroad operations result in death or significant injury and in which railroad employees witness or are charged to directly intervene.

These events will require initiation of the required plan with respect to those employees directly impacted. This should not preclude initiation of plans for other events (e.g., "close calls" with clear and/or declared impact on specific employees), or their extension beyond directly impacted employees, but these would be determined by the carrier and/or the carriers' negotiated

agreements with their employees. It is recommended, however, that guidance regarding implementation of these plans emphasize that access to the plan's components should be made available and specific outreach considered for any event in which (a) the nature of the event or observed reactions to it suggest that intervention would prove of value to the employee and/or promote safe return to duty, or (b) specific employees request assistance following such exposure.

## 5. Relief from Duty

The majority of existing plans call for immediate relief from duty upon request for the remainder of a shift or tour of duty and for transportation to the home terminal for employees directly involved in a covered event. The conventional pattern at present is to grant 3 days additional leave upon request, generally requiring contact with occupational medicine or EAP to ensure that any needed services have been offered. Additional leave is typically predicated on evaluation by the appropriate occupational medical authority and treated in conformance with other occupational injury protocols, as is consistent with existing clinical literature.

Substantial discussion at CIWG sessions centered on whether immediate relief should be mandatory. There is no compelling scientific evidence at present to suggest that all persons exposed to a potentially traumatic event require or benefit from such mandated removal from duty; there is, however, substantive anecdotal evidence to suggest that many persons prefer and may benefit from continuing their duties *if they choose to do so*. Feedback provided by carriers during CIWG deliberations suggest that 35–50 percent of crews currently elect to continue, although the option for relief and transportation to home terminal is typically offered.

There is some empirical evidence that certain individuals—particularly those whose dominant coping style is repressive in nature—fare as well or better than those who employ more expressive coping styles, *unless* their coping style is challenged by efforts to provide assistance incompatible with their typical strategies (Frasure-Smith *et al.*, (2002); Ginzburg, Solomon, & Bleich, 2002). As many as a quarter of the individuals in these studies were classified as repressive copers, suggesting that provision of an option is a reasonable solution. It may be useful to ensure that personnel are advised of their option at the time of the event and that they are allowed to change that decision should they later determine that relief is in their best interest. Safety considerations must also be taken into account to ensure that employees are indeed capable of operating the train safely if allowed to continue.

Similarly, relief following an event should be considered an option at the individual's discretion. Where addressed in existing plans, the more common period cited has been up to 3 days relief. There is at present no clinical evidence to suggest this or any other specific interval is optimal or necessary, but the 3-day period is (a) consistent with common industry practice as reported in the AAR matrix (Appendix B) and (b) presents a reasonable window in which employees can evaluate their response and reconciliation of the event. Therefore, it is suggested that this be considered a guideline index, subject to employee election, but that additional time requests beyond those 3 days involve occupational medicine (as specified in carrier protocol).

## 6. CIWG Definition and Proposed Rule

The CIWG achieved consensus on the following definitions:

*Critical incident* means an event that results in a fatality, loss of limb, or a similarly serious bodily injury; or a catastrophic accident which could be reasonably expected to impair a directly involved employee's ability to safely perform his or her job duties.

*Directly involved employee* means a railroad employee whose actions are closely connected to the critical incident, who witnessed the critical incident, or who was charged to directly intervene/respond to the critical incident.

The proposed rule submitted to the CIWG, directly mirroring the Act, provides that:

- (a) Each railroad to which this part applies is required to develop and submit to the Federal Railroad Administration, Office of Railroad Safety, 1200 New Jersey Avenue, S.E., Washington DC 20590, for approval, a Critical Incident Plan. Each covered railroad must submit its Critical Incident Plan to FRA for approval within 12 months of the effective date of this regulation.
- (b) A Critical Incident Plan is considered approved if FRA notifies the railroad in writing that the Critical Incident Plan is approved, or 90 days after FRA received the Critical Incident Plan. After initial approval by FRA, if there is a material change in a railroad's Critical Incident Plan, the revised Critical Incident Plan shall be submitted to FRA within 30 days of the change.
- (c) Each Critical Incident Plan shall include, at a minimum, provisions for:
  - 1) Immediate response, counseling, guidance, and other appropriate support services;
  - 2) Relief from the balance of duty-tour for employees directly involved in a critical incident, following any actions necessary for the safety of persons and contemporaneous documentation of the incident;
  - 3) The railroad's response personnel must inform the employee(s) directly involved in a critical incident that they may request relief; and
  - 4) Permitting such additional leave from normal duty as may be necessary and reasonable to receive preventive services and/or treatment related to the incident.
- (d) A copy of the Critical Incident Plan must be made available to employees covered by the regulation and/or holding responsibilities related to execution of the plan.

These provisions are combined with current evidence supported best practices to propose a recommended model template, designed to be compatible with current best practices in the railroad environment and consistent with the Act and the proposed rule. The model has also been compared with an existing program to determine goodness of fit and acceptability for implementation without undue cost or administrative burden.

# 7. Proposed Model for Rail Industry Critical Incident Intervention Program

The proposed model template is treated as a process design. The focus of the process is generated from the perspective of the impacted employee and tracks his or her progress through the event and its sequelae. The recommended general design is illustrated in the flow chart below (black lines are the progress of the event from the employee perspective; the red line indicates exposure recommendation for contact of the employee as an outreach step; solid green lines indicate pathways toward terminus of process; dashed green lines prescribe recommendations that the employee contact EAP or Occupational Medicine designated resource prior to termination of process).

The chart begins with a potentially traumatic exposure (PTE, a.k.a. "critical incident") as defined under the Act (or, if indicated based upon protocol or agreement, an event falling outside that strict definition but recognized as a pertinent trigger).

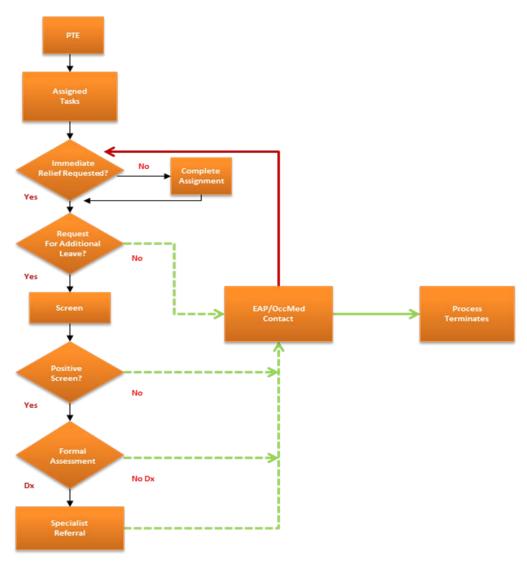


Figure 1. Proposed Model for Railway Industry Critical Incident Stress Program

- (1) The employee is expected to perform those duties assigned by protocol to secure the train and the scene, notify appropriate personnel, render aid to injured persons, and provide information needed for contemporaneous documentation of the incident. This implies that each employee involved has clear and prescribed protocols to follow with respect to tasks and responsibilities, and that each employee involved has access to all equipment required to perform those tasks and has received adequate training to execute those tasks effectively. Check lists and/or process charts should be provided for each position; it is advisable that these be accessible in the event of emergency.
- (2) Involved employees should be presented the option of immediate relief from duty and timely transport to their home terminal. Regardless of their decision, they should also be informed of their option to request recovery leave at a later time (see below). It is suggested that an occupational medicine representative or EAP make contact and offer services according to the carrier's approved plan.
- (3) If further recovery leave is requested or required, the case should be handled in accordance with the carrier's occupational medicine protocols. This option should remain available even if the employee opts to complete the immediate tour of duty (above). If no additional time is requested or required, the process terminates, but can be reopened by the employee. Medical clearance should not be required to return to duty if no additional leave is involved.
- (4) Screening for adverse clinical reactions, to specifically include PTSD and depression, should be conducted prior to return to duty in any case where additional time has been granted. Evidence-based screening should be utilized (e.g., Brewin, et. al., 2002). In the absence of a positive screen, it is suggested that an exit interview through occupational medicine or EAP be recommended to ensure that any necessary assistance is offered. If no other services are indicated, the process terminates.
- (5) Positive screening should result in complete assessment for PTSD and/or depression. This assessment should be conducted by appropriately trained, certified, and prepared practitioners; if none are available through the carrier's occupational medicine or EAP resources, the employee should be referred for specialist evaluation. If no clinical diagnosis is indicated, it is suggested that an exit interview with occupational medicine or EAP be recommended to determine need or desire for other assistance or support. If no other services are indicated, the process terminates.
- (6) Where a clinical diagnosis is entered, the employee should be referred for appropriate specialist care. Specialists should be prepared to provide treatment according to current standards for evidence-based practice (e.g., cognitive behavioral therapy). Following completion of specialist care, a final occupational medicine or EAP contact should be recommended to determine need or desire for other assistance or support. If no other services are indicated, the process terminates.

The objective should be to allow each carrier to utilize its existing model as a base, making modifications as necessary to ensure compliance with minimum standards proposed for

applicability and to enhance conformity of its screening and intervention components to current best practices and standards for evidence-based care. The plan to be presented for review should document that the carrier has taken sufficient steps to establish capacity and capability to satisfactorily execute each element in the proposed process model and describe how those elements are to be executed in covered events.

## 8. Development, Evaluation, and Approval of Plans

Collaboration between labor and management in the development of the critical incident response plan is strongly recommended prior to submission. It is recommended that review of plans examine, at a minimum, these essential features:

- (1) Clearly specified protocols should be provided for railroad personnel in the event of a covered incident, to include:
  - *i*. Actions to be taken by specific employees (e.g., contacts to be made, treatment of injured, securing scene, documenting circumstances and events).
  - *ii.* Training and equipment needed to ensure capacity and capability to execute required functions.
  - *iii.* To whom responsibility will be relinquished as event unfolds.
  - *iv*. Timeframe (with specified minimum standards) in which relief will be provided when indicated
  - v. Checklist and/or process chart to be followed to ensure that responsibilities have been met.
- (2) Responsibility for first contact with impacted employees and initiation of required plan should be specifically assigned, to include:
  - *i.* Assumption of responsibility for scene and injured parties.
  - ii. Gathering of preliminary information for legal and investigative purposes.
  - *iii.* Establishment of first contact elements of carrier's approved plan.
  - iv. Relief from duty and return to home terminal if requested.
  - v. Initiation of contact/outreach components as indicated.
  - *vi.* Training and equipment needed to ensure capacity and capability to execute required functions.
  - vii. Checklist to be followed to ensure that responsibilities have been met.
- (3) Responsibility of occupational medicine or EAP (internal or contracted) should be outlined, to include:
  - *i*. Timing and responsibility for outreach contact.
  - ii. Standards of care regarding basic services to be provided.
  - iii. Processes and standards for screening, assessment, and immediate care.
  - iv. Standards and methods for specialty referral.
  - v. Evaluation protocols for return to duty.
  - vi. Relationship to occupational medicine functions.

- (4) Peer support programs, if utilized, should follow specific protocols:
  - i. Not a required component though recommended where feasible.
  - ii. Where utilized, should complement but not supplant professional roles outlined above.
  - iii. Definition of roles and boundaries should be emphasized.
  - *iv.* Relationship to occupational medicine and/or EAP, including selection, supervision, and case evaluation, should be specified.
- (5) Resources to Support Implementation:
  - *i*. Training protocols should be developed for covered employees, responsible parties, supervisors, managers, and providers.
  - ii. Plans should provide for adaptation or development of resources not currently available.

## 9. Articulation with Current Programs and Practices

A central objective in the development of a model template has been to create a flexible approach that can be both compatible with existing practices and reflective of current evidence-informed best practices. Specifically, the model is intended to:

- (a) Be compatible with the needs, practices, and personalities of the workers who will be using it for help;
- (b) Provide for implementation by the carrier and their designated providers without undue burden or extraordinary expense;
- (c) Contain elements that have been demonstrated to help mitigate, attenuate, and limit stressful impacts, as well as provide intervention and treatment after the fact;
- (d) Establish clear pathways for action and intervention as seen from employee, organization, and provider viewpoints;
- (e) Strengthen established and effective programs where present; and
- (f) Ensure both employees and providers that their needs have been recognized, understood, and appropriately addressed.

#### 9.1 Compatibility with Established Carrier Programs

The model as proposed and presented at the September Working Group meeting was discussed in detail with representatives of a major carrier EAP noted for its effectiveness; members of United Transportation Union and Brotherhood of Locomotive Engineers and Trainmen involved in that program were specifically included in those discussions. The purpose of these discussions was to

- (a) Explain the proposed model and how it would be expected to work;
- (b) Hear concerns, comments, suggestions, and recommendations;
- (c) Compare key elements prescribed with existing processes and practice;
- (d) Explore "goodness of fit" for the railroad environment;
- (e) Determine perceptions of providers and consumers regarding benefits and/or liabilities; and
- (f) Identify any specific changes, enhancements, or additions the model would require to be fully implemented.

The program queried was chosen as the first site visit because (a) it was identified by several contributors as one of the longer established and more developed programs in the industry, (b) its experience and utilization rates were sufficient to ensure representative information, and (c) it is a national operation that represents many parts of the country and a range of geographic, population, and resource distribution configurations.

Key findings from those discussions included:

- (1) Though a very well developed and operated program, there did not appear to be a clear written protocol or checklist for required actions. There are indeed various procedures that are understood; some of these exist in various policies and operating procedures. These did not appear at present to have been brought together in a clear process, resulting in procedures that detailed specific responsibilities and expectations in the event of accident or emergency.
- (2) Specificity of responsibility and expectation is a critical feature in ensuring that immediate impact is mitigated. This can typically be done without great cost, effort, or expense. Beyond its moderating effect with respect to individual impacts, it contributes to reliable and consistent action by those first on scene and hence benefits all aspects of the evolving incident. Participants felt it could and should be done but, since it is an operational feature, input outside the EAP function is required.
- (3) Specific training for responsibilities and tasks in accidents is another area of development that lies outside the EAP domain. Operating employees such as train crews, trainmasters, and road foremen, have important first contact assignments and need preparation to do them reliably and well. These first contacts can be critical to moderating impact. Some training in critical areas is recognized as a part of other training activities, but specific training involving accidents and other critical incidents should be provided.
- (4) Employees and providers recognized situations in which immediate relief expectations might be difficult to meet. All agreed that exceptions should be possible but that any exceptions should require specific authorization at a managerial level and should be accompanied by appropriate documentation and review.
- (5) Development of protocol, process charts, and the like for those assigned to relieve impacted personnel also requires operational input from outside the EAP. As with the elements addressed above, clear procedures and regular training ensure consistent and reliable execution in relatively infrequent but high impact situations.
- (6) Consistency throughout the system was a major concern of all discussants because different regions have different operating cultures. Again, clear and specific protocols backed by consistent, reinforced training must be in place and performance monitored at a system level if consistency is to be achieved and maintained.
- (7) Some "retraining" of providers was recommended to ensure that skills and formulations represent expectations of the model and current best practices. The provider involved has internal trainers who can accomplish this but indicated that additional assistance would be welcome.
- (8) Relationship to occupational medicine protocols and regulations were understood but could benefit from clarification and documentation of policy and process elements specific to the PTE response. Of particular consequence are approval of additional time, handling of "reportable injury," return to duty, and the like. A clear process outlined would help document the expected structure for these interactions, which would in turn help facilitate

employee transition and utilization.

(9) Peer programs were noted to be effective bridge mechanisms. This carrier program, like many such programs, utilized labor representatives whose duties make them natural resources for benefits, assistance, and the like. Additional guidance and structure may be beneficial to help guide decisions to develop or utilize peer contact mechanisms, especially where programs are weakly established or underutilized. A current international project to develop best practice standards (Australian Centre for Posttraumatic Mental Health, 2009) may provide a resource for carriers wishing to consider this option.

Overall, discussants reported good fit between the proposed model template and their existing model. Few discussants perceived obstacles to meeting any requirements the proposed model template would present and anticipated that added features would enhance an already successful program without undue burden or additional major expense. The final model, as presented in this report, reflects modifications made based on these discussions and comparisons, as well as further refinements derived from discussion within the CIWG.

#### 10. Conclusions

The Rail Safety Improvement Act of 2008 mandates that each Class I railroad carrier, intercity passenger railroad carrier, and commuter railroad carrier develop and submit for approval a critical incident stress plan that makes available appropriate support services to employees affected by a critical incident. This report reviewed existing critical incident stress plans in place at various railroads around the United States. Based on current best practices and relevant findings from the scientific literature, a model plan was proposed for the railroads to consider when adapting their plans to conform to the forthcoming FRA rule on this matter.

In general, programs in place already contain most of the essential elements needed to devise a suitable plan and mount a successful program of assistance and intervention. Additional knowledge about current best practices may, however, help carriers make adjustments to their existing programs and refine their processes. Ideally, the model program included in this report will help guide carriers to effectively modify existing programs to meet the requirements of the Act. Included in this model program are elements which (a) ensure that all required elements of the Act are incorporated, (b) provide a soundly structured approach that can be efficiently and effectively executed, and (c) allow carriers to build upon current programs without undue cost of disruption.

Once the mandates of the Rail Safety Improvement Act of 2008 go into effect, this model program will help railroad carriers implement necessary changes in an efficient way. As these changes are implemented, FRA will continue to work closely with railroad carriers to better understand the challenges of implementing such programs and to better understand the various impacts associated with mitigating potential stress reactions of train crews to potentially traumatic incidents.

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## Appendix A. Rail Safety Improvement Act of 2008, Sec. 410

Rail Safety Improvement Act of 2008, Public Law No. 110-432, Division A

#### SEC. 410. CRITICAL INCIDENT STRESS PLAN.

- (a) IN GENERAL.—The Secretary of Transportation, in consultation with the Secretary of Labor and the Secretary of Health and Human Services, as appropriate, shall require each Class I railroad carrier, each intercity passenger railroad carrier, and each commuter railroad carrier to develop and submit for approval to the Secretary a critical incident stress plan that provides for debriefing, counseling, guidance, and other appropriate support services to be offered to an employee affected by a critical incident. (b) PLAN REQUIREMENTS.—Each such plan shall include provisions
- for—
  - (1) relieving an employee who was involved in a critical incident of his or her duties for the balance of the duty tour, following any actions necessary for the safety of persons and contemporaneous documentation of the incident;
  - (2) upon the employee's request, relieving an employee who witnessed a critical incident of his or her duties following any actions necessary for the safety of persons and contemporaneous documentation of the incident; and
  - (3) providing such leave from normal duties as may be necessary and reasonable to receive preventive services, treatment, or both, related to the incident.
- (c) Secretary To Define What Constitutes A Critical INCIDENT.—Within 30 days after the date of enactment of this Act, the Secretary shall initiate a rulemaking proceeding to define the term "critical incident" for the purposes of this section.

# **Appendix B. American Railroad Critical Incident Matrix**

Carriers 1 through 3	Carriers 1 through 3					
	Carrier 1	Carrier 2	Carrier 3			
Accountability	Health Services and EAP are accountable for the delivery of the CIRP program and for coordinating appropriate action with employees and supervisors. Managers and supervisors are responsible for making the initial referral at the scene of any accident by providing employees with EAP contact information.  Employees are responsible for requesting leave following a critical incident when they feel that they will not be able to work safely.	Medical and Environmental Health is responsible for managing the critical incident program in coordination with the EAP and field management. Employees are responsible for requesting leave whenever they believe they cannot work safely as a result of a critical incident.	Safety and Medical are responsible for overall management of the program. Field supervision is responsible for implementation and compliance with the program in field, with more senior field supervision involved in training and local management.			
Scope/Applicability (Population)	All employees, and is especially significant for Hours of Service employees	All Employees	All Employees			
Process and Application (Management Training for Critical Incident Response Offered Preventive Resiliency Training Offered 24/7 Hour Help Line Availability Counseling Availability)	Employee wellbeing is essential to the productivity, safety, and health of employees, their families, and the general public. Carrier 1 recognizes that employees exposed to workplace traumatic events may need special assistance in dealing with the event and/or its after-effects.  The Critical Incident Response Program (CIRP) is an integral component of the U.S. Employee Assistance Program (EAP) and is designed to provide timely assistance to individuals who have experienced traumatic events. The primary goal of this program is to support employees or, when appropriate, employee families or the general public, as they work through the normal reactions related to traumatic events.	24/7 immediate telephonic Psychological First Aid services available through EAPs  EAP counselors respond to site within 24 hours.  EAP trained peer responders available either telephonically or on site.	Identification of signs and symptoms of potential stress in an incident is fundamental. Individual employees can request assistance from supervision, request time off and/or elect to receive professional help (including 24/7 immediate telephonic assessment and referral to the appropriate level of care). Field supervision can likewise initiate discussions with employees apparently affected by stress to identify any further assistance or action needed (but not counsel them, which would involve the professional assistance discussed above), grant leave, and involve the Medical Department. Most importantly, the program recognizes that adverse situations must be reacted to in accordance with the individual's separate and distinct needs.			

Carriers 1 through 3	Carriers 1 through 3				
	Carrier 1	Carrier 2	Carrier 3		
Critical Incident Definition	A critical incident is a catastrophic event the employee has witnessed or in which the employee was involved that is outside the range of usual workplace events.  The following are examples of critical incidents; however, the list is not exhaustive:  1. Serious accidents, fatalities or dramatic events in the workplace (e.g. accidental death, explosion or suicide);  2. Catastrophic injuries, crossing accidents, or major train derailments resulting in life threatening injuries;  3. Criminal incidents (e.g. hold-up; hostagetaking; terrorist acts).		The program does not contain a formal definition, but it is understood to include any fatality or major injury occurring in connection with rail operations in which a Carrier 3 employee is directly involved or observes the incident.		
Time Away – Immediate Relief From Duty (Compensated Time Off (number of days specified))	Upon request from an employee who believes he or she is unable to function safely following a critical incident, the manager on the scene may make the decision to relieve the employee for the remainder of his or her tour of duty. An employee granted such relief will be returned to his or her home terminal, if applicable, without loss of compensation for the tour of duty.	Employee may request relief from duty from his or her supervisor. Employee is returned to home terminal and paid for the balance of trip miles, or shift not completed, under applicable collective bargaining agreements.	The employee may request to be relieved from duty and transported to home terminal.		

Carriers 1 through	Carriers 1 through 3				
	Carrier 1	Carrier 2	Carrier 3		
Time Away – Critical Incident Leave	Subsequent to a critical incident, there may be emotional reactions which may interfere with a person's ability to function safely. These reactions may occur either at the time of the incident, or later. As a result, employees directly involved in a critical incident may request additional time off through their Manager. If this occurs:  • The employee must contact his or her supervisor as soon as he or she feels unable to report for the next tour of duty;  • The supervisor will then make a referral to EAP with which the employee must comply;  • To receive compensation for time off, the employee must contact EAP and request and be approved for temporary leave based on the critical incident.  An employee may be allowed up to the 3 days (72 hours) with pay, with approval by EAP, in coordination with Health Services and the employee's manager. All approved paid time off work will be paid at the basic daily rate of pay.	Employees who believe that they are not safe to work should request time off from their supervisor.  Time off is paid at the basic daily rate of pay, approved by the supervisor, and requires employee to work cooperatively with EAP.	Employees who believe they are not fit for service may request time off from their supervisor. If the request is for an extended period, or otherwise as medically dictated, the Medical Department will be involved. In the absence of a request for leave, supervisors who identify signs and symptoms of stress will alert Medical.		
Additional Leave	Additional time off may be appropriate in some circumstances. This will be determined on a case-by-case basis by EAP in conjunction with appropriate medical/mental health professionals. Compensation for extended leave would be through Railroad Retirement Board (RRB) or complementary disability insurance.	Employee directly contacts his or her supervisor to request additional time off due to the incident.	Same as immediately above.		
Follow-Up	EAP follow-up is initiated immediately or as soon as practical after each incident. If no other follow-up is needed, EAP will then close its files.	EAP continues services based on employee need.	Medical continues involvement as needs dictate.		

Carriers 1 through 3	Carriers 1 through 3					
	Carrier 1	Carrier 2	Carrier 3			
Referral	If an employee or employees indicate they need further attention, EAP will assist them in getting a referral for services near their home.	Employees may request immediate referral for behavioral health services. EAP, whenever possible, refers to trained critical incident specialists—Psychological First-Aid professionals. If employee's symptoms do not improve after 72 hours, employees are referred to these professionals.	As discussed above, in addition to medical resources, there is the opportunity for first level supervisors to consult with senior supervisors, who have access to experts in the field of workplace stress management, for advice.			
Administration (Peer Support Availability)	The administration and interpretation of this policy is the responsibility of Health Services.	EAP trained peer responders available either telephonically or on site.	Not provided by program			

Carriers 4 through 6	Carriers 4 through 6					
	Carrier 4	Carrier 5	Carrier 6			
Accountability	At times there occurs at work a critical incident which exposes employees to actual or threatened death, serious injury, or other threats to the physical integrity of other employees or non-employees. After such an incident, Carrier 4 offers to those exposed employees a post-incident debriefing. This confidential, structured, preventive interview is conducted by an EAP Counselor and is intended to aid in managing any discomfort experienced during or after the incident.	"Carrier 5 EAPs respond to critical incidents in the workplace to address employee's needs for mental health assistance and support. The scope includes all Carrier 5 employees but specifically Train & Engine Service employees. The services include calls to employees, guidance to supervisors, defusing, debriefings, and follow up with employees."	Several departments collaborate to respond to employees impacted by critical incidents. The Risk Management Call Center notifies the EAP 24 Helpline. EAP regional managers are notified and the Peer Support manager begins the process of assessing crew needs under the supervision of the EAP director. Contact is made with local managers and Peer Support volunteers to plan for responding to employee needs. For employee-related injuries and deaths, the Peer Support manager and EAP team are on-site within 12–24 hours. Services are coordinated with local management, Claims, and local resources.			
Scope/Applicability (Population)	All Employees	All Employees	All Employees			

Carriers 4 through 6	Carriers 4 through 6					
	Carrier 4	Carrier 5	Carrier 6			
Process and Application (Management Training for Critical Incident Response Offered Preventive Resiliency Training Offered 24/7 Hour Help Line Availability Counseling Availability)	If a debriefing is appropriate, the supervisor will consult with EAP staff by calling Monday through Friday 8:30 AM to 5:00 PM, or by contacting the EAP Duty Counselor by beeper. The counselor will return the call promptly. The counselor will discuss the incident with the supervisor and, if necessary, with involved employees. If a debriefing is called for, it is scheduled as soon as practical, at EAP offices or another location, as directed by the counselor. After the debriefing has been conducted, the department is notified. EAP staff maintains contact with affected employees during their time out of service and coordinates any additional care, or, if necessary, additional rest time.	Once a critical incident takes place in the workplace, EAP staff is notified by various means. When a train incident is involved, the notification system operates through the National Operation Center. The EAP counselors are notified through an alert system on their Blackberries. They can also be notified through the local management (Road Foremen and Trainmasters), union representatives, or CARE Peer Counselors. The EAP staff will attempt to contact the employees involved in critical incidents up to three times within the first 24 hours. If the EAP is unable to contact the employee within the specified time frame, it is the employee's responsibility to contact the regional EAP staff member if he/she is in need of services. The EAP staff will conduct an assessment to determine the wellbeing of the employee and the level of additional assistance necessary. The employee will be provided with basic stress management techniques to assist in coping. The employee is reassessed in 24 hour increments for up to but not limited to 3 days. In the three telephone sessions, the EAP will assess the employee, providing psychological first aid, educating him or her on typical emotional reactions and evaluating the return to work readiness.	• Full time Peer Support (PS) Resource for Operating, Mechanical and Engineering • Trained Volunteer Peer Network (350 volunteers) • All Employees involved in a critical incident are contacted • Per our critical incident policy employees (when circumstances warrant) receive up to 3 days off paid at a basic day rate. Local management authorizes the time off and pay. Extra time off, if needed, is approved by the superintendent in consultation with the EAP Director. • Onsite services provided by EAP for employee fatalities			

Carriers 4 through 6				
	Carrier 4	Carrier 5	Carrier 6	
Critical Incident Definition	<ul> <li>Serious injury or death of a fellow employee at work;</li> <li>Serious injury or death of a non-employee resulting from railroad operations;</li> <li>Requirement for employees to administer first aid for a serious illness or injury (e.g., CPR or traumatic amputation);</li> <li>Requirement for employees to remove bodies or parts of bodies;</li> <li>Requirement for employees to wait with seriously ill or injured victims for the arrival of Emergency Medical Services;</li> <li>Workplace violence involving assaults or other violence directed at an employee that requires police notification.</li> </ul>	A critical incident is defined as a traumatic event occurring in the workplace where there is serious bodily injury or death of employees, passengers, or trespassers. Also, traumatic events that do not result in bodily injury or death but are catastrophic in nature may be considered. A critical incident is defined in terms of its effects—that is, an event that may lead to a traumatizing reaction.	Defined as unforeseen disruption in standard work operations, typically outside the normal range of human experience, that adversely impacts the immediate safety and wellbeing of railroad employees. Disruptions to standard work operations include but are not limited to: Employee involvement in or direct exposure to grade crossing accidents, pedestrian fatalities, serious injuries, and other catastrophic events outside the range of normal human experience.	
Time Away – Immediate Relief From Duty (Compensated Time Off (number of days specified))	Employees who attend a debriefing will be given an excused absence of 2 days with pay directly following the incident, if they want or need it.	First Three Days—If an employee involved in a critical incident believes that he or she has been traumatized by the event and cannot continue his or her work duties, he or she will be relieved from work assignments under the procedures of the CARE program.	3 days off are provided based on employee request, manager assessment of need, and EAP/PS communication with the employee.	

	Carrier 4	Carrier 5	Carrier 6	
Time Away – Critical Incident Leave	itical Incident will contact the employee, as		work. Typically, at least two contacts are made with employees before their return.  Employees may also be contacted after they have returned to work to monitor their adjustment. Electronic record EAP/PS profiles are created for each CI an employee is involved in so that the cumulative impact of CIs on an employee can be monitored.	
Additional Leave		If it is determined that the employee needs more than 3 consecutive scheduled workdays and needs to be treated for trauma, the employee can be compensated a maximum of 7 work days.	Additional needed time off must be approved by management with EAP involvement.	
Follow-Up		If it is determined by the EAP staff that the employee needs more than 3 consecutive scheduled work days from active duty and needs to be treated for trauma, the employee will be referred to an external Qualified Health Care Professional (QHCP).	In the unlikely event that the employee cannot return to service after 3 days off and any additional time off, the employee is placed on medical leave. Employee is required to work with a mental health provider during this time off.	

Carriers 4 through 6			
	Carrier 4	Carrier 5	Carrier 6
Referral		External Qualified Health Care Professional (QHCP) will be obtained through Amtrak's provider network. As a requirement of the program, the QHCP will be sent an evaluation form to complete and return to the EAP staff. The EAP counselor must receive a diagnosis, prognosis, and treatment plan from the QHCP. As part of the program, the employee utilizes his or her health care coverage and the CARE program pays the copays for up to 10 sessions with the QHCP.	Employees impacted by critical incident events are referred to a network of preferred providers for counseling. EAP managers collaborate with providers to ensure employee is receiving best practice care and is safe to work.

Carriers 7 through 9			
	Carrier 7	Carrier 8	Carrier 9
Accountability		On an as need basis	Organizationally, EAP is located within Risk Management/Medical and is responsible for delivery of all critical incident services, volunteer training, training of field managers, and the reporting of expenditures and outcomes to senior management. Supervisors are responsible for assessing the needs of the employees at the time of the accident.
Scope/Applicability (Population)	All Employees	All Employees	Emphasis is on Hours of Service but all employees are served.

Carriers 7 through 9			
	Carrier 7	Carrier 8	Carrier 9
Process and Application (Management Training for Critical Incident Response Offered Preventive Resiliency Training Offered 24/7 Hour Help Line Availability Counseling Availability)	EAP staff is immediately dispatched to the incident. As the first step, one of our EAP consultants conducts a crisis management consultation by phone with the manager reporting the incident. The specifics of the incident are discussed and the consultant works with the manager to determine an appropriate level of response. Recommendations can include some or all of the following critical incident stress management services:  1. Reminders of EAP availability to all employees at the location;  2. Referral of a particularly troubled employee to EAP services;  3. Distribution of educational recovery materials related to the incident;  4. Communication of online educational resources available through the EAP;  5. Telephonic meetings for managers and employees;  6. On-site wellness seminar related to the incident; and  7. On-site defusing or debriefing session.	On an as need basis	Non-Employee Death: a. Critical incident occurs. b. Incident is reported to the 24/7 EAP Helpline (whether or not the crew has been relieved). c. 24/7 Helpline counselor contacts employees immediately after the conclusion of their mandatory 10-hour rest period. d. 24/7 Helpline counselor assesses the employees and from assessment information determines days off, interventions, and outside referrals (if any), as well as a follow-up schedule which can run from hours to weeks. e. Local EAP Counselor may also follow up with the employees in addition to the follow-up provided by the 24/7 Helpline counselor. f. Local EAP Counselor will also follow up with the local manager and any other officer who worked the accident.  Process—Death of an Employee: a. Local EAP Counselor will go on-site as soon as possible after the fatality to be supportive of employees, managers, etc. b. Local EAP Counselor will meet with deceased coworkers whether or not they witnessed the accident. c. Local EAP Counselor may accompany CSX officers as they make the death notification to family.

Carriers 7 through 9			
	Carrier 7	Carrier 8	Carrier 9
Critical Incident Definition	A critical incident is any situation that causes a work group to experience strong reactions that have the potential to interfere with present or future productivity. A few examples are: Natural Disasters, Robberies, Employee Deaths/Serious Injuries, Assaults, Industrial Accidents, Other Traumatic Events		A critical incident is an event experienced by an employee in the performance of his or her duties that results in the death or injury of an employee or trespasser, or where the field supervisor determines the circumstances to be so uniquely traumatic as to constitute a critical incident.
Time Away – Immediate Relief From Duty (Compensated Time Off (number of days specified))		As need basis	Only a supervisor can remove an employee from service at the time of the CI. If the employee is relieved, he is returned to his home terminal and made whole for the remainder of that shift.
Time Away – Critical Incident Leave		As need basis	An employee who experiences a critical incident must speak with the EAP counselor (local or 24/7 Helpline). EAP recommends/approves 0–3 days off after a telephone assessment with the individual crew members. EAP forwards that approval to payroll, which then pays the employee for the number of EAP-recommended days off at the basic rate using a special CI payment code.
Additional Leave		As need basis	Additional leave under "critical incident" is possible in unusual circumstances; however, if significant additional time off is needed, the employee is transitioned to sickness status. Compensation would then be covered by RRB or personal disability insurance
Follow-Up		As need basis	EAP counselors monitor the employees for days to weeks.

	Carrier 7	Carrier 8	Carrier 9
Referral	Recommendations can include some or all of the following critical incident stress management services:  • Reminders of EAP availability to all employees at the location;  • Referral of a particularly troubled employee to EAP services;  • Distribution of educational recovery materials related to the incident;  • Communication of online educational resources available through the EAP;  • Telephone meetings for managers and employees;  • On-site wellness seminar related to the incident; and  • On-site defusing or debriefing session.		EAP Counselors refer employees for outside counseling services.
Administration (Peer Support Availability)			Carrier 9 has a Peer Support Program and training is provided by EAP counseling staff. We are transitioning to the Psychological Firs Aid curriculum and have appointed one EAP counselor to coordinate this company-wide program.

# **Abbreviations and Acronyms**

AAR Association of American Railroads

BLET Brotherhood of Locomotive Engineers and Trainmen

CFR Code of Federal Regulations

CI Critical Incident

CIRP Critical Incident Response Program
CISD Critical Incident Stress Debriefing

CISP Critical Incident Stress Plan

CIWG Critical Incident Working Group
EAP Employee Assistance Program
FRA Federal Railroad Administration

NCPTSD National Center for Post-Traumatic Stress Disorder

NFFF National Fallen Firefighters Foundation

NIMH National Institute for Mental Health

QHCP Qualified Health Care Provider

PS Peer Support

PTE Potentially Traumatic Exposure
PTEs Potentially Traumatic Events
PTSD Post-Traumatic Stress Disorder

RRB Railroad Retirement Board

SAMHSA Substance Abuse and Mental Health Services Administration

UTU United Transportation Union