

The Potential Consequences of Public Release of Food Safety and Inspection Service Establishment-Specific Data

The release of food safety data gathered during federal inspections of meat, poultry, and egg product processing establishments such as slaughterhouses, warehouses, and retail stores would help increase transparency and could lead to improvements in public health. For example, purchasers, consumers, and public interest organizations could use the data to identify companies with performance records consistently above or below the industry average, potentially creating economic pressure on food processing establishments to improve food safety. However, in order to maximize its effectiveness and minimize unintended adverse consequences, data release should be guided by a carefully designed information-disclosure strategy.

The Food Safety and Inspection Service is the regulatory agency within the U.S. Department of Agriculture (USDA) that is responsible for ensuring the safety, wholesomeness, and proper labeling of meat, poultry, and processed egg products produced domestically or imported into the United States. The Service does this by issuing and enforcing food-safety regulations, conducting facility and product inspections, responding to foodborne disease outbreaks, and conducting communication, education, and food-defense activities.

During the course of its testing, sampling, inspection and enforcement activities, the Food Safety and Inspection Service collects large volumes of food safety data, some of which are made publicly available on its website. However, most of these data are aggregated, for example



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by geographic region, production type, establishment size, and pathogen, and in most cases there is insufficient information provided to link data to specific food industry establishments such as slaughterhouses, warehouses, or retail stores. While the public can obtain some disaggregated data through the Freedom of Information Act, initiating and responding to Freedom of Information Act requests can be time-consuming and costly for the requester and the Food Safety and Inspection Service.

In recent years there have been efforts to facilitate openness in government, including an administration requirement for federal agencies to publish information online in a timely manner and in a format that can be easily retrieved, downloaded, and indexed by

the public without the need for Freedom of Information Act requests. As part of these efforts, the Food Safety and Inspection Service is now considering providing access to the data in a disaggregated form, giving the public access to food safety data collected from specific food industry establishments.

Experience with Public Posting of Government Data

The concept of publicly posting government-generated data is not new. In response to calls for increased transparency and information provision, several government agencies, including regulatory agencies responsible for protecting human health and safety, now regularly post detailed data on the Internet. In some cases, the data relate to individual firms or facilities (for instance, Medicare publishes data on hospital-specific outcomes of care), while in other cases they are commodity, product, or event specific (for example, the National Highway Traffic Safety Administration posts data on safety ratings of products such as cars, tires, and children’s car seats). There is a substantial body of literature documenting the impacts and uses of publicly released data, showing that public access to facility-specific performance data can have both benefits and costs.

Public Release of Food Safety and Inspection Service Establishment-Specific Data

The previous experiences of other federal agencies that have released detailed data can help predict the potential benefits and adverse impacts of posting establishment-specific data collected by the Food Safety and Inspection Service.

Potential Benefits

At the most basic level, the public release of Food Safety and Inspection Service establishment-specific data would increase transparency by supporting the public’s “right to know,” and providing improved information to support decision-making. Releasing these data could potentially motivate individual companies, and sectors of the food industry, to improve their overall food safety efforts. For example, data release could:



A worker packages ground beef in a meat processing plant.

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- Provide incentives to food processing establishments to protect brand reputation in food safety in order to protect and enhance customer base and profitability
- Allow downstream users (purchasers, consumers or public interest organizations) to identify companies with performance records consistently above or below the industry average, potentially creating economic pressure to improve food safety
- Provide better insights into strengths and weaknesses of different processing practices, leading to industry-wide improvements in food safety practices
- Enhance performance benchmarking by individual companies, sectors, and the industry as a whole, including efforts by individual companies seeking to avoid being identified as “below average”
- Improve the consistency of inspector performance

Potential Costs and Unintended Adverse Consequences

Evidence of adverse effects resulting from the public release of establishment-specific data by other government agencies is insufficient to predict what might occur were the Food Safety and Inspection

Service to release similar data. In the absence of information specific to the Food Safety and Inspection Service, the Committee identified a number of potential costs or unintended consequences that public release of establishment-specific data might have, including:

- The financial commitment associated with designing and maintaining a useful data disclosure system
- Drawing of inappropriate conclusions as a result of misinterpretations of the data, particularly if appropriate context is not provided to the user
- Adverse effects on international trade
- Risks that proprietary or confidential information could be deduced from the data
- Adverse effects on inspector performance

It is important to note that, as with all regulatory interventions, some parties may be negatively impacted by public data disclosure. Furthermore, different parties may have different perspectives on what constitutes a negative impact. In fact, a negative impact for one party might be viewed as a positive effect for another, or may be considered positive by the public at large. For example, although company might suffer initial reductions in the stock market prices following the release of data by the Food Safety and Inspection Service, ultimately this might serve as an incentive for improved performance, constituting a benefit for the public.

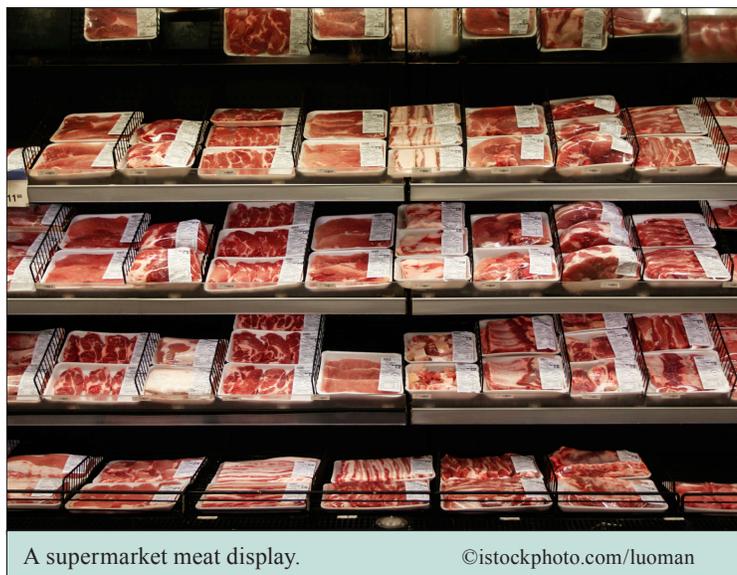
Considerations for Strategic Planning for Data Release

To maximize effectiveness and minimize the potential for adverse unintended consequences, data disclosure needs to be guided by a carefully designed information disclosure strategy. The disclosure strategy would consider the utility of the data to be released, the presentation of data, and the means by which to assure that data are continuously updated and improved. Key features of an effective information disclosure plan include:

- Assuring the integrity of the data, for example by requiring the development of protocols to ensure the data are accurate, timely, and likely to be useful before posting

- Providing precise and appropriate definitions of what is being quantified and adequate documentation of context, in order to limit the potential for misinterpretation of data
- Providing support for analyses of the data by users. At a minimum, this would involve releasing data in machine-readable form to facilitate third-party analysis
- Providing precautionary measures to prevent the linking of portions of the data in ways that would allow the user to deduce confidential information about particular establishments.
- Seeking input from stakeholders—for example, from industry, academia, and consumer groups—to provide insight on their needs and concerns for all data types. This would facilitate continuous improvements in data disclosure as users gain a better understanding of how the data might be used, and as the Food Safety and Inspection Service responds to stakeholder input

The Committee examined the issues specific to the public release of two specific types of Food Safety and Inspection Service establishment-specific data: Sampling and Testing data (derived using standard laboratory tests), and Inspection and Enforcement data (derived from text written by inspectors). The Committee believed that Sampling and Testing data are amenable to public release as long as the key features described above are adequately addressed.



A supermarket meat display.

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Members of the Committee did, however, express different views about the implications of releasing Inspection and Enforcement data, which are subjective in nature. A minority noted that minimizing the potential negative consequences when releasing this type of data on an establishment-specific basis would be especially challenging, citing concerns about inspector variability, the potential for misinterpretation of the data, and confidentiality issues. However, the majority strongly supported public access to these types of data, believing that this could help identify variability in inspector performance and enforcement outcomes, ultimately facilitating more uniform inspections.

Measuring the Potential Impacts of Data Release

Although currently it is not possible to make a direct causal link between public data access and specific food safety improvements, there are measures for other outcomes of public release of establishment-specific data. Documenting these

outcomes could provide insights into the relationship between data release and food safety. Examples of outcomes that could be measured and used as intermediate food safety metrics include the incidence of positive pathogen testing results, or indicators of process integrity. Public release of establishment-specific data could result in increased compliance with regulatory requirements, and the Food Safety and Inspection Service could also measure this.

In addition, metrics on the use of publicly released data could be collected. These might logically include the number of web downloads, reported and peer-reviewed reports generated, policy changes, and changes in industry practices.

The committee encourages the Food Safety and Inspection Service and other federal public health agencies to continue to expand their current collaborative efforts to develop food safety metrics to better measure public health effects of food safety activities.

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<http://dels.nas.edu/banr>

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The National Academies appointed the above committee of experts to address the specific task requested by the U.S. Department of Agriculture Food Safety and Inspection Service. The members volunteered their time for this activity; their report is peer-reviewed and the final product signed off by both the committee members and the National Academies. This report brief was prepared by the National Research Council based on the committee's report.



For more information, contact the Board on Agriculture and Natural Resources at (202) 334-3062 or visit <http://dels.nas.edu/banr>. Copies of *The Potential Consequences of Public Release of Food Safety and Inspection Service Establishment-Specific Data* are available from the National Academies Press, 500 Fifth Street, NW, Washington, D.C. 20001; (800) 624-6242; www.nap.edu.

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