



HEALTH-RELATED COSTS

FROM FOODBORNE ILLNESS IN THE UNITED STATES



SUMMARY

The burden of foodborne illness on Americans is substantial. According to the Centers for Disease Control and Prevention (CDC), an estimated 76 million cases of foodborne illness occur each year. Of those who become ill, approximately 300,000 are hospitalized and 5,000 die. Nevertheless, perhaps because of the public's familiarity with the more mild forms of this problem, illnesses from tainted foods have not been viewed by some as a particularly important societal problem. As federal dollars for programs aimed at improving the health of Americans become scarce, it becomes more important to put this problem in perspective. This report seeks to place this problem in context by assessing the health-related economic costs of foodborne illness in the United States.

One widely cited prior U.S. Department of Agriculture study has assessed the economic cost of foodborne illness at \$6.9 billion annually. This figure, however, only includes costs from five pathogens and does not include the substantial pain and suffering costs that accompany a case of foodborne illness. The study below aims to include foodborne illnesses from all sources and uses a more comprehensive measure of economic cost. The resulting **best estimate of the health-related economic cost of foodborne illness in the United States is approximately \$152 billion** (\$1,850 on average per illness). Even when pain and suffering losses from acute illnesses are not included, the cost to society is \$103 billion. Although this study only addresses the health-related costs of foodborne illness, the total cost of foodborne illness also includes other costs, such as costs to industry and government from outbreaks. As a result, the estimates presented here represent a lower bound estimate of the total societal cost of foodborne illness.

In addition to the aggregated cost of foodborne illness, this report also presents costs broken down by pathogen and state. The cost associated with a given pathogen is a function of both the average severity of a case of illness and the incidence of illness. For example, a much higher cost per case for *Listeria monocytogenes* cases leads to a total economic cost that is almost half of the cost of *Campylobacter* cases even though there are approximately 400 times more *Campylobacter* cases. State costs are also broken out. As expected, large states face higher total costs from foodborne illness.

Differences in cost per case also are reported. For example, due to differences in the number of illnesses and medical costs associated with those illnesses, Hawaii faces a cost per case more than \$200 greater than Kentucky.

In recent years a growing number of foodborne illness outbreaks have been linked to consumption of contaminated produce. Data from the CDC Foodborne Disease Outbreak Surveillance System suggests that **produce is responsible for \$39 billion of health-related losses**. Furthermore, the cost associated with each case of illness from tainted produce is somewhat higher than the average cost per illness (\$1,960 vs. \$1,850).

It is hoped that this report will help policymakers put food safety in its proper context. The values developed here can be used both as an illustration of the magnitude of the problem faced and as a tool for legislators, program officers, and regulatory economists to help shape policy.