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COVER Vertical section through 15-cm-high sand boil caused by liquefaction during the 24 November 1987 Superstition Hills, California, earthquake. Alternating layers of fine (dark) and coarse (light) sediment indicate that discharge rate through the feeder dike in the reddish-brown soil beneath the sand boil was variable. See page 56. [Photograph by T. C. Hanks, U.S. Geological Survey, Menlo Park, CA 94025]

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Scare of the Week

The fable of the boy who cried wolf is as pertinent today as it was in Aesop's time. We are being subjected to the scare of the week. Some of these scares may reflect real dangers, but they are becoming obscured by a cacophony of false or exaggerated ones. Two that hit the headlines recently illustrate quite different problems.

The first was a highly publicized announcement by the Natural Resources Defense Council that Alar-treated apples would cause thousands of cancer deaths to children. The reaction was predictable: school districts quickly canceled apple distribution and the fruit piled up on grocery shelves. The facts came more slowly. Only 5% of apples are treated with Alar, and in that 5% the levels of Alar are well below conservative Environmental Protection Agency tolerances. Even in a worst case scenario the probability of cancer among the affected group would change from 25% to 25.025%. When health commissioners announced the facts, the country returned to normal and apples were returned to school districts and grocery shelves. However, serious psychological and financial damage was sustained.

It is time to recognize that public interest groups have conflicts of interest, just as do business groups, even though their public positions are orthogonal. Businesses prefer to be out of the limelight; public interest groups like to be in it. Because they are selling products in the marketplace, businesses downplay discussions of hazard. Because public interest groups acquire members by publicity, they emphasize hazards. Each group convinces itself that its worthy goals justify oversimplification to an "ignorant" public. Businesses today have product liability and can incur legal damages if they place a dangerous product on the market. Public interest groups have no such constraints at the moment; it may be time to develop appropriate ones so that victims of irresponsible information have redress. Public interest groups, as well as apple growers, contribute importantly to our society, but both groups should be accountable for their acts.

The second scare was the banning of Chilean grapes after a terrorist threat and the finding of traces of a little cyanide in two grapes. On the surface it resembles the Alar scare: the amounts of cyanide were found to be negligible, so the job losses and the ensuing ill will created among Chilean farmers seemed disproportionate in retrospect. The difference is that eating too much cyanide can cause instant death, whereas Alar presents a possible danger only over a lifetime of consumption and that scare required no instantaneous action. Although the Chilean grape scare may have been more justifiable, a reevaluation suggests that a less extreme reaction would have been more appropriate.

The overreaction in these cases has as its background the present climate in our society in which complete safety without cost is seen as a feasible goal. The possibility of danger, therefore, is perceived to result from chicanery, negligence, or incompetence. In such a climate, officials respond with extreme measures. Because increased costs in either the affected products or in taxes are not obviously linked to these official actions, the system becomes tilted to overreaction. A certain balance is necessary to prevent the costs of legitimate safety measures from becoming prohibitive. A graphic illustration of this problem surfaced recently with the arrest in Los Angeles of a person who admitted having made about a hundred bomb threats to airlines, all false, each of which had been investigated by authorities. If every threat causes flights to be canceled or fruit to be removed from grocery shelves, terrorists and psychotics will soon be able to grind society to a halt. On the other hand, the alternative of broadcasting each threat, caveat emptor with a vengeance, would soon cause all warnings to be ignored.

To thread our way between real dangers and false alarms, we must often let officials decide which terrorist threats deserve wide publicity, and the public must be understanding of risk as well. Because these officials cannot always be right they deserve to be judged on an overall record, not from the certainty of hindsight. The public must recognize that a risk-free society is not only impossible, but intolerably expensive. At some point the real danger of too much pesticide must be balanced against the value to poor people of cheaper fruit. There are numerous deaths from falls down stairs in the home every year, but we do not advocate that all staircases be replaced by elevators. Scares of the week are in the same category. We cannot afford to be complacent about real threats, but we must remember that to be alive is to be at risk.—DANIEL E. KOSHLAND, JR.