

## Centers for Disease Control Backtracks on Foodborne Illnesses

In the September 2010 issue of the World Apple Report, we criticized the Centers for Disease Control and Prevention (CDC) for allowing pressure groups to use its out-dated and flawed statistics on the incidence of foodborne illnesses in the United States. The CDC has now published a more recent analysis that restores the balance somewhat, but still contains numerous flaws.

The first notable point is the sharp reduction in the latest CDC's estimates compared to those published over a decade ago in 1999. Since the U.S. population has grown by over 10 percent in the intervening years, that would imply that per capita incidence of foodborne diseases has about halved.

### CDC Estimates of Effects of Foodborne Diseases, 1999 and 2010

Publication Date	Illnesses	Hospitalizations	Deaths
1999 study	78 million	325,000	5,000
2010 study	48 million	128,000	3,000
Change (%)	- 38.5%	- 60.6%	- 40.0%

Clearly, the CDC seriously over-estimated the impact of foodborne illnesses in its 1999 study. However, to dampen criticism of the 1999 study, the CDC points out "Because of data and method improvements, the 1999 and current estimates cannot be compared to measure trends."

In a separate press release, the CDC compared reported incidences of selected foodborne infections in the United States in 2009 with the average for 1996-1998. It showed decreases of 41% for Shiga toxin-producing E-coli O157, 10% for salmonella, 26% for listeria and 30% for campylobacter.

### CDC Continues to Sound Alarms

Lest readers become complacent, the CDC press release goes on to quote FDA Commissioner Margaret A. Hamburg, M.D. as saying, "Foodborne illnesses and deaths are preventable, and as such, are unacceptable." The FDA will continue to use the most recent results as justification for sweeping new regulations under the new Food Safety Act..

### Major Flaws Remain

While the latest CDC research (actually published in two separate scientific papers) is an improvement on the 1999 study, it still contains serious flaws. Above all, it is not science-based. The methodology used draws scraps of evidence from various databases (including some foreign databases) and infers estimates of illnesses, hospitalizations and deaths based on fairly heroic assumptions about underdiagnosis or underreporting of foodborne illnesses and about scale up factors. Even the authors admit that other assumptions could have led to quite different results. Their results are given a veneer of scientific validity by being expressed in terms of "90% Credible Intervals."

For example, the authors estimated that the five pathogens causing the most illnesses, hospitalizations and deaths in 2009, caused 1,185 deaths. However, their 90% credible interval for annual deaths lay between 284 and 2,795 deaths. In other words, the low estimate was only one-tenth of the high estimate. Similar wide disparities in results were reported for illnesses, hospitalizations and deaths for individual pathogens.

In their subsequent use of these study results, both the CDC and the FDA create the impression that their estimates are firm and that the source of all foodborne illnesses is bad practices among commercial producers, processors and packers. However, many sources of foodborne illness clearly arise from mishandling of food in home kitchens, from the behavior of untrained individuals serving in restaurants and bars, and from inadequate controls on shelves and in backrooms of retail food stores. Without more precise estimates of where the problems are arising throughout the food system, FDA and CDC policies may be both wasteful and ineffective.

**Don't Expect Much from New Food Safety Law**

These inherent weaknesses are likely to blunt much of the beneficial effects of the new Food Safety Law. Expanding the FDA bureaucracy, aggravating food suppliers around the world, and stimulating an increasing blizzard of paperwork (real or virtual) will not really help government to focus attention on the parts of the food system where most foodborne dangers lurk.

The Act has also drawn a lot of criticism for excluding so many small producers and processors and for the sparseness of the actual inspections that will be required. Its initial price tag of about \$1.4 billion could run afoul of the plans of the Republican majority in the House of Representatives to reduce the size of government. We may not yet have heard the last word on the food safety debate.

**First published in the World Apple Report, February 2011, page 7.**