

# Understanding Risk

Every week, it seems that a new health risk or benefit is reported by the media. Sometimes, it seems as if what was “bad for you” last year is “good for you” this year. How can you make sense of all this information when making decisions about your own health?

You can start by asking the right questions and insisting on high-quality information about health. The Health Insight program, developed by experts in risk analysis at Harvard University, suggests considering the questions below when weighing a media report—along with talking with your doctor, of course. In the end, your health care decisions must reflect your individual circumstances, needs, and values.

## 1. What is the message?

Look past the presentation for the actual facts. Does the story stress only the risk, or only the benefit? If a scary health report mentions a small number of people affected by a risk, remember that this may mean many more people were *not* affected. If the facts seem confusing, it may be because the information is misleading or incomplete, or you may have misunderstood it.

## 2. Is the source reliable?

Be aware of who is delivering a health care message to you. Information comes from many sources, ranging from reliable and trustworthy to downright deceptive.

- What is the source of the message—a government agency? A personal “blog” on the Internet? A company selling a product? A law firm seeking clients for lawsuits? Every source may be affected by possible biases.
- Health information can be based on anything from an untested claim to a large scientific study. The least reliable claims are based on anecdotes and testimonials. The most reliable information often comes from controlled clinical studies of large numbers of people published in journals reviewed by other scientists.

## 3. How strong is the overall evidence?

Seek to understand how one piece of health information fits into the big picture of what’s known about that treatment or disease. Is this source giving you all sides of the story? Does most of the other available evidence support the claim, or not?

## 4. Does this information matter?

Ask yourself whether the information affects you or the people you care about and leads you to respond. Some risks (like plane crashes and murders) receive heavy media publicity, while other much more common risks (like heart disease and stroke) are under-reported. The result: Many people worry about risks that are numerically small and beyond their control and ignore big risks (sometimes, risks they could modify).



## Understanding Risk (cont'd)

### 5. What do the numbers mean?

Risks are expressed in various ways. Many reports give the chances of a certain outcome, like a heart attack, occurring; often the number is expressed as a percent (1%) or a value such as 1 in 100. Even percentages can mean many different things, however. Scientists have methods to measure their confidence that statistics reflect the way things really are. But some media reports to the public leave out these details—so make sure you have all the facts before you make any health decision based on numbers you hear about or read regarding medicines.

### 6. How does this risk compare to others?

Put risks into context, and consider the other factors that affect your response to those numbers. Your reaction may be based on feelings as well as facts, depending on the extent to which you:

- Think the risk is new.
- Choose the risk.
- Can control or prevent harm from it.
- Gain benefits you want by taking the risk.
- Fear the risk.
- Understand the risk.

### 7. Identify ways to improve your health and reduce your risk.

Don't rush to judgment when you hear about an alarming risk or a promising benefit. Don't let friends or co-workers sway you with scare stories or fad treatments or "cures." Base your health decisions on the firm foundation of a healthy lifestyle and common sense, seek out the facts, and make up your own mind in partnership with your health care team.

### 8. What factors should a consumer consider when deciding to take a medicine?

Every decision involves some kind of trade-off. Medicines offer benefits in preventing or treating disease, but can cause "side effects" in some people. Other factors that may be considered include resources like time, money, and convenience. To the extent possible, consider the full range of factors in your health care decisions, discuss them with your doctor, and decide which risks you are willing to accept.

### 9. What else do I need to know?

Try to identify the information that will help you make a better decision. Even scientific research is never 100% certain (even if it sounds that way in media reports).

Don't depend on the headlines for your health choices, and ask your doctor to fill in what you need to know.



## Understanding Risk (cont'd)

### 10. Where can I get more information?

Be assertive in finding the information you need. In addition to your health care team, consider these resources:

- Libraries.
- Manufacturers and the Medication Guides or patient package inserts they may provide with their products, or the *Information for Patients* or *Patient Counseling information* sections of the professional prescribing information (talk to your doctor if you do not understand the information).
- Your local department of health.
- Government agencies, including the U.S. Food and Drug Administration (FDA), Consumer Product Safety Commission, National Cancer Institute (NCI), and National Institutes of Health (NIH).
- Organizations of medical professionals and advocates, such as the American Academy of Pediatrics or the American Heart Association.
- The Internet.

When it comes to the Internet, remember that “on-line” information is only as reliable as its source. Information from Web pages may be outdated, deceptive, and error-filled, or it may be up-to-date and trustworthy. The source of the Web page is the most important indicator of the quality of on-line information.

Thompson KM. Health insight: a consumer's guide to taking charge of health information. *Risk in Perspective* [serial online]. October 1999;7:1-6. Available from Harvard Center for Risk Analysis, Harvard School of Public Health, Boston, Mass.

