

## Comprehensive assessment methods

This sheet provides an overview of safety culture assessment techniques that are used when conducting a comprehensive assessment. A comprehensive safety culture assessment involves going beyond an employee perception survey. Surveys only capture employees' perceptions of the relative importance of safety and this is influenced by employees' expectations about the importance placed on safety. In addition, perceptual measures can be biased by factors not directly related to safety (e.g. labour disputes). Assessment methods can be grouped into three broad categories, namely:

- Document analysis (e.g. review of incident investigations and safety communication).
- Perceptual (e.g. surveys, interviews and focus groups),
- Observation (e.g. worksite observation and meeting observation),

It is recommended that one method from each group is used when assessing safety culture.

Documentation is an important part of a safety management system, as it describes how the system is supposed to operate, the outcome of audits or external reviews and lessons learned from incidents. Document analysis is a useful place to start a safety culture assessment as it provides input for observation, focus groups and interviews. Document reviews also provide an overview of the entire safety management system, which is helpful for those performing the assessment. To conduct a document analysis, a list of the entire set of documents available is examined in order to select a sample of documents to review. Documents that are typically included are minutes from safety meetings, risk assessments, procedures, incident investigations, internal and external audit results, safety suggestions, maintenance records, unscheduled maintenance, and training records. The results of all the different document types are then reviewed to identify common themes that cut across all documents<sup>1</sup>. The main limitation of document analysis is that on its own it provides limited insight into the culture; rather it identifies areas or issues that require further exploration.

Perceptual measures are critical in order to conduct a meaningful assessment of safety culture. It is vital to understand how key stakeholders understand and think about safety within the organization. Perceptual measures include surveys, interviews and focus groups. Perception surveys were covered in detail in sheet 8, so they will not be discussed further here.

Interviews are a flexible way to capture safety culture perceptions from key stakeholders. Interviews can vary from structured to unstructured. Typically safety culture interviews are semi-structured as the interviewer has a series of questions that they plan to ask but are flexible and can add more probing questions or not ask questions that have already been answered. Interviews can be time consuming to conduct (1 to 2 hours) and even longer to analyse. Therefore only a limited number of interviews are conducted (i.e. less than 20). It is important that a cross section of stakeholders, are interviewed. The interviews should include those who are actively involved in safety (e.g. Joint occupational health and safety committee members) and those who are not involved (e.g. frontline staff). It is also important to interview managers and supervisors.

It is important to explain to participants how their interview responses will be used (e.g. confidentiality) and that participation is voluntary. Interviews need to be conducted in a private office to avoid interruptions and to ensure confidentiality. Ideally the interviews are conducted by an independent third party so that participants can be open without concern of their comments being held against them later. It can be helpful to record interviews so that they can be transcribed later. While recording ensures that interview transcripts are accurate, recording can inhibit participants from speaking openly and it is very time consuming to transcribe the interviews. If interviews are being recorded then it is important to get the participant's permission to record and enable them to turn off the recorder at any time. Once the interviews are completed then the transcripts are analysed to identify common themes and compare the responses of key groups (i.e. managers versus employees).

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Focus groups are similar to interviews, except they involve a group of participants rather than with one individual. Typically safety culture focus groups are semi-structured, as the facilitator typically presents the groups with a series of questions or topics to discuss. Sometimes survey results are presented to the group and they are asked to provide their interpretation of the results and potential action to improve.

It is important to set clear ground rules when running a focus group, as it is easy for the discussion to get out of hand or off topic. It is important to note the limits of confidentiality with a focus group, as there are many participants in the group and they could tell others about the focus group discussion. It is also important to advise participants not to name specific individuals, as this is unfair to those individuals and may unfairly damage their reputation. Effective facilitation requires some skill and significant effort. It is therefore virtually impossible to take good notes while facilitating the session. Often facilitators will write the main points on a flip chart to ensure they have accurately understood the comment from the group. In addition, it is useful to record the focus group to ensure that all the comments are captured. Similar to interviews the focus groups are typically transcribed and analysed to identify common themes.

Observation can include a wide range of activities including watching employees perform routine tasks, observing management meetings and employee manager interactions. Observation provides an opportunity to observe safety culture in action, as it captures actual behaviour rather than self-report behaviour. To conduct an effective task observation requires some knowledge of the task being performed and relevant control measures. It is important for the observer to introduce themselves to the person being observed and seek their permission to conduct the observation. While it is possible that people will change their behaviour if they know that they are being observed it is better than sneaking up on people, as this sends out all the wrong signals. It is often helpful to have an observation checklist to capture notes and

details of the observation. Once the observation is completed then it is good practice to debrief with the person who was observed and seek their perspective on your observations. For example if you observed a rule violation the person observed may explain why this occurred or why their actions did not constitute a rule violation in this setting. One challenge for observers is if they witness someone at risk they should intervene to prevent harm occurring.

Observation of meetings can also provide insight into how safety is handled on a day to day basis. As with task observations, the observer should introduce themselves and the purpose of the observations to the people attending the meeting and then sit quietly and observe the meeting. Again it is helpful to have a checklist to record observations. It is important not to be drawn into discussions during the meeting. Observation can provide important information about current safety practices and how safety is being managed. It is useful to compare the results of the observation to those obtained from perceptual measures. For example, if employees report high compliance to rules in the survey, yet employees are observed not complying, then it is useful to investigate this further through interview or focus group. Observation can be a time consuming activity as it requires significant preparation to be completed effectively.

### Key Points:

- There are three main types of methods used to assess safety culture.
- All methods have their strengths and weaknesses and therefore it is important to use multiple methods (ideally at least three).
- Obtaining conflicting results from different methods is not unusual and can provide greater insight into the safety culture.

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<sup>i</sup> Bowen, G. (2009). Document analysis as a qualitative research method. *Qualitative Research Journal*, 9, 27 – 40.