

# Fallacies in the Safety Fable

Some "facts" about safety you shouldn't take at face value.

by Terry L. Mathis

A fable is a story designed to reveal an edifying or cautionary lesson. Even though most of us don't take fables at face value, they can influence our thinking. Although fiction, fables have enough truth to attract us and enough fallacies to make them misleading.

Safety management has developed its own fable. It goes something like this:

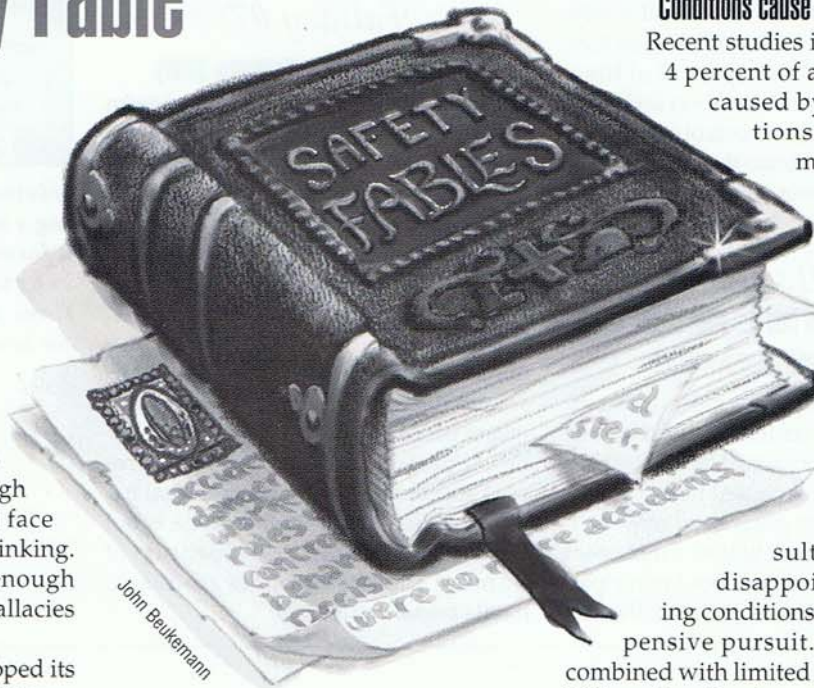
*The way to manage safety is to provide workers with a safe working environment, good safety rules and awareness training. Supervisors and safety professionals should enforce safety rules, reward safe employees and investigate accidents to determine the root cause so similar accidents can be prevented. When such a program is working well, accident rates will go down.*

Although it appears true on the surface, this fable has its own set of fallacies that can influence our thinking on how to design and implement safety management programs.

## Fallacy #1:

**Low accident rates indicate safety programs that are working well.**

This is true in the long term but not necessarily in the short term. A low accident rate for last month or last year doesn't necessarily mean accidents are under control. While random variation of accidents can result in cycles that last for months or years, they are not really trends. Accidents that seem to have gone away for no reason tend to



come back. The sign at the front gate boasting of the number of days since the last recordable accident is more likely a sign of good luck than good safety management.

There is also another danger in thinking of safety as a "lack of accidents." A negative definition (what safety is not) does not effectively tell a worker what to do or not to do; it only tells what result "not to have." Workers figure the lack of accidents means that what they are doing is safe and develop a false sense of security about the very actions that cause accidents.

## Fallacy #2:

**Safety professionals can keep workers safe.**

There is no doubt that safety professionals can contribute to engineering safe environments, training and increasing safety awareness. But safety is ultimately the responsibility of each worker. Team-based safety efforts in which workers are genuinely involved and empowered are almost always more successful than top-down man-

agement models. Safety professionals cannot be safe for workers and workers cannot hang their brains at the door and be supervised into safety.

## Fallacy #3:

**Conditions cause accidents.**

Recent studies indicate that 3 to 4 percent of all accidents are caused by unsafe conditions alone. The remainder are caused by unsafe acts or a combination of acts and conditions. This means that if the majority of safety efforts are aimed at improving conditions, the results will likely be disappointing. Improving conditions is usually an expensive pursuit. The high costs combined with limited results make the ROI unattractive to most managers.

## Fallacy #4:

**Enforcing rules improves safety.**

The truthfulness of this statement is directly proportional to the effectiveness of the rules and inversely proportional to the IQ of the work force. Rules tend to be created without the participation of workers and are often out of touch with the realities of the work site. As the rules grow more numerous, they are compiled in manuals, which are awkward to access and time-consuming to use. Decisions about safety issues tend to be made on the spot with internalized information rather than referenced from manuals. For these reasons, compliance with safety rules is very low at most facilities.

In addition, rules are usually enforced by the means of punishment. Companies have problems enforcing rules with reduced numbers of supervisors and safety professionals. Furthermore, workers resent being policed and usually comply only when supervisors are present.

*Fallacy #5:*

**Rewards improve safety.**

Rewards definitely affect short-term accident data. The real question is whether rewards such as bonuses improve safety or just suppress reporting. The answer often depends on the criteria for the rewards. If bonuses are based on safe behavior, they can improve actual safety. However, if they are based on "not having an accident" for a period of time, workers are likely not to report accidents. Employees must have control over the action necessary to obtain the reward. They do have control over what they report.

*Fallacy #6:*

**Investigating to find the root cause of accidents will improve safety.**


Root cause analysis is most useful for understanding accidents caused by mechanical or environmental factors and less useful for accidents caused by the actions of employees. The purpose of most accident investigation is blame. Employees are seldom very excited about participating in an inquisition. In addition, the zeal

for finding the root cause and someone to blame often leads investigators to overlook the easiest and most logical ways to prevent accidents. Accidents can be more effectively reduced by studying "how to prevent it" than by discovering "who or what caused it."

*Fallacy #7:*

**Awareness training improves safety.**

If you are only looking for short-term results, this approach may work for you. Our research indicates that awareness training, if done effectively, has good results for up to 30 days, fair results for 30-60 days, and almost no results after 90 days, at least if it is not reinforced by more tangible actions. Workers tend to do their job on automatic pilot, by habit rather than conscious decision. Awareness training wears off as workers fall back into habitual patterns. The only way to prevent accidents is to change habitual behavior. Changing thoughts alone is not enough. Without spaced repetition of training and performance feedback, habits seldom change.

Is your safety management program based on fallacies or on reality? The answer to this question will be crucial in determining whether your safety efforts are going to have long-term credibility and success. 



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