

Update for the 2023 Biennial Meeting of the Conference for Food Protection

Laura Brown, Ph.D.

Water, Food, and Environmental Health Services Branch
Division of Environmental Health Science and Practice

Conference for Food Protection
Houston, Texas, April 25, 2023

Updates will come from several Centers at CDC

- **National Center for Emerging and Zoonotic Infectious Diseases (NCEZID)**
- **National Center for Chronic Disease Prevention and Health Promotion (NCCDPHP)**
- **National Center for Environmental Health (NCEH)**

NCEZID: Foodborne disease prevention priorities

Prevention Office's five foodborne disease prevention priorities:

- Beef and *Salmonella*
- Shellfish and *Vibrio*
- Chicken and *Salmonella*
- Leafy greens and STEC
- Food safety in correctional facilities

NCEZID: BEAM Dashboard



BEAM Dashboard

Salmonella

Isolation Year

2022

Number of Isolates

44,417

New Outbreaks

79

Pathogen Filter



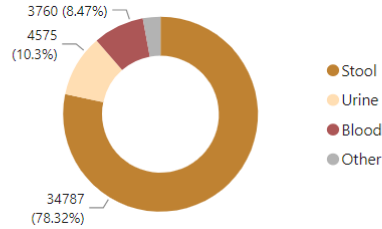
Isolation Year Filter



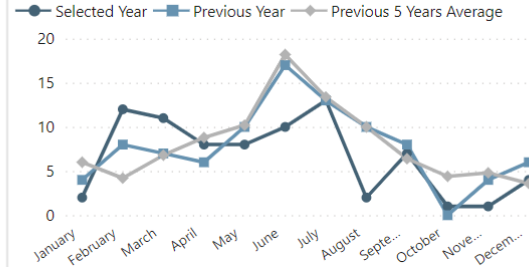
HHS Region Filter



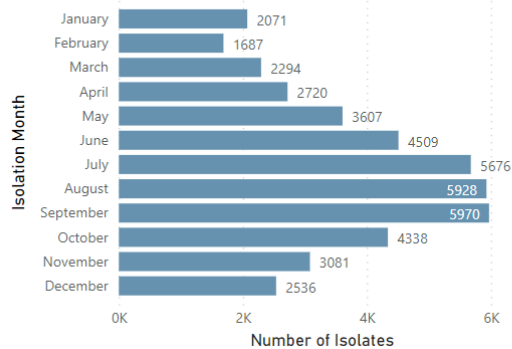
Specimen Source



Number of New Multistate Outbreaks Detected



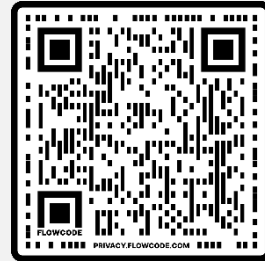
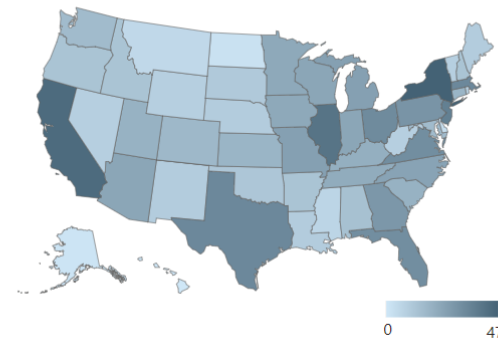
Number of Isolates by Month



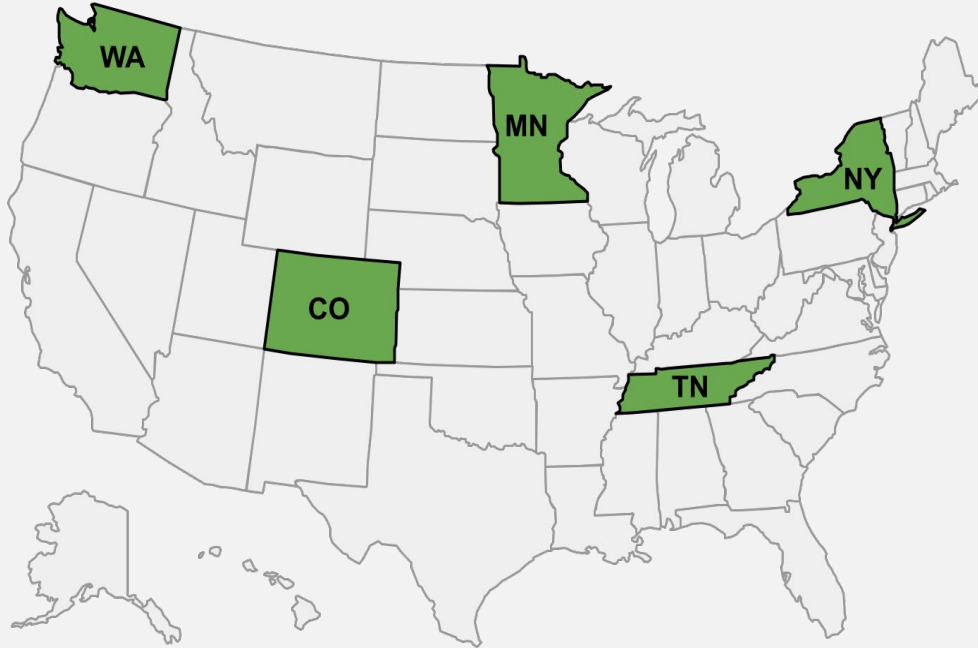
Multistate Outbreaks With More Than 10 Isolates by Serotype

Serotype	Number of Isolates	Outbreak-associated Isolates
Enteritidis	8,128	1,079
Newport	5,438	225
Typhimurium	4,519	631
Javiana	2,536	37
I 4,[5],12:i:-	1,838	39
Infantis	1,755	168
Saintpaul	1,187	84
Oranienburg	1,146	39
Muenchen	1,113	12

New Multistate Outbreaks Associated with each State



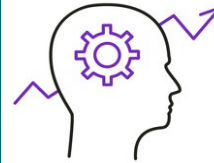
NCEZID: Integrated Food Safety Centers of Excellence



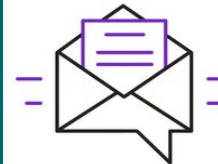
Strengthen & Improve surveillance and outbreak investigations



Train & Educate students and public health personnel



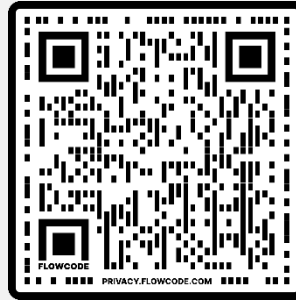
Evaluate & Analyze the timeliness and effectiveness of surveillance and outbreak response



Disseminate & Communicate tools and resources

NCEZID: Food Safety Centers of Excellence products

- Lots of resources available online



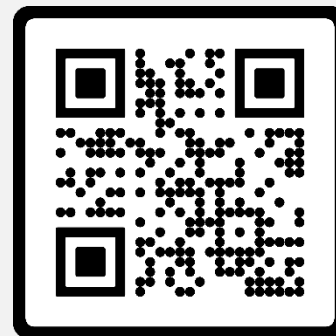
- What's New?

- **COVID Impact Project** –evaluate the impact of the COVID-19 pandemic on enteric disease surveillance, outbreak detection, and investigations
- **Updated Epi-Ready** – recently finalized updates to this workshop for public health professionals involved with foodborne disease outbreaks investigations

NCEZID: Foodborne Diseases Active Surveillance Network (FoodNet)



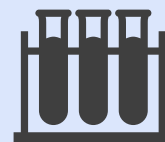
Annual report described 2021
incidence of enteric infections



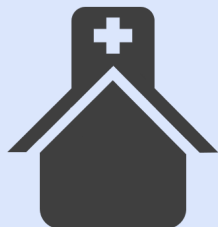
Key FoodNet findings in 2021



Overall, 8% fewer enteric infections in 2021, compared with a pre-pandemic baseline of 2016-18



Number and percentage of cases diagnosed by CIDT continued to increase; reflex cultures decreased



Percentage of infections requiring hospitalizations was stable

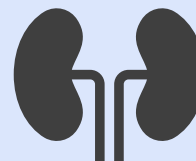
Enduring predominance of common *Salmonella* serotypes in 2021:

Decreased incidence of Enteritidis, Typhimurium, & I4,[5],12:i-

Increased incidence of Infantis & Oranienburg



Percentage of infections associated with international travel was 7% in 2021 (compared with 13% during pre-pandemic baseline)



2020: incidence of HUS was stable

NCEZID: National Outbreak Reporting System (NORS)



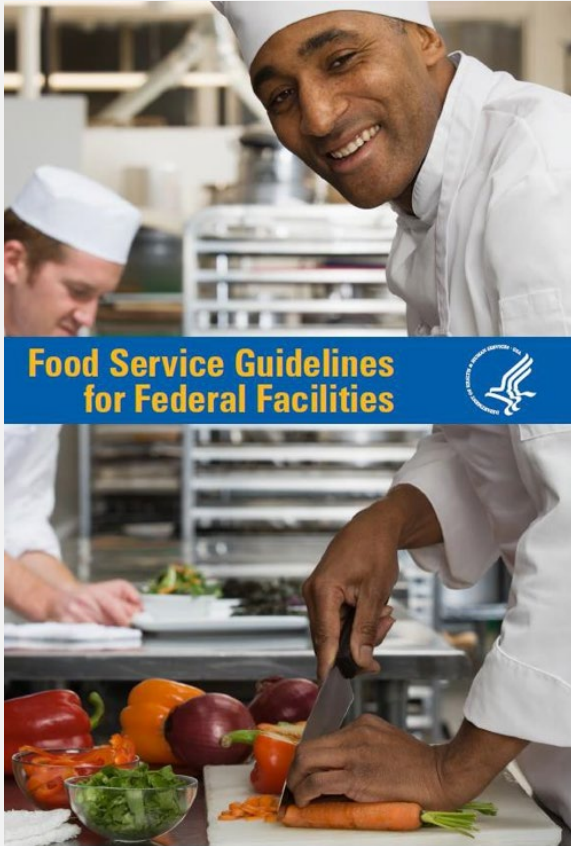
- **Update to NORS**
 - Streamline data collection and improve data quality
 - Add reporting of some fungal disease outbreaks
 - Add data collection on prevention measures conducted for outbreaks
- **NORS Dashboard**, a publicly available tool for searching and accessing NORS data, will soon be updated with 2021 data

NCEZID: Multistate foodborne outbreak list



Contaminated Food	Germ	Year
Frozen Strawberries	Hepatitis A	2023
Unknown Source	<i>Listeria monocytogenes</i>	2023
Alfalfa Sprouts	<i>Salmonella</i> Typhimurium	2022
Raw Oysters	Norovirus	2022
Enoki Mushrooms	<i>Listeria monocytogenes</i>	2022
Deli Meat and Cheese	<i>Listeria monocytogenes</i>	2022
Fish	<i>Salmonella</i> Litchfield	2022
Frozen Falafel	<i>E. coli</i> O121	2022
Brie and Camembert Cheese	<i>Listeria monocytogenes</i>	2022
Ground Beef	<i>E. coli</i> O157:H7	2022

NCCDPHP: *Food Service Guidelines for Federal Facilities*



Promote:

- Healthier foods and beverages
- Environmentally responsible practices
- Support of communities are local food sourcing
- **Food safety**



NCCDPHP: *Food Service Guidelines for Federal Facilities*

Food Safety Standards

- Follow the most recent Food Code.
- Establish a comprehensive written food safety plan to achieve active managerial control.
- Do not serve meat, poultry, and egg products raw or undercooked, even if customer asks.
- Implement written policies on
 - control of *Listeria monocytogenes*
 - employee health
 - employee food safety training

NCCDPHP: *Food Service Guidelines for Federal Facilities*



Where can they be used?

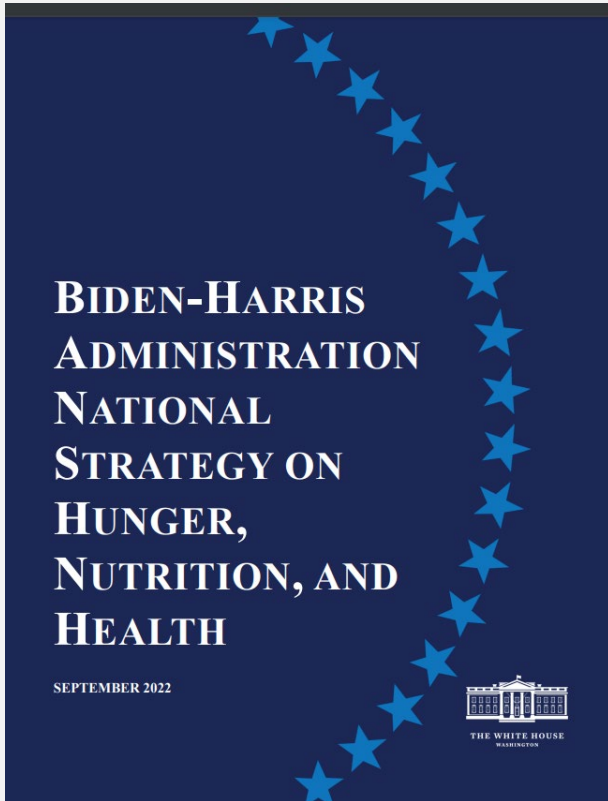
Settings

- Federal, state, and local government facilities
- Hospitals and healthcare facilities
- Colleges and universities
- Private worksites
- Parks and recreation centers
- Stadiums

Venues

- Cafeterias
- Cafes
- Snack bars
- Grills
- Concession stands
- Sundry shops
- Micro markets
- Vending machines

NCCDPHP: *Food Service Guidelines for Federal Facilities*



**Expand access to healthier environments
in federal facilities by:**

**Implementing and updating the *Federal
Food Service Guidelines* in federal facilities**

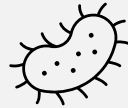
NCEH: National Environmental Reporting System (NEARS)



NCEH: Characteristics linked with successful investigations



Successful
investigations



Agent identified



Food identified



Contributing factor identified

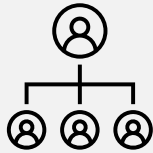
NCEH: High quality epidemiology, laboratory, and environmental health are key to successful investigations

- ✓ Robust epidemiology method
- ✓ Thorough environmental assessment
- ✓ Clinical sample collection



Successful
investigation

NCEH: Management leadership and commitment are key components of food safety culture



Management leadership in offering food safety training and policies

Management commitment to food safety



Employee commitment to food safety



Restaurant resources

NCEH: *From Inspector to Investigator Finding the Factors That Lead to Foodborne Outbreaks*

Learn about the factors that contribute to outbreaks so you can understand how and why the outbreak occurred.



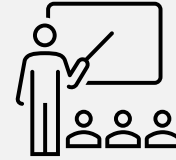
NCEH: Other resources



Research



Surveillance



Training



Thank you

For more information, contact NCEH
1-800-CDC-INFO (232-4636)
TTY: 1-888-232-6348 www.cdc.gov
Follow us on Twitter [@CDCEnvironment](https://twitter.com/CDCEnvironment)

The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.

