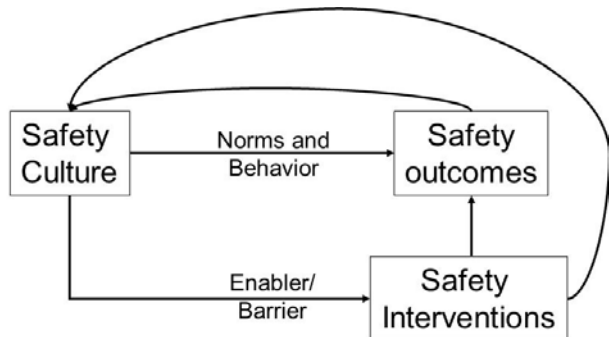


## Safety culture overview

It is widely recognised that a positive safety culture is required for effective health and safety management. It is important for leaders to understand safety culture and their role in creating a positive culture. This sheet will provide a brief overview of safety culture. There are additional sheets that provide more information about specific topics such as leadership (sheet 2) and improvement (sheet 3). There is good evidence that safety culture is related to important safety outcomes such as occupational injuries<sup>i</sup> process safety and disasters<sup>ii</sup> (see sheet 4 on outcomes). Safety culture influences safety outcomes directly through accepted workplace norms and behavior and indirectly as an enabler or barrier to the adoption of safety interventions.

### Relationship between safety culture and outcomes



The term safety culture was coined in 1986 to explain the underlying cause of the Chernobyl nuclear disaster. There are numerous definitions of safety culture, nearly one for every alleged expert. In Canada the following definition of safety culture has been used by the NEB, CNSOPB and C-NLOPB: *“the attitudes, values, norms and beliefs, which a particular group of people shares with respect to risk and safety”*<sup>iii</sup>. This definition highlights the shared nature of safety culture and that it includes values and beliefs. Safety culture is not simply employee safety attitudes. While this is not the only definition or the most comprehensive, it is consistent with the broader literature. The term safety climate is often used interchangeable with safety culture. Safety climate is a subset of safety culture and refers to employee perceptions of the relative importance managers’ place on safety. Over time, safety culture has come to incorporate both health and environment. Technically it

would be more accurate to talk about a health, safety and environment culture, but this is a bit cumbersome.

Over the last quarter of a century, there has been significant research into safety culture. Initially much of this research focused on the nature of safety culture and measurement. It is generally agreed in the academic literature that safety culture is multi-dimensional. That is to say, there are a number of elements or dimensions that make up safety culture. There is less agreement about the specific dimensions that constitute safety culture. Some models such as the International Atomic Energy Agency (IAEA) has five dimensions, while the Bureau for Safety and Environment Enforcement (BSEE) has nine. While these models look very different, there is significant overlap across models. The models with fewer dimensions tend to be more general and capture the concepts in models with more dimensions. There is no ideal or best model, but it is important to understand how the model being used relates to other models (see sheet 5 on composition).

The increased popularity of safety culture has resulted in the term being used in many different ways, which has led to confusion. There is a risk that safety culture will turn into a catchall for all aspects of safety. Recently, new terms, such as process safety culture have been coined, to highlight the importance of culture in the management of major hazard risks. In practice these terms have added little value and are likely to cause confusion (see sheet 6 on clarifying misconceptions).

It is important for senior managers, to understand their organization’s safety culture, including strengths and weaknesses. It is dangerous to assume that a low injury rate means the culture is positive. Sadly there are many examples of organizations with a low injury rate, but a poor safety culture, which resulted in a major disaster. Organizations should proactively assess their culture and not rely solely on safety outcomes. There are many ways of assessing safety culture and current best practice recommends the adoption of a multi-method approach (see sheet 7 on assessment). This involves

## Safety culture overview

capturing information from different sources about the safety culture. For example employee perceptions can be captured by a survey (see sheet 8 on perception surveys). Workplace practices can be captured through observation of people at work or meetings. Document reviews and worksite audits can be used to assess the extent to which systems promote the desired culture (see sheet 9 comprehensive assessment). Once the output from the different assessment methods has been collected, they should be integrated to provide an overall picture of the culture. The process of integration should involve a cross-section of employees. The analysis should identify areas of strength and areas in need of improvement.

Leaders play a key role in shaping the culture. They do this by articulating key organizational and personal values. Senior leaders influence the safety culture by setting policy, determining reward structures, tracking performance, ensuring that adequate resources are available and convincing employees that safety is a personal value. It can be difficult for senior leaders to convince front-line employees that they are truly committed to safety. There are limited opportunities for senior leaders to speak directly to front-line staff. Even when leaders address employees directly they may not be believed, because what manager is going to say that safety is not important. It is therefore necessary for senior leaders to create systems and processes that demonstrate commitment on an ongoing basis. These systems should include ways to motivate middle managers and supervisors to demonstrate commitment to safety. It is also important for senior leaders to convince their direct reports that safety is truly important to them. In the day-to-day business environment it can be easy for safety to drop down the agenda. Often other business objectives can appear more pressing and if safety is not continually emphasised there is a risk that safety will be compromised in order to achieve other more immediate goals. Sadly when a manager is perceived to have compromised safety, it can cause employees to lose faith in all managers' commitment to safety. This one lapse can undo many of the positive actions that leaders have taken (see Sheet 2 on leadership).

Creating and maintaining a positive safety culture is a continuous and ongoing process that takes effort. Organizations should adopt a systematic approach to safety culture improvement. They could do this by adopting a five-year plan for safety culture improvement or use a safety management systems approach to promote the desired culture. Adopting a systematic approach involves creating a shared **vision** for the culture, specifying **responsibilities** of key groups to create this culture, putting **plans and actions** in place to promote the desired culture, **assessing** the culture on an ongoing basis, **auditing** safety culture processes and **reviewing** progress and creating improvement plans. If an organization is not actively promoting a positive safety culture, then it is very unlikely to maintain a positive culture over time (see sheet 3 on improvement).

### Key Points:

- Safety culture is an important concept that leaders must understand in order to manage health, safety and environment effectively.
- Safety culture is a very broad concept and impacts all aspects of the management of health, safety, and environment.
- Leaders play a key role in creating and maintaining a positive safety culture.
- There is no simple way to create a positive safety culture, as it evolves over time and is a reflection of the true values of the organization.
- There are additional sheets in this series that provide more detailed information on safety culture models, assessment, improvement, and leadership.

---

<sup>i</sup> Clarke, S. The relationship between safety climate and safety performance: A meta-analytic review. *Journal of Occupational Health Psychology*. (2006), Vol. 11, ., pp. 315-327

<sup>ii</sup> Fleming, M. & Scott, N. (2012) *Cultural disasters: Learning from yesterday to be safe tomorrow*. Oil and Gas Facilities, Vol. 1, No. 3 (June). Society of Petroleum Engineers. Houston, Texas

<sup>iii</sup> NEB, C-NLOPB and CNSOPB (2014). Advancing safety in the oil and gas industry: Statement on safety culture. <http://www.neb-one.gc.ca/clf-nsi/rsftyndthnvrnmnt/sfty/sftycltr/sftycltr-eng.html>