



OREGON
HEALTH
AUTHORITY

Outbreak Questionnaires and Interviewing Tips

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Informal poll: Are you currently involved in interviewing cases for routine case investigation(s) or outbreak(s)?

Why do we investigate outbreaks?

- Determine cause of disease
- Identify source of infection
- Determine mode of transmission
- Understand who is at risk
- Control/prevention of additional illnesses

Objectives

1. Become familiar with **interviewing** tips
2. List **information** needed from outbreak questionnaires
3. Describe **process** for developing questionnaires
4. Describe methods for **administering** questionnaires
5. Discuss potential **concerns** of respondents
6. Consider **challenges** of outbreak investigation

1. Interviewing Tips

30-minute Interviewing Cardinal Rules

https://www.youtube.com/watch?v=HNZm7z_JELw&feature=emb_logo

9-minute Quick Review- Do's and don'ts of outbreak interviewing


<https://www.youtube.com/watch?app=desktop&v=O6gKLQpEkfY>

2. Purpose of Questionnaires

For outbreak investigations

Gather information for generating and testing **hypotheses** about cause of outbreak

Characterize the outbreak



Who?
What?
Where?
When?
Why?

3. Developing the questionnaire

Develop hypothesis:

- Interview a few ill people
- Use open-ended questions
- Look for common themes among responses

Test hypothesis using focused questionnaire:

- Collect facts that lead to acceptance or rejection

Testing Your Hypotheses

Use closed-ended questions that need no interpreting

- Require yes or no answer
- Specific, without embroidered details

Examples:

- *“Did you eat the potato salad?”*
- *“Did you ride the MAX train on Thursday last week? On Friday last week?”*



Writing the questionnaire

Customizable template questionnaires are available at OHA ACDP website

→ Foodborne outbreak investigation tools

<https://www.oregon.gov/oha/PH/DISEASES/CONDITIONS/COMMUNICABLEDISEASE/OUTBREAKS/GASTROENTERITIS/Pages/Outbreak-Investigation-Tools.aspx>

case control exclude

Name / i d. _____

WEDDING RECEPTION (2002-65)

check if proxy respondent _____

Phone _____ Age _____ Sex M F

E-mail _____ Interviewed by _____ on _____

Did you attend the Wedding reception? yes no *if no, STOP; if yes, CONTINUE*

FOOD EXPOSURES

Did you attend the rehearsal dinner? yes no

Let me walk you through the food items served at the wedding reception.

About what time did you eat? _____

For each item, give me a "yes" or "no" answer if you remember eating or even tasting it.

Reception Food	Y	N	?
Veg Lasagna A	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Garlic Chick Lasagna B	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Greek Salad C	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Italian dressing D	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Bread Sticks E	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cake F	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Punch G	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Water H	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
_____ I	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
_____ J	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

How many drinks with ice? _____

Have you been sick at all since the reception? yes no *if no, STOP; if yes, CONTINUE*

Who was interviewed?

What was the exposure of concern (where, when)?

Looking for the "why": possible risk factors

What symptoms and clinical information?

case control exclude

Name / i d. _____

SIGNS AND SYMPTOMS

Let me read you a list of symptoms. For each one, give me a "yes" or "no." Did you have any...

Y	N	?		Y	N	?	
H	<input type="checkbox"/>	<input type="checkbox"/>	headache	L	<input type="checkbox"/>	<input type="checkbox"/>	chills
N	<input type="checkbox"/>	<input type="checkbox"/>	nausea	D	<input type="checkbox"/>	<input type="checkbox"/>	any diarrhea or loose stools
V	<input type="checkbox"/>	<input type="checkbox"/>	vomiting	3	<input type="checkbox"/>	<input type="checkbox"/>	<i>if yes to diarrhea</i> , did you have 3 or more loose stools in any 24-hour period?
M	<input type="checkbox"/>	<input type="checkbox"/>	myalgia (muscle aches)	B	<input type="checkbox"/>	<input type="checkbox"/>	any blood in stools
C	<input type="checkbox"/>	<input type="checkbox"/>	abdominal (stomach, belly) cramps	O	<input type="checkbox"/>	<input type="checkbox"/>	other _____
T	<input type="checkbox"/>	<input type="checkbox"/>	unusual fatigue (feeling tired)				
F	<input type="checkbox"/>	<input type="checkbox"/>	fever (<i>if yes</i> , <input type="checkbox"/> subjective or _____ ° (max.)				

Time factors:



- When did symptoms begin?
- How long did they last?

ONSET AND DURATION

Get precise answers for onset time. If you don't get a date and time, they won't fit on an epi curve. [Their] estimates are OK. Prompt as needed: "What is your best guess of the time?" Don't let them get away with vague stuff like "morning" or "after midnight." Be careful with times such as "midnight" or early morning hours – which day do they mean? Midnight exactly is the _____ of the day.

On what date did you first feel sick?

Sat, Oct 5 Sun, Oct 6 Mon, Oct 7 Tues, Oct 8 _____

[If applicable] **On what day did you first have any vomiting or diarrhea?**

Sat, Oct 5 Sun, Oct 6 Mon, Oct 7 Tue, Oct 8 _____

[If applicable] **At what time did the vomiting or diarrhea begin? [ENTER A SPECIFIC HOUR!!!]**

_____ am noon _____ pm midnight (end of day)

Are you still feeling sick now? yes no

If no, how long did you feel sick? ____ hours days

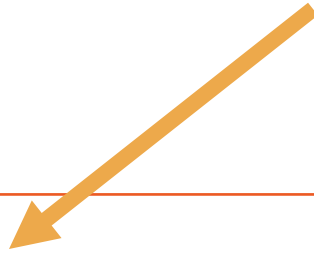
Is anyone in your household ill that did not attend the reception? yes no
If so, when did they become ill? _____ day, _____ time

October						
S	M	T	W	T	F	S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		



Helpful to refer to calendar

How severe was illness?



MISCELLANY

Did you/Are you... (check all that apply; provide details [names, dates, phone numbers, etc.] at right.)

	Y	N	?		
W	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	miss work or school?	if yes, how many days? _____
P	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	see a physician/HCP?	if yes, whom?
E	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	visit an ER?	if yes, specify
S	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	give a stool specimen?	if yes, when/to whom
C	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	already culture-positive?	if yes, specify
F	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	[if not] willing to provide specimen?	
H	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	get admitted to hospital overnight?	if yes, how many nights? _____

4. Methods for administering questionnaires

Telephone = *most common and efficient* method

- Quick
 - Inexpensive
 - Sensitive (does problem truly exist?)
-
- Disadvantages:
 - Need cooperation from those called
 - Possible bias: do those who answer phone differ from those who don't?



Administering questionnaires

In-person interview

- More accurate to obtain complex information
 - When observations important
 - May enhance data quality
- Disadvantages
 - More expensive than phone
 - Time-consuming
 - Staff intensive



Administering questionnaires

Web based (e.g., Survey Monkey, Inquisite, Google Forms)

Advantages:

- Quickly develop and launch questionnaire
- Can reach many people quickly
- Low cost and staff time

Disadvantages:

- Can't ask clarifying questions
- Responses may be less complete
- Ensure security of confidential health information



The screenshot shows a web-based questionnaire interface with a light green background. The title is "Circles- Reflections and Connections". It contains several sections:

- 1. Name:** A text input field.
- 2. Date:** A text input field.
- 3. How do I rate my understanding of this WALT?** A list of radio button options: excellent, very good, good, and need support.
- Comments:** A text input field.
- Instructions:** "If you selected 'good' or 'need support' then please complete the following questions before returning to the blog."
- 4. What did you find best? What did you not understand?** A text input field.
- 5. What help do you need to achieve this Learning Intention?** A text input field.
- Done:** A button in the bottom right corner.

Administering questionnaires

Direct (phone or in-person)

Self-administered (mail or web-based)

Proxy

- Parent (for child <18 years old), family member, caregiver
- May get **inaccurate** information



5. Concerns among respondents

- Feel blamed or judged because of the outbreak or disease
- Feel threatened by you
- Mental status issues
- Undocumented status
- Outbreak in setting of illegal activities
- Businesses **fear** bad publicity, loss of clients/customers
- Missed work and loss of income for self or sick child
- Obtaining health care if no health insurance or access to care



Concerns among Respondents



Some individuals selected for interview during outbreak investigation may challenge or question your legal authority in contacting them for interview

I'M FROM THE
GOVERNMENT,
I'M HERE
TO HELP



OAR 333-019-0000

Responsibility of Public Health
Authorities to Investigate Reportable
Diseases

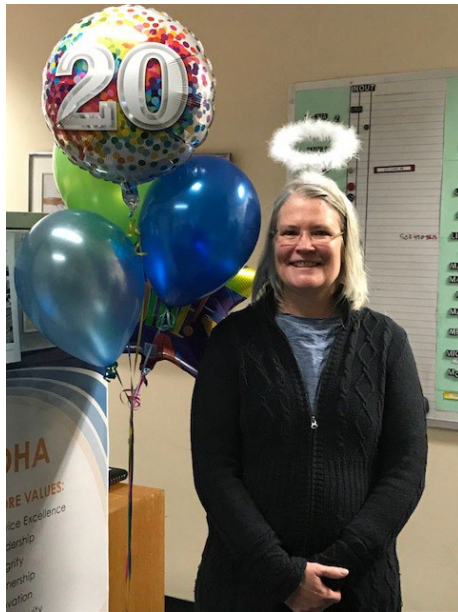
6. Challenges in outbreak investigations

- Time constraints
- Reliance on a **facility** or others
- **LPHA staffing**: availability, competing priorities
- **Uncertain** how much to do, for how long, other priorities

You don't have to do this alone!

On-call ACDP epidemiologists or the Urgent Epidemiology Response Team (UERT) are available 24/7 to consult and assist with outbreaks.

ACDP: 971-673-1111



Questions?

