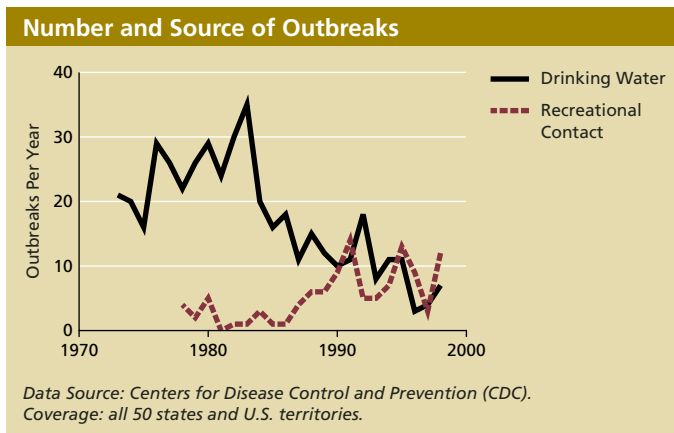


SYSTEM DIMENSIONS	CHEMICAL AND PHYSICAL	BIOLOGICAL COMPONENTS	HUMAN USES
Extent Pattern	Nutrients, Carbon, Oxygen Contaminants Physical	Plants and Animals Communities Ecological Productivity	Food, Fiber, and Water Recreation and Other Services

● Waterborne Human Disease Outbreaks



What Is This Indicator, and Why Is It Important?

This indicator reports the number of disease outbreaks—which generally means at least two people getting sick—attributed to drinking water that is untreated or where treatment has failed to remove disease-causing organisms, or to swimming or other recreational contact at lakes, streams, and rivers (see p. 84 for an indicator of coastal recreational water quality).

Ensuring that water is fit to drink and swim in without fear of disease is a basic societal objective. The number of disease outbreaks that can be attributed to contaminated water is a direct measure of the fitness of the nation’s waters for these two key uses.

What Do the Data Show? The number of disease outbreaks attributable to contaminated drinking water declined significantly overall from 1973 to 1998. Since 1986, the average number of outbreaks per year was lower than the average during the 1973–1985 period, although there was notable year-to-year variation. There is also notable variation in the number of outbreaks associated with recreational contact, which have increased significantly since 1978. Since 1990, the number of outbreaks associated with drinking water and the number associated with recreational contact have followed a similar pattern.

Discussion This indicator reports outbreaks, not the number of people who become ill. Thus, depending on the location of contamination problems, the size and type of water delivery system, and other factors not related to environmental quality, the trend in the number of people affected may be different from the trend in the number of outbreaks. Doctors and state and local public health officials report data on outbreaks to the Centers for Disease Control and Prevention. Whether an outbreak is identified and reported depends on many factors, so these reports are best considered an indication—rather than a perfect record—of the true incidence of waterborne disease outbreaks.

The technical note for this indicator is on page 255.