Γhe to Provide Workplace **Safety**

By Robert F. Eckhardt

ocial consciousness or moral (right vs. wrong) obligation to provide workplace safety varies among individuals although world political history and religious codes indicate increasing assumption of such responsibility. Many conscientious safety professionals struggle with this sense of moral obligation when, for example, their company decides to ignore safety recommendations.

This internal struggle leads to the very crux of the underlying safety problem: How much time and financial expenditure is "enough" safety? And how is "enough" defined? (In this article, the definition of "safety" is "an acceptable level of risk," while the term "safe" refers to "without risk," which can only be achieved in theory.)

From a mathematical viewpoint, every activity in which people engage has risk, therefore nothing is completely safe. The real question then becomes, "How far do we go in reducing risk? At what point does the moral and job oblig-

The "Other Voices" feature section of Professional Safety serves as a forum for authors with distinct viewpoints. Opinions expressed are strictly those of the author(s). Although Professional Safety does not necessarily endorse these opinions, we hope they will stimulate healthy discussions on matters of vital concern to the safety and health profession.

ation stop? This invisible line moves constantly since it depends on many factors.

The common-sense definition of "enough" risk reduction (or safety) is based on two key factors: 1) what the law dictates and 2) the need to achieve balance between losses and safety costs. In other words, losses are weighed against costs and regulatory requirements; however, as Figure 1 illustrates, the situation is more complicated than that. At some point, management determines a spoken, written or implied limit within which the safety professional must work.

This article discusses the struggle of the safety professional's willingness to assume risk on the part of others (employees) and the perceived moral obligation to provide workplace safety. To some, the question of providing safety may seem more political philosophy than personal ethics. This article does not debate that issue; rather, it focuses on the evolution of moral implications of providing safety to others.

THE BASIS FOR LEGAL & MORAL OBLIGATIONS

Legal and moral obligations to provide workplace safety have been defined in various laws and religious codes for at least 5,000 years. One of the earliest origins of the safety/political/ethical issue occurred around 2500 BC, when Babylonian ruler Hammurabi issued 271 laws. Several of these pertained to safety, and

many provided for penalties or compensation due to injury caused to another, intentional or not. An example follows:

Law #198. *If* (a person) put out the eye of a freed man or break the bone of a freed man, he shall pay one gold mina.

Hammurabi also established the "eye for an eye and a tooth for a tooth" laws. These were not designed to enable personal vindication but rather to establish a legal penalty for those who caused injury to others. In other words, "the penalty shall fit the crime." These laws have been sorely misunderstood throughout history as approval for vindication when, in fact, they are simply action-imposed penalties based on "fairness" that is to be carried out by the governing authority, *not* the victim.

Hammurabi also instituted stiff penalties for unsafe construction and demanded building warranties, as exemplified in the following two laws.

Law #229. If a builder build a house for someone, and does not construct it properly, and the house which he built fall in and kill its owner, then that builder shall be put to death.

Law #235. If a shipbuilder build a boat for someone, and do not make it tight, if during that same year that boat is sent away and suffers injury, the shipbuilder shall take the boat apart and put it together tight at his own expense. The tight boat he shall give to the boat owner.

Whether the moral responsibility for safety is innate or learned is unknown, but the origin of the concept can be traced back at least 5,000 years.

This ruler clearly had firm moral convictions regarding people's safety obligations toward others. Certainly, during the time of ancient Babylon, a legal duty was established by a sense of moral duty, or at least a perceived social code, that harming others should result in penalty. Safety professionals now spin the concept in positive terms—such as establishing vision and values—although the work of Pavlov and Skinner has been heralded as proving that behavioral reinforcement works. Of course, Hammurabi and others knew this long ago and established a social responsibility for others.

The Ebers Papyrus and the Edwin Smith Papyrus from ancient Egypt (1500 and 1700 BC, respectively) provide a "textbook of surgery" that discussed treatments for various injuries. While it is admittedly a stretch to apply this reference to workplace safety, one must acknowledge that providing medical care poses a similar moral dilemma as providing for workplace safety. Around 1500 BC, Ramses III reportedly hired physicians to care for mine and quarry workers as well as those engaged in the construction of public

works such as canals and

large temples.

Although the cause for this action remains unclear, one can point to the fact that most religions have established a spiritual or moral decree similar to the Golden Rule—"Do unto others as you would have them do unto you." Certainly this rule could be interpreted as a moral obligation to provide safety to others.

For example, in the Analects of Confucius, written circa 500 BC (at the time Confucianism was established), a pupil of Confucius proposed our duty to others. Confucius later phrased it another way:

> 5.12: What I don't want others to do to me, I do not want to do to others (Confucius' pupil).

> 12.2: (One way to divine love is) not to do unto others what we would not thy should do unto (Confucius).

Confucius lived during a tumultuous time when such revelations put him in great danger. As a result, he never directly addressed the duty to provide for safety nor the government's duty to provide safety as a social responsibility; doing so would have meant certain death.

When performing a word search of the Qu'ran or Koran (Allah's Word), the word "safe" or "safety" occurs between two and 22 times, depending on the translator and the wordsearch directory used. Although the author did not attempt to draw parallels or make interpretations regarding the duty to provide safety, one quotation is provided.

[9:6] If one of the idol worshipers sought safe passage with you, you shall grant him safe passage, so that he can hear the word of God, then send him back to his place of security. That is because they are people who do not know. (Translated by Dr. Rashad Khalifa.)

About 400 BC, Plato wrote a series of laws which provided, among other things, that the state be responsible for providing safety and security to its citizens. In the Athenian Constitution written by Aristotle in 350 BC, many laws reference the state's responsibility to provide for public safety. In Metaphysics, section 1013b, Aristotle defines safety as that which can be achieved in the following example:

And again the same thing is sometimes the cause of contrary results; because that which by its presence is the cause of so and so, we sometimes accuse of being, by its absence, the cause of the contrary as, e.g., we say that the absence of the pilot is the cause of a capsize, whereas his presence was the cause of safety.

Aristotle also explains cause and effect, which is at the foundation of rootcause analysis.

As this brief review shows, a moral responsibility for safety was well-established early in history. Whether this responsibility is innate or learned is unknown, but the origin of the concept can be traced back at least 5,000 years.

The Bible yields between 12 and 28 references to "safe" or "safety," again depending on the translation. These terms are addressed (for example, in

> Luke, Matthew and Galatians) as spiritual safety, to "dwell in safety," or safety from war or illness. However, no direct references to a duty for one to provide for another's workplace safety and health are found in the Bible, other than the Golden Rule, which is repeated in many places.

Deuteronomy 22:8 suggests a moral duty to provide for the safety of guests. "When you build a new house, make a parapet around your roof so that you may not bring the guilt of bloodshed on your house if someone falls from the roof." At this time, people often sat on rooftops to visit since they could catch the breeze and enjoy the view.

About 200 BC, the effects of lead poisoning were described by Greek physician Nicander. Certainly, the era of lead contamination in Rome in the first two centuries AD inspired studies on its associated prob-

FIGURE 1

Factors determining our action level to provide safety to others. This model is based on the assumption that everything we do has risk and, therefore, nothing is, nor can be made, 100 percent risk-free (safe).

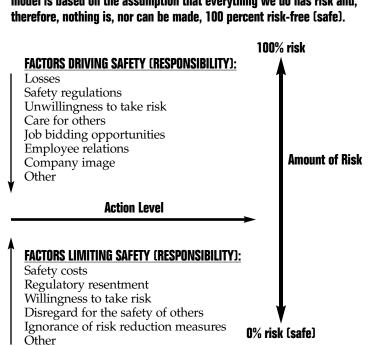


FIGURE 2

World Religion Versions of the Golden Rule

The Golden Rule establishes a moral level of care for others that we are responsible to provide. This moral directive is a common theme in most, if not all, of the world's major religions.

Buddhist: Hurt not others in ways that you would find hurtful.

Christian: All things whatsoever ye would that men should do to you, do ye even so to them.

Confucian: Do not unto others what you would not have them do unto you.

Hindu: This is the sum of duty; do naught unto others which if done to thee would cause thee pain.

Islamic: No one of you is a believer until he desires for his brother that which he desires for himself.

Jain: In happiness and suffering, in joy and grief, we should regard all creatures as we regard our own self.

Sikh: As thou deemest thyself, so deem others.

Taoist: Regard your neighbor's gain as your own gain, and your neighbor's loss as your own loss.

Zoroastrian: That nature alone is good which refrains from doing unto another whatsoever is not good for itself.

Source: Theosophy Library Online.

lems. For example, Pliny the Younger identified the effects of lead poisoning and Pliny the Elder developed a lead dust respirator from an animal's bladder.

Following this period, safety, health and medical knowledge grew at an everincreasing rate. Asbestos closely followed (although many people perceive it as a recent concern). The Middle Ages saw significant growth in knowledge regarding safety, health and medicine as well.

Today, most countries have safety and health laws. It is even trendy in many management circles

to "go beyond" safety and health regulations. Tort cases and various jury decisions (such as the infamous McDonald's spilled coffee incident) reflect a continued moral duty to provide safety to others.

Although the actions of many world leaders and nations have caused danger, war, unwarranted executions, genocide and other events opposed to safety responsibility, there remains an overriding morality among people worldwide to provide safety for employees and citizens. Just consider that during the last 100 years, many safety boards, organizations, associations and councils have been formed, none derived due to regulatory mandate or religious history. More recently, the safety profession has seen various branches of specialization, and an entire industry has emerged to provide consulting services, equipment, tools, systems and training.

The OSH Act of 1970 furthers this sense of duty, calling on employers as follows:

Each employer shall furnish to each of his employees employment and a place of employment which are free from recognized hazards that are causing or are likely to cause death or serious physical harm to his employees.

The reasons for this duty are described as being both financial and for the "general welfare":

The Congress finds that personal injuries and illnesses arising out of work situations impose a substantial burden upon, and are a hindrance to, interstate commerce in terms of lost production, wage loss, medical expenses and disability compensation payments.

... (OSHA's duty is) to regulate com*merce* . . . and to provide for the general welfare, to assure so far as possible every working man and woman in the nation safe and healthful working conditions and to preserve our human resources....

Regulated enforcement of workforce safety has produced mixed results. Perhaps the best recent example of spiritually driven safety is found in the Seven Spiritual Laws of Success (Chopra). Law #2 states, "In our willingness to give that which we seek, we keep the abundance of the universe circulating in our lives. If you want to get something, give it."

Clearly, today's business leaders who provide comprehensive safety programs that exceed regulations are following both a moral and a spiritual path. Although other issues are certainly involved with these decisions, morality is an issue these leaders frequently cite. Of course, prosperity generates an environment where reduced risk is affordable whereas desperation often creates an environment for increased risk.

Hammurabi's Code of Laws, written 4,500 years ago, formally introduced the moral obligation to provide a safe workplace. Whether this obligation or duty is defined as a religious, spiritual or legal responsibility depends on the individual. Regardless of the source, however, the sense of this moral duty has dramatically increased over the past century—and will likely continue to do so. ■

REFERENCES

Breasted, J. The Edwin Smith Surgical Papyrus. Chicago: University of Chicago Press, 1930.

Chopra, D. The Seven Spiritual Laws of Success. New York: Harmony Books, 1994.

Ebbell, B. Die altagyptische Chirugie. Die chirurgischen Abschnitte des Paryrus E. Smith und Papyrus Ebers. 1939.

Ebers, G. Papyrus Ebers, das hermetische Buch uber die Arzeneimittel der alten Agypter in hieratischer Schrift. Leipzig, 1875.

Felton, J.S. History of Occupational Health & Safety. Chicago: NSC, 1986.

Hammurabi. "Hammurabi's Code of Laws." Trans. by L.W. King with commentary

from C.F. Horne, (1915) and Encyclopedia Britannica, 11th ed. C.H.W. Johns (1910). http://www.escape.com/~farras/. Jan. 7,

National Safety Council (NSC). Accident Prevention Manual for Industrial Operations, Administration and Programs. 9th ed. Chicago: NSC, 1988.

Plato in Twelve Volumes. Vols. 10, 11. Trans. by R.G. Bury. Cambridge, MA: Harvard University Press; London: William Heinemann Ltd., 1967, 1968.

Theosophy Library Online. "World Religion Versions of the Golden Rule." http://theosophy.org/tlodocs/GoldnRul. htm.>

Robert F. Eckhardt, P.E., CSP, is project manager/ consultant with N.J. & Associates Inc., Addison, TX. A member of ASSE's Gulf Coast Chapter, he has served as a proctor for the Board of Certified Safety Professionals, is a former member of the Texas Safety Assn. board of directors and representative councilor for the Houston Engineering Society. Eckhardt currently is a columnist for Concrete Products magazine and is the author of the book Health and Safety in the Concrete Products Industry.

READER FEEDBACK

Did you find this article interesting and useful? Circle the corresponding number on the reader service card.

YES	37
SOMEWHAT	38
NO	39