Railway Association of Canada

COMPENDIUM OF SAFETY CULTURE TOOLS | 2018

www.railcan.ca

Compendium of Safety Culture Tools 2018

The Railway Association of Canada (RAC) is dedicated to helping railways foster a strong safety culture since 2014. As a part of this initiative, RAC has created a compendium of safety culture tools available to its members.

The compendium contains an array of tools that can be utilized to educate and inform individuals in the railway industry on safety culture. The Railway Association of Canada's safety culture model consists of five elements: leadership commitment to safety, two-way communication, employee involvement, learning culture, and fair/just culture. In order to have a strong safety culture, an organization must have leaders who are committed to safety. Leaders show their commitment to safety through informal (conversations with employees, proper use of PPE) and formal methods (safety walks, safety policies). When leaders prioritize safety in their day to day work it sends a message to employees that safety is an important value.

Two-way communication has an important role in fostering a strong safety culture. An effective communication system flows in multiple directions- not exclusively top down. In addition to the flow of communication, it is important that the organizations have effective systems for reporting safety concerns and safety information. The process for using these systems should be communicated to the workforce and should be easy to use. Effective reporting systems need to have a feedback component so that employees may track the progress and status of their safety concerns.

Employee involvement refers to the opportunities employees have to be involved in safety in the organization. Involvement is more inclusive than following rules and showing up for work. Involving employees in safety whenever the opportunity arises shows employees they are trusted and valued, as well as encourages their ownership over safety processes in the organization.

A learning culture is one in which the collection of safety related information is valued above placing blame. Tracking and analyzing near miss and incident reports is a great way to recognize incident trends and gaps in the organization's defenses. In order to encourage reporting it is important to foster trust between occupational levels. It is not uncommon for employees to fear reprisal and feel skeptical when reporting incidents/near misses. Communicating the importance of learning from safety related incidents is invaluable. When approached with a concern it is important to be welcoming to employees who do come forward with safety information. This is the first step to conquering the idea that reporting=reprisal.

The last element of safety culture is a fair/just culture. In a fair/just culture the discipline policy should be easily accessible and understood by the workforce. It is crucial the discipline policy is clear and used consistently. The way in which the discipline is used effects employees' perception of fairness in the organization.

The compendium of safety culture tools contains 17 tools related to safety culture education and improvement. Table 1 contains the full list of tools in the compendium.

Table 1 — Safety Culture Tools

A. **RAC Safety Culture Elements**

B. **RAC Safety Culture Assessment and Improvement Tool**

C. **RAC SMART Goals Guidance Document**

D. **A Closer Look at Railway Safety Management Systems in Canada**

E. **Railway Safety Act Review 2007**

F. **Railway Safety Act Review 2017–18**

G. CN Strengthening Our Safety Culture (NDA Required)

H. CN Joint Health & Safety Training Program (NDA Required)

I. **BNSF Safety Briefing**

J. **Transport Canada-Just Culture Debrief**

K. **Safety Culture R&D Business Case**

L. **NHS-Incident Decision Tree**

M. **Changing Minds Guide**

N. **Safety Culture Maturity Model**

O. **RSSB Safety Culture and Behavioural Development**

P. **APTA: Safety Management Systems Guidelines**

Q. **9 Methods for Assessing SMS Program Effectiveness**

These tools are intended to provide guidance on facilitating safety culture change and advancement. The compendium is updated annually to include new materials and evaluate the relevance of existing tools.

Table 2 contains a brief abstract of each tool as well as the safety culture element(s) to which they are relevant. Those that do not fall under a specific safety culture element or elements are categorized as "general", relating to the broader context of safety culture, or "SMS".

Table 2 — Safety Culture Tools Abstract

Safety Culture Tool	Abstract	Safety Culture Element(s)
A. RAC Safety Culture Elements	These one page documents were created to give a brief overview and description of the five safety culture elements in the RAC's safety culture model. The RAC safety culture assessment process uses these elements to categorize employee perceptions gathered through surveys and focus groups. The elements are leadership commitment, two-way communication, employee involvement, learning culture, and fair/just culture.	• Leadership commitment • Two-way communication • Employee involvement • Learning culture • Fair/Just culture
B. RAC Safety Culture Assessment and Improvement Tool	This guide explains how the Safety Culture Assessment, used by the RAC, was created. The guide explains the steps of the safety culture assessment including planning, distribution of surveys, data analysis, focus groups, and the creation of an action plan. This guide can be useful for managers who are considering taking part in a safety culture assessment.	• General
C. RAC SMART Goals Guidance Document	The SMART goals guidance document was created for use of RAC members during the action plan phase of a safety culture assessment. This guide is applicable to any railway who is in the process of creating goals (whether or not they have completed an assessment). SMART goals are specific, measurable, achievable, results focused, and time-bound. Creating SMART goals helps to ensure that goals are thoughtfully planned and remain a priority within the organization.	• Learning culture
D. A Closer Look at Railway Safety Management Systems in Canada	A strong safety management system (SMS) is a critical component of Canada's federal railway safety regime. This document created by the RAC explains the background and purpose of safety management systems. SMS is explained by three real examples within Canadian railways. A strong SMS helps to develop a strong safety culture. This can be used as an educational tool for all employment levels to provide information about SMS.	• SMS
E. Railway Safety Act Review 2007	The Railway Safety Act (RSA) was implemented in 1989 to address concerns and future directions of the rail industry in Canada. The 2007 RSA reviewed the operations and efficiency of the Act and provides the Minister of Transportation with advice on rail safety and improvements. The scope of the 2007 RSA includes, but it not limited to, a review the regulatory framework, SMS, human factors, safety awareness, and baseline safety requirements.	• General
F. Railway Safety Act Review 2017–18	The Railway Safety Act (RSA) was implemented in 1989 to address concerns and future directions of the rail industry in Canada. This review focuses on the effectiveness of rail safety legislation, the regulatory framework, and the degree to which the Act meets its objective of ensuring rail safety in Canada. This review is of significant importance, as it highlights the need for developing a safety culture in Canadian Railways (section 1.3 Safety Culture: The Next Step for Safety).	• General
G. CN Strengthening Our Safety Culture (NDA Required)	The CN "Strengthening Our Safety Culture" program is targeted at supervisors and managers. The training teaches safety leadership skills that are designed to lead to the improvement of safety culture in the workplace. After completion of the training, trainees should be able to effectively communicate with employees in safety discussions and engage employees in developing safe behaviors. Included with this training package is a facilitator guide, slide deck, and a safety leadership self-assessment survey. This training focuses on leadership commitment to safety, communication, and engaging employees in safety.	• Leadership commitment • Two-way communication • Employee involvement

Table 2 — Safety Culture Tools Abstract (continued)

Safety Culture Tool	Abstract	Safety Culture Element(s)
H. CN Joint Health & Safety Training Program (NDA Required)	This training program provided by CN includes 10 modules of health and safety material and a self-assessment. Each module has a unique focus on health and safety and includes a knowledge check. The training materials include an instructor's guide and a participant's manual. Through this training program, employees can learn about Canadian Occupational Health & Safety Regulations, internal responsibility systems, risk assessments, and many other areas of health & safety in the workplace. This training benefits individuals at all employment levels.	• Employee involvement • SMS • Learning culture
I. BNSF Safety Briefing	This safety brief provided by BNSF is a good example of learning culture. The safety brief is an effective way to share information with all staff. The brief describes an incident in which four co-workers were injured following a multiple train collision. The incident is described including crew information, environmental conditions, and train operations. Following the description there is a question and answer section which addresses situation based questions. For example "What conditions may not warrant dimming a headlight even when permitted by rules?" This provides an opportunity for staff to recall rules pertaining to this situation. The BNSF Safety Briefing is a good example of a tool that promotes two-way communication, employee involvement and learning culture.	• Two-way communication • Employee involvement • Learning culture
J. Transport Canada-Just Culture Debrief	This tool discusses two types of culture: punitive culture and just culture. A punitive culture is one in which there is no differentiation between an accidental and intentional error. Punitive cultures functions with the belief that human error can be completely eradicated. However, this is not the case. A just culture is one in which it is understood that human error is going to occur but can be limited through the encouragement of safe behaviors and knowledge of internal regulations. This tool can be used to educate and train staff at all employment levels on the benefits of a fair/just culture.	• Fair/Just culture
K. Safety Culture R&D Business Case	The safety Culture R&D Business Case discusses the importance of safety culture in the Canadian railway industry. The link between safety culture and an organization's safety management system is explained, and the role of Transport Canada and the Railway Association of Canada are discussed. This report can be used as an educational tool for managers to understand the process of a safety culture assessment. This tool can be useful for railways who are interested in taking part in the RAC's safety culture assessment.	• General
L. NHS-Incident Decision Tree	This tool is based on James Reason's culpability model. While it is intended for use in the healthcare industry, it can be a useful tool during incident investigation. The incident decision tree can aid managers and supervisors conducting incident investigations to understand what events lead to the accident, if the barriers to prevent accidents failed, and if employees involved followed proper procedures. The use of this tool promotes a fair/just culture.	• Fair/Just Culture
M. Changing Minds Guide	This guide was originally created and validated for use in the UK oil and gas industry. The Changing Minds Guide uses the Safety Culture Maturity Model as a framework for the development of strategies and the selection of interventions to promote continuous safety improvement. The guide has two parts: Part one focuses on behavioural issues and clarifies common safety definitions. Part two consists of a toolkit and guidance on implementing the safety culture improvement process. This guide can be used to improve leadership commitment and SMS at all employment levels.	• Leadership commitment • SMS

Table 2 — Safety Culture Tools Abstract (continued)

Safety Culture Tool	Abstract	Safety Culture Element(s)
N. Safety Culture Maturity Model	The safety culture maturity model is based on a maturity model that was created to improve the manner in which software is created and maintained. The SCMM model of safety culture was originally created for use in the offshore oil and gas industry. It is intended for organizations to establish their level of safety culture and how they can strengthen their safety culture. The model has five levels; each level builds on the next. As an organization progresses through the safety culture maturity model they remove the weaknesses and collect the strengths of each successive level. In this report the development of the SCMM is explained and each of the five levels of safety culture are described. This model can be used as educational material for management to promote leadership commitment to safety and learning culture.	• Leadership commitment • Learning culture
O. RSSB Safety Culture and Behavioural Development	The RSSB created this guide to provide safety professionals within the rail industry practical information and advice on how create a culture of continuous safety improvement. The goal of this guide is to create an industry-wide approach to safety that will reduce repetitive actions and exhaustion of resources. Managers and supervisors can use this as a guidance tool for safety culture development. Employees, supervisors, and managers can all benefit from this guide that promotes learning culture. This guide includes an appendix with series of self-report tables. Each table focuses on theme (ex. actions to support a strong reporting culture, putting people first, employee consultation and engagement, etc.) and gives examples of behaviors that are encourage that theme.	• Learning culture
P. APTA: Safety Management Systems Guidelines	The American Public Transportation Association created this set of guidelines for public passenger transportation organizations to gain a better understanding of SMS within their company and gives examples of implementation strategies that can be used to reach the SMS goals of individual companies. This guide is not prescriptive, nor was it created for organizations to meet the minimum standard of SMS rules and regulations, rather it is to infuse safety into all aspects of an organization. This report can be utilized to provide general education on safety management systems.	• SMS
Q. 9 Methods for Assessing SMS Program Effectiveness	This document was created by the Committee on the Effectiveness of Safety and Environmental Management Systems for Outer Continental Shelf Oil and Gas Operations. The 9 methods proposed are: compliance inspections, audits, peer reviews and peer assists, key performance indicators, whistleblower programs, periodic lessee reports, tabletop exercises or drills, monitoring sensors, and calculation of risk with SEMS in place. The 9 methods for assessing SMS program effectiveness can be applied to the railway industry. These methods are described in detail and range in effort, time, and utility. This document can be a useful tool in educating supervisors and managers in assessing SMS programs.	• SMS

The compendium of safety culture tools is updated and reviewed annually. If you have material you would like to add to the compendium or would like to see a tool that addresses a new topic, please contact Michael Gullo at **mgullo@RAILCAN.ca**.