How do we measure the intrinsic value of a life, in addition to the instrumental value? Though perhaps an interesting mental exercise in which to engage, it is also a critical component of some business decisions and dilemmas. The following decision, though decades old, continues to teach us the hazards of considering only the instrumental value of a life. Though the instrumental calculation seems to make sense, and presumably it did at the time to those involved, you will see in hindsight that the "human element" seems to be missing.

In 1968, Ford Motor Company made a historic decision regarding the Ford Pinto, which was engineered with a rear gas tank assembly that had a tendency to explode in accidents that involved some rear-end collisions. The company allowed the Pinto to remain on the market after it determined that it would be more costly to engage in a recall effort than to pay out the costs of liability for injuries and deaths incurred. In an infamous memo, Ford's senior management calculated what the company would likely have to pay per life lost. It is noteworthy that these estimates were not Ford's alone but were based instead on figures from the National Highway Traffic Safety Administration.

Expected Costs of Producing the Pinto with Fuel Tank Modifications:

- Expected unit sales: 11 million vehicles (includes utility vehicles built on same chassis)
- Modification costs per unit: \$11
- Total Cost: \$121 million [11 million vehicles × \$11 per unit]

Expected Costs of Producing the Pinto without Fuel Tank Modifications:

- Expected accident results (assuming 2,100 accidents):
 - 180 burn deaths
 - 180 serious burn injuries
 - 2,100 burned out vehicles
- Unit costs of accident results (assuming out of court settlements):
 - \$200,000 per burn death
 - \$67,000 per serious injury
 - \$700 per burned out vehicle
- Total Costs: \$49.53 million [= $(180 \text{ deaths} \times \$200\text{k}) + (180 \text{ injuries} \times \$67\text{k})$ + (2,100 vehicles \times \$700 per vehicle)]

Using the figures above, the costs for recalling and modifying the Pinto were \$121 million, while the costs for settling cases in which injuries were expected to

occur would reach only \$50 million. If you were responsible for deciding whether to engage in the recall, how would you conduct the decision-making process? How would you account for the intrinsic as well as the instrumental value of a human life? Returning to the question that opened this Decision Point, consider how you would measure your own worth or the value of someone close to you. Who are your stakeholders and what is your value to each of them? How will you measure it—financially?

Would any of the following questions offer you a guidepost?

How much would your stakeholders suffer if they lost you?

(continued)

- How much do you currently contribute to society and what would society lose
 if you were not here?
- How much would society benefit if you continued to survive?

Businesses have reasons to consider these issues, though extraordinarily difficult; how would you prefer that they reach conclusions in these areas?

be capable of attaining our ends. In this sense, health and safety have a very high instrumental value since part of their value derives from the fact that we use them to attain other things of value. Insurance therefore seeks to compensate workers for injuries they incur by paying the employees for the wages they lost as a result of being unable to work.



Yet health and safety are also valuable in and of themselves. They have intrinsic value in addition to their instrumental value. To understand this distinction, consider how one might respond to the question of how much her or his life is worth. The life of one who dies in a workplace accident has instrumental value that can be measured, in part, by the lost wages that would have been earned had that person lived. But these lost wages do not measure the *intrinsic* value of the life, something that financial compensation simply cannot replace. The above Decision Point explores the measurement of intrinsic value.

What is the value of health and what does it mean to be healthy? When is a work-place safe? When is it unsafe? If "healthy" is taken to mean a state of flawless physical and psychological well-being, arguably no one is perfectly healthy. If "safe" means completely free from risk, certainly no workplace is perfectly safe. If health and safety are interpreted as ideals that are impossible to realize, then it would be unreasonable to claim that employees have a right to a healthy and safe workplace.

Health and Safety as Acceptable Risk



Employers cannot be responsible for providing an ideally safe and healthy workplace. Instead, discussions in ethics about employee health and safety will tend to focus on the *relative* risks workers face and the level of *acceptable* workplace risk. In this discussion, "risks" can be defined as the probability of harm, and we determine "relative risks" by comparing the probabilities of harm involved in various activities. Therefore, scientists who compile and measure data can determine both risks and relative risks (see Figure 6.1). It is an easy step from these calculations to certain conclusions about acceptable risks. If it can be determined that the probability of harm involved in a specific work activity is equal to or less than the probability of harm of some more common activity, then we can conclude that this activity faces an "acceptable level of risk." From this perspective, *a workplace is safe if the risks are acceptable*.

Imagine if we generalize this conclusion and determine all workplace health and safety standards in this manner. Such an approach would place the responsibility for workplace safety solely on management. Business would hire safety engineers and other experts to determine the risks within their workplace. These experts would know the risk levels that are otherwise accepted throughout the society. These might involve the risks involved in driving a car, eating high-fat