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## Fact or Fiction?

### Cost of a Life

How much money are we willing to spend to save a life? If it's our own life, we may say it's worth millions, but that doesn't make for sound national policy. Assigning a dollar value to life may seem to be a repugnant subject, but we all do it frequently. When we decide not to have frequent medical check-ups, when we buy low priced tires rather than the type that can't blow out, when we drive small compact cars rather than large, safer from a crash viewpoint cars, we are placing a dollar value on saving our own life and those of others.<sup>1</sup>

Here's a sampling of what very small amounts of dollars can do to save lives. For as little as \$1 per patient per year, the world could eliminate four tropical diseases by 2007, including leprosy, Chagas' disease, river blindness and lymphatic filariasis according to the World Health Organization (WHO).<sup>2</sup> Also according to WHO, a life can be saved for \$20 in Indonesia; \$50 in Gambia; other Third World possible savings include: \$550 can save a live from malaria, \$2000 in general health can save a life, \$4000 worth of work on water sanitation saves a life, and \$5000 worth of nutritional effort can save a life.<sup>3</sup>

About 5 million deaths occur each year from diarrhea in under developed countries. It's estimated that 50-75 percent of these could be prevented by oral rehydration therapy (ORT).<sup>1</sup> This consists of feeding a mixture containing glucose, salt and baking soda mixed with water. These salts restore the body's electrolyte balance and degree of salinity in the body's cells, therefore allowing the cells to retain fluid. J. Drasbek of the Pan

American Health Organization reports that for \$500,000, 2.5 million lives could be saved each year. As O'Rourke points out, "This is about half the cost of a 30-second Superbowl advertising spot—an apt comparison, since Gatorade® is more or less a commercial version of oral rehydration therapy (although the precise clinical effect of dumping it on coaches is not fully understood)."<sup>4</sup>

Now here's an example of an expensive way to save a life. To avoid cancer, we are undertaking activities that cost an enormous amount. The possibility of getting cancer from breathing formaldehyde which tends to off-gas from furniture and fabrics indoors is about the same as the risk of cancer from drinking two glasses of beer or two cans of

Table 1  
Costs to Save a Life\*

Activity	Cost per death averted
<i>Third World Countries</i>	
Diphtheria immunization (Gambia)	\$87
Malaria prevention (Africa)	\$440
Measles immunization (Ivory Coast)	\$850
Improved health care	\$1930
Improved water sanitation	\$4030
Dietary supplements	\$5300
<i>U.S., Non-environmental</i>	
Improved traffic signs	\$31,000
Cervical cancer screening	\$50,000
Improved lighting	\$80,000
Upgrade guard rails	\$101,000
Mobile intensive care units	\$120,000
Breakaway sign supports	\$125,000
Lung cancer screening	\$140,000
Breast cancer screening	\$160,000
<i>U.S., Environmental</i>	
Acrylonitrile emission control via best available technology	\$9,000,000
Arsenic emission control at glass manufacturing plants	\$51,000,000
Ban asbestos in acetylene cylinders	\$350,000,000
Benzene emission control at rubber tire manufacturing plants	\$20,000,000,000
Radionuclide emission control at uranium fuel cycle facilities	\$34,000,000,000
Chloroform private well emission standard at 49 pulp mills	\$99,000,000,000

\* From references 1 & 7.

cola every day. In other words, the chances are quite slim. Yet, the rules and regulations governing the exposure to formaldehyde set by OSHA amount to a cost of \$86 billion per life, or per cancer risk aversion. This is true even though the EPA itself estimates that only 0.2–0.3 percent of all cancer cases are caused

by air pollutants.<sup>5</sup> Table 1 compares life saving costs for third world countries with some environmental and non-environmental life saving activities in the U.S. The high cost of environmental regulations is clearly evident. These exorbitant sums are not spent, but rather it would take centuries by statistical extrapolation and huge investments before a single life would be saved.<sup>6</sup>

One final example: Table 2 contains some examples of what the Fish & Wildlife Service has spent to protect and recover endangered and threatened species.

No debate animals are important, but are they really more important

Table 2  
Dollars Spent to Preserve & Recover  
Endangered & Threatened Species\*

Species	Cost, million
Northern Spotted Owl	\$9.7
Least Bell's Vireo (bird)	\$9.2
Grizzly Bear	\$5.9
Red Cockaded Woodpecker	\$5.2
Florida Panther	\$4.1
Mojave Desert Tortoise	\$4.1
Bald Eagle	\$3.5
Ocelot	\$3.0
Jaguarundi (type of wildcat)	\$2.9
American Peregrine Falcon	\$2.9

\* From ref. 5

than human lives? Or is the life not as important if we don't see it (in a poor section of one of our cities or somewhere in a third-world country)? P&SF

#### References

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