

# NORS: Evaluation of Foodborne Disease Outbreak Reporting

## Introduction

Form approved: OMB No. 0920-0879: Expiration Date 03/31/2014

**The NORS-Foodborne team is conducting a survey to evaluate the National Outbreak Reporting System (NORS) for foodborne disease outbreak reporting. We are asking all Reporting Site Administrators (RSAs) responsible for entering foodborne disease outbreak reports into NORS to complete the survey.**

**Your participation is voluntary. By returning the survey you are consenting to participate. There is no penalty for declining to participate and there are no foreseen risks to you or your state if you do not participate. You will receive no direct benefits from participating in the survey; however, your participation will help to improve the reporting system.**

**The information you provide will not be considered to constitute your NORS reporting agency's official policy or position, and will not be used beyond the scope of this evaluation without your permission. We would like to share the results of this evaluation with participating NORS reporting agencies, but all responses will be kept anonymous.**

**The survey will take approximately 20 minutes to complete. The survey must be completed in one sitting, so please make sure that you have ample time to complete the entire survey before starting.**

**Your time, assistance, and input are invaluable and greatly appreciated.**

**If you have any questions about this survey, please contact Maho Imanishi ([hwl2@cdc.gov](mailto:hwl2@cdc.gov), 404-718-4689), Karunya Manikonda ([hum6@cdc.gov](mailto:hum6@cdc.gov), 404-639-3530) or Hannah Gould ([dvj9@cdc.gov](mailto:dvj9@cdc.gov), 404-639-3315) at the CDC Enteric Diseases Epidemiology Branch.**

Public reporting burden of this collection of information is estimated to average 20 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. An agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a currently valid OMB control number. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to CDC/ATSDR Information Collection Review Office, 1600 Clifton Road NE, MS D-74, Atlanta, Georgia 30333; ATTN: PRA (0920-0879).

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## Part 1: General Questions

### \*1. State

### \*2. Are you at a local, state, or territorial health department?

- Local
- State
- Territorial
- Other (please specify)

### 3. What is your job title or function?

- Foodborne/enteric disease epidemiologist
- Health officer
- Food program director
- State epidemiologist
- Other (please specify)

### 4. How often does your NORS reporting agency enter foodborne disease outbreaks into NORS?

- As they occur ('real time')
- Weekly
- Monthly
- Every 6 months
- Annually
- When CDC closes out data
- Other (please specify)

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## 5. How does your NORS reporting agency use foodborne disease outbreak data collected by NORS? (choose up to 3)

- For outbreak investigations
- For analyses of foodborne disease outbreaks
- To learn about investigations by other states
- To respond to requests for data (e.g., The Freedom of Information Act, open records requests)
- To inform other state or local agencies
- To verify state outbreak database
- My agency does not use the NORS data
- Other (please specify)

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## Part 2: Questions about the NORS interface

**6. On a scale from 1 to 5, where 1 is not user-friendly, and 5 is very user-friendly, how would you rate the NORS interface...**

	1 (Not user-friendly)	2	3	4	5 (Very user-friendly)	Not sure	I didn't use it and I cannot find someone who did
...in 2009 when NORS first launched?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
...today?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**7. Comparing NORS with the electronic Foodborne Outbreak Reporting System (eFORS), do you feel the system for foodborne disease outbreak reporting is better or worse?**

- Much better
- A little bit better
- About the same
- A little bit worse
- Much worse
- Not sure/I never used eFORS

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**8. Please tell us why you feel the NORS system for foodborne disease outbreak reporting is better or worse than eFORS.**

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## Part 2: Questions about the NORS Interface

**9. Comparing NORS with eFORS, how has the number of foodborne disease outbreaks reported to CDC from your NORS reporting agency changed since the introduction of NORS in January 2009?**

- Many more foodborne disease outbreaks reported
- Slightly more foodborne disease outbreaks reported
- About the same number of foodborne disease outbreaks reported
- Slightly fewer foodborne disease outbreaks reported
- Many fewer foodborne disease outbreaks reported
- Don't know
- Not sure/I never used eFORS

**10. In 2009, did your agency experience any interface problems when using NORS to enter foodborne outbreak reports?**

- Yes
- No
- Do not remember or not sure
- I wasn't here or did not enter any reports in 2009 and could not find someone who was

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## 11. In 2009, how frequently did your agency experience the following interface problems when using NORS to enter foodborne outbreak reports?

	Never	Sometimes	Often
System (interface) froze or was non-responsive	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Lost data or failed data retrieval	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Locked out of the system	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Tabs within the interface did not appear when expected	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other interface problems (please specify)	<input type="text"/>		

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## Part 2: Questions about the NORS interface

**12. In the past 3 months, did your agency experience any interface problems when using NORS to enter foodborne outbreak reports?**

- Yes
- No
- Do not remember or not sure
- I wasn't here 3 months ago or did not enter any reports in the past 3 months and could not find someone who was



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## 13. In the past 3 months, how frequently did your agency experience the following interface problems when using NORS to enter foodborne outbreak reports?

	Never	Sometimes	Often
System (interface) froze or was non-responsive	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Lost data or failed data retrieval	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Locked out of the system	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Tabs within the interface did not appear when expected	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other interface problems (please specify)	<input type="text"/>		



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## Part 2: Questions about the NORS interface

**16. Approximately what proportion of foodborne disease outbreaks were not entered because of technical problems with the NORS interface...**

	None	<10%	10% - <25%	25% - <50%	50% or more	Don't know
...in 2009?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
...in the past year?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**17. Does your NORS reporting agency solely house its foodborne disease outbreak data in NORS (i.e., agency does not have its own outbreak data system)?**

- Yes
- No
- Don't know

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## 18. What other type of system does your NORS reporting agency currently use to house foodborne disease outbreak reports? (Choose all that apply)

- Paper-based system
- Excel spreadsheet
- Access database
- State-specific electronic reporting database
- Other (please specify)

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## Part 2: Questions about the NORS interface

**19. Does your NORS reporting agency currently send any foodborne disease isolate or outbreak data through Public Health Information Network Messaging System (PHINMS)?**

- Yes
- No
- Don't know

**20. How would you prioritize the following planned future NORS enhancements (not specific to foodborne disease outbreaks)? Please rank at least 4.**

	1 (Most needed)	2	3	4	5 (Least needed)
Increase allowed size for attachments	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
NORSDirect (i.e. feature to support direct upload of site data into NORS)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Access a specific outbreak report from the NORS Admin screen	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Grant read/write access to a specific user	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other (please specify below)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Other (please specify)

**21. Do you feel like you and other NORS users have received enough training or guidance about how to enter foodborne disease outbreak data into NORS?**

- Yes
- No
- Not sure

# NORS: Evaluation of Foodborne Disease Outbreak Reporting

## 22. What topics would you like further training on? (Choose all that apply)

- NORS interface navigation
- Enhanced database download feature (Full Download)
- NORSDirect (i.e., uploading data directly into NORS via Public Health Information Network Messaging System (PHINMS)) as soon as this feature is available
- Mode of transmission assignment (i.e., when to select food as the primary mode of transmission versus other modes of transmission)
- None
- Other (please specify)

# NORS: Evaluation of Foodborne Disease Outbreak Reporting

## Part 3: Questions on data quality

**23. Approximately what proportion of detected foodborne disease outbreaks are entered into NORS in your NORS reporting agency?**

- 90-100%
- 75-<90%
- 50-<75%
- <50%
- Don't know

# NORS: Evaluation of Foodborne Disease Outbreak Reporting

## 24. Which of the following factors most influence whether a detected foodborne disease outbreak is reported to NORS? (Choose up to 3)

- Pathogen
- Vehicle of the outbreak
- Location where the outbreak occurred
- Time of the year the outbreak occurred
- Quality of evidence about the outbreak (e.g., laboratory confirmation, implicated food)
- Available personnel and financial resources
- What else is happening in the state (e.g. non-foodborne outbreaks)
- IT issues at your health department
- IT issues with NORS
- Don't know
- None
- Other (please specify)



# NORS: Evaluation of Foodborne Disease Outbreak Reporting

## Part 3. Questions on data quality

**25. On average, how many people review each foodborne disease outbreak report before it is entered in NORS?**

- Don't know
- Enter number if known:

**26. On a scale from 1 to 5, where 1 is low priority (data entered only if time/staff available) and 5 is high priority (make time to enter all the data), how would you rate the effort your NORS reporting agency puts into entering data on all foodborne disease outbreaks into NORS?**

1 (low priority)	2	3	4	5 (high priority)	Don't know or prefer not to say
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**27. On a scale of 1 to 5, where 1 is low impact (does not affect reporting) and 5 is high impact (significantly affects reporting), how important is grant funding from Epidemiology and Laboratory Capacity (ELC) or Affordable Care Act (ACA) for reporting to NORS in your NORS reporting agency?**

1 (low impact)	2	3	4	5 (high impact)	Don't know or prefer not to say
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**28. In 2009, many health departments were dealing with H1N1 outbreaks. Did your NORS reporting agency experience decreased resources available to work on foodborne disease outbreaks?**

	Yes	No	Don't know
For detection (e.g., lab capacity):	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
For investigation:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
For data entry and reporting:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

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## Part 4: Questions on mode of transmission in NORS

**29. The revised guidance for reporting outbreaks was sent out in June 2012 ([Click here to access the revised guidance](#)). Is the description of each mode of transmission in the guidance document useful and clear in deciding how to report outbreaks?**

- Useful and clear
- Useful, but not clear
- Clear, but not useful
- Neither useful or clear
- Don't know

**30. Does your NORS reporting agency have a specific protocol to follow to determine which outbreaks are reported as foodborne? [if you are willing to share the protocol, please provide in the textbox or email to [mimanishi@cdc.gov](mailto:mimanishi@cdc.gov)]**

- Yes
- No
- Not sure

Protocol:

**31. Since 2009, outbreaks with other primary modes of transmission can also be reported (food, water, animal contact, environment, or undetermined). As a result, many states have noted that it can be difficult to determine the primary mode of transmission for some outbreaks.**

**Is this a problem that you have experienced?**

- Yes
- No
- Not sure

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**32. For each of the combination(s) that have caused you problems in NORS (since 2009), how likely would the outbreaks have been reported as foodborne disease outbreaks in eFORS (before 2009)?**

*If a combination did not cause you problems, please select "No problems."*

	No problems	Don't know if problems	Not likely reported	Somewhat likely reported	Very likely reported	Don't Know if reported
Foodborne vs. person-to-person	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Foodborne vs. water	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Foodborne vs. animal contact	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Foodborne vs. environmental contamination	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Foodborne vs. indeterminate/other/unknown	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Comment (optional)

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## Part 4: Questions on mode of transmission in NORS

**33. If your NORS reporting agency usually picks a "default" when the mode of transmission is not clear, which mode is considered "default" in your agency?**

- None -- no default
- Foodborne
- Water
- Person-to-person
- Animal contact
- Environmental contamination
- Indeterminate/other/unknown
- Not sure

# NORS: Evaluation of Foodborne Disease Outbreak Reporting

## Final Comments

**Thank you for completing the survey. The results of the evaluation will be shared with the participating state and local public health agencies via email/written report and in a webinar.**

**If you have any questions about this survey, please contact Maho Imanishi ([hwl2@cdc.gov](mailto:hwl2@cdc.gov), 404-718-4689), Karunya Manikonda ([hum6@cdc.gov](mailto:hum6@cdc.gov), 404-639-3530), or Hannah Gould ([dvj9@cdc.gov](mailto:dvj9@cdc.gov), 404-639-3315) at the CDC Enteric Diseases Epidemiology Branch.**

**34. Please provide any additional feedback you have on NORS. Your response is invaluable to help to improve the NORS reporting system.**