

Indiana University-Student Epidemiology Response Team (IU-SERT)



IUPUI

**RICHARD M. FAIRBANKS
SCHOOL OF PUBLIC HEALTH**

INDIANA UNIVERSITY

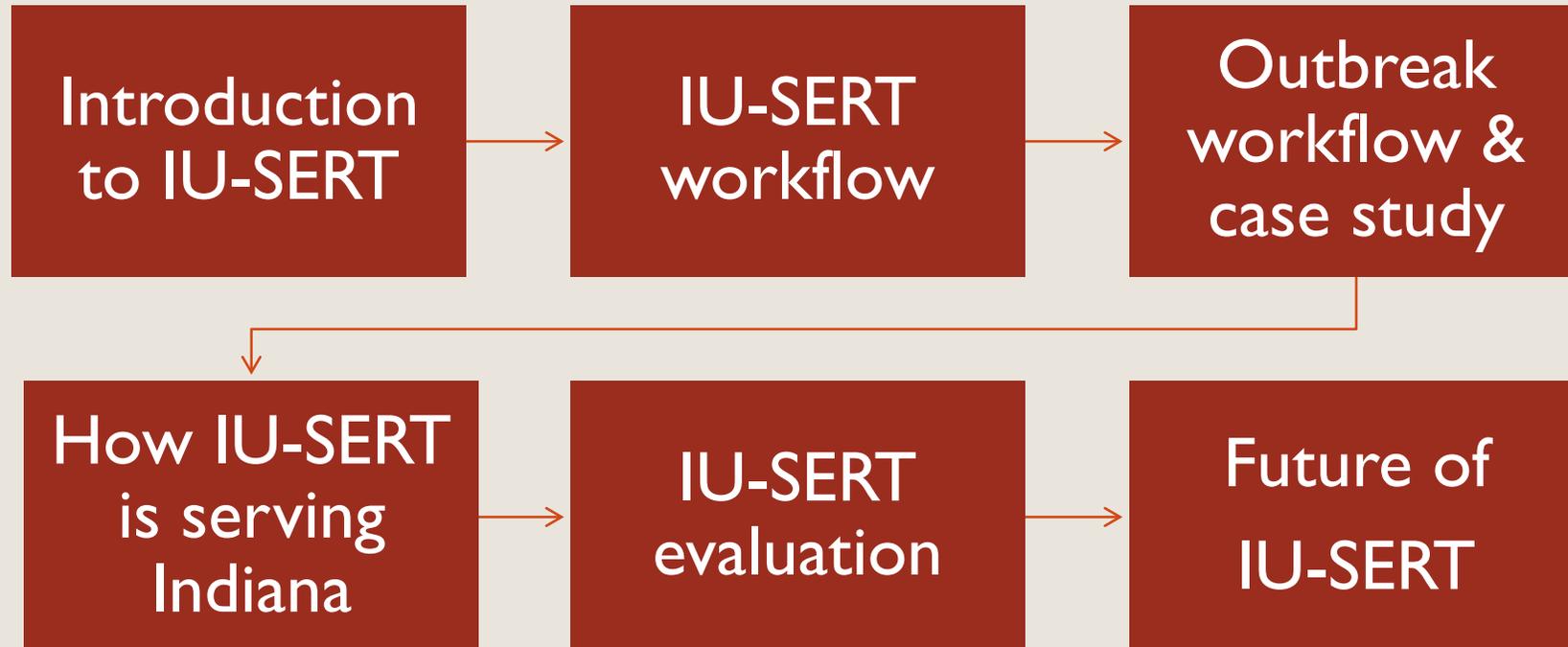
Indianapolis



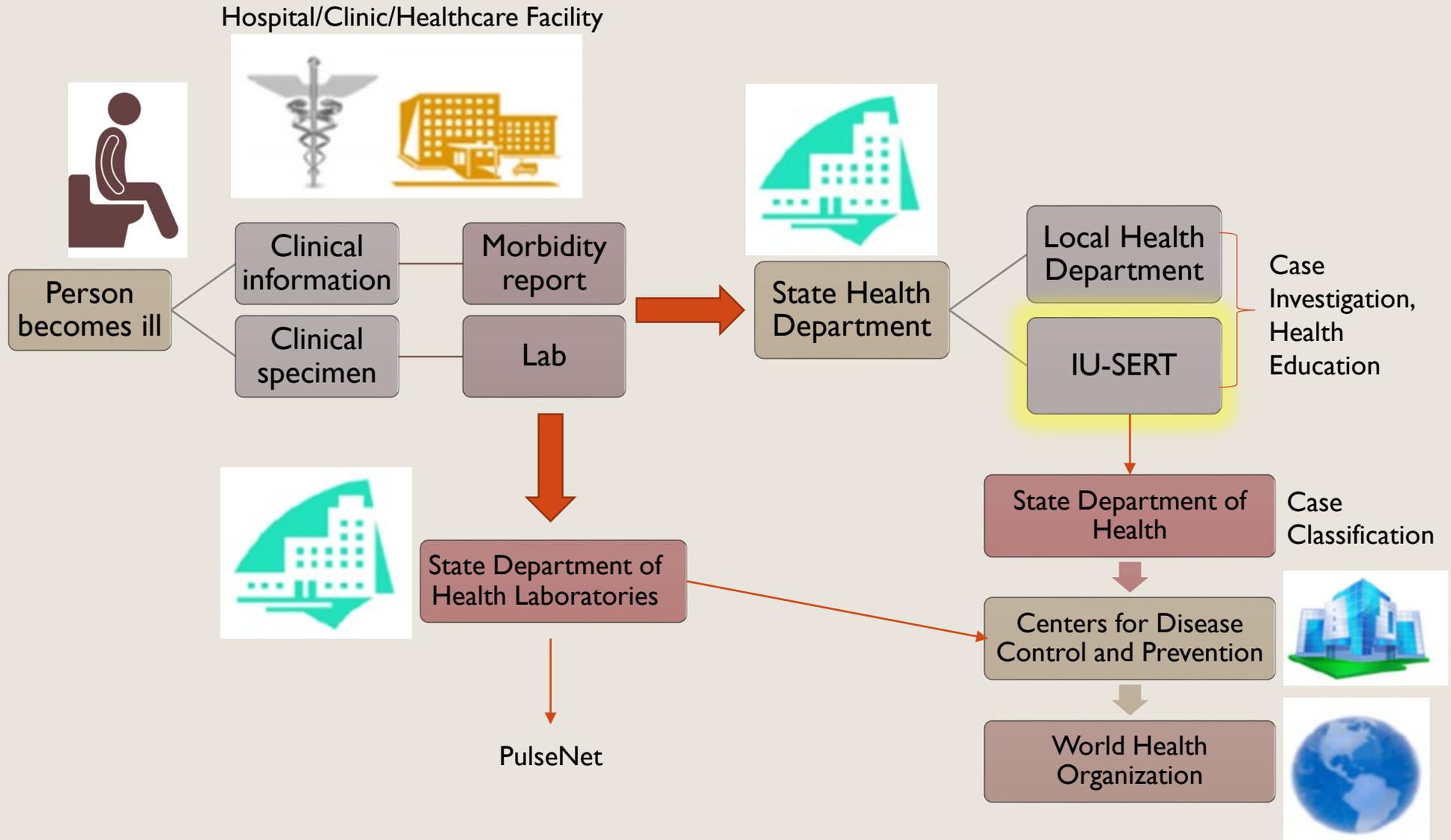
**Indiana State
Department of Health**

Kori Waelbroeck MPH (c)

OUTLINE FOR DISCUSSION



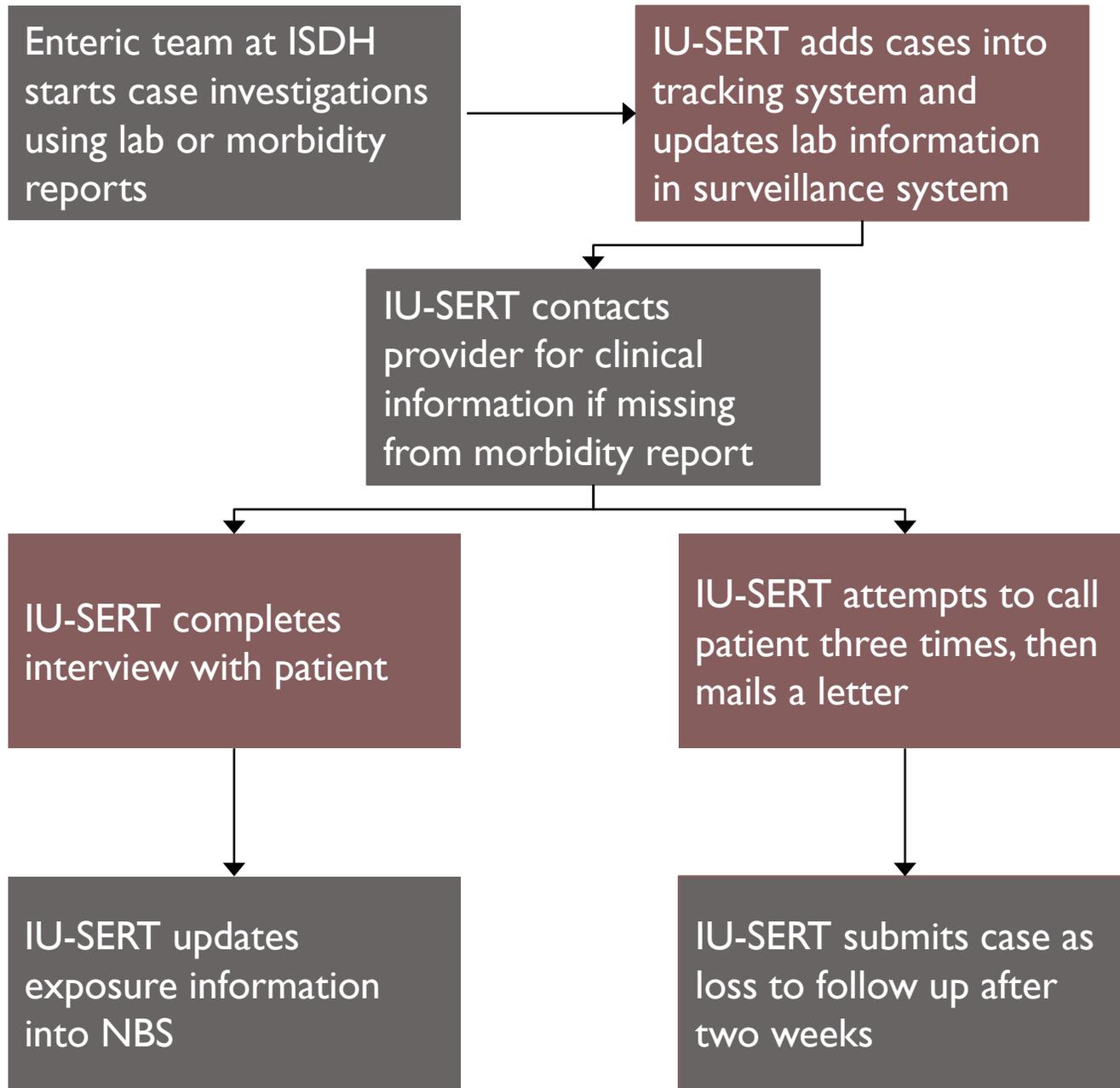
WHAT IS IU-SERT?



HOW WAS IU-SERT CREATED?

- The ISDH and the Indiana University Richard M. Fairbanks School of Public Health (RMFSPH) collaborated to develop a team of public health graduate students to investigate cases and outbreaks of salmonellosis.
- IU-SERT was designed to improve Indiana's ability to investigate clusters/outbreaks of salmonellosis by obtaining more timely and complete case investigation data.





IU-SERT WORKFLOW

FELLOW RESPONSIBILITIES

Train new IU-SERT interns

Optimize IU-SERT workflow

IU-SERT Fellow

Evaluate IU-SERT program

Support enteric epidemiologists

OUTBREAK WORKFLOW

Enteric epidemiologists are notified of a cluster or outbreak of cases



IU-SERT enters cases into a line list on tracking spreadsheet



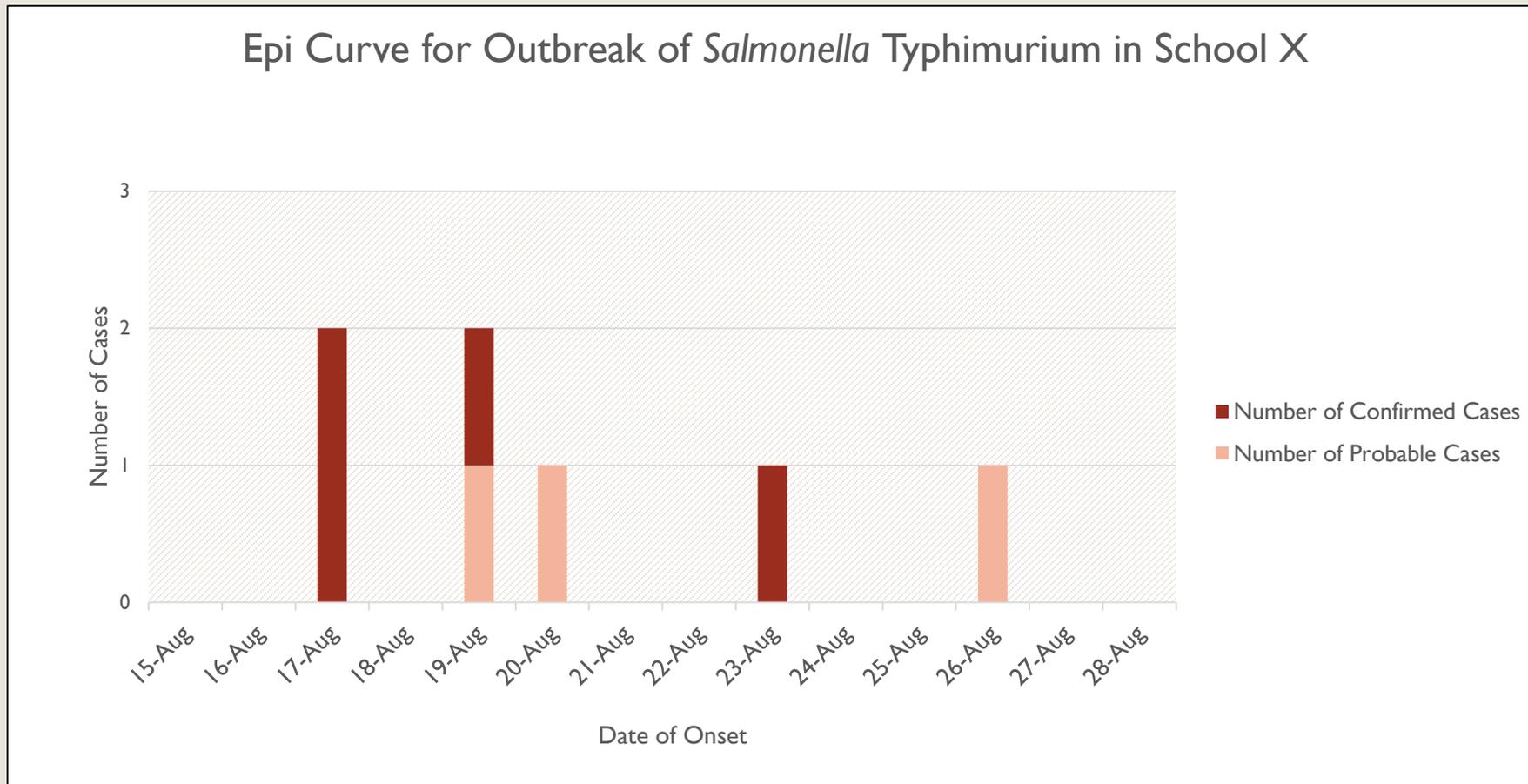
IU-SERT enters exposure information into Epi Info and provides enteric epi with exposure line list



IU-SERT assists with completion of supplemental questionnaires as needed

SUMMER 2019 OUTBREAK OF *SALMONELLA* TYPHIMURIUM IN SCHOOL X

- ISDH was notified of four cases of salmonellosis associated with school X. Public health officials at the county identified five additional probable cases of ill school attendees.



SUMMER 2019 OUTBREAK OF SALMONELLA TYPHIMURIUM IN SCHOOL X

Foods Eaten at Lunch at School X

Resize font:



This survey was created by the Indiana State Department of Health in partnership with the County Health Department.

Thank you for taking the time to complete this survey. The questions below will ask what your child had for lunch in the past several weeks. Please answer them to the best of your ability. It may be helpful to complete the survey with your child, since they might have a better idea of what they ate at school.

Any information you provide will be helpful in our investigation. Choose the option that best describes whether or not your child ate that food item on a particular day from the options: Yes, Maybe, No, or Don't Know.

All the information you provide will remain confidential. You don't have to answer any questions you don't want to, but your answers may help us figure out what made your child ill and prevent others from getting sick.

Note: You only need to complete the survey for days up to and including the day where your child started to experience symptoms. For example, if your child started having diarrhea on August 13th, you only need to complete the survey for the days up to and including August 13th. You may leave the rest of the days below blank.

Thank you very much for your time!

Patient Information:

What is your child's name?

* must provide value

What is your child's date of birth? (MM/DD/YYYY)

* must provide value

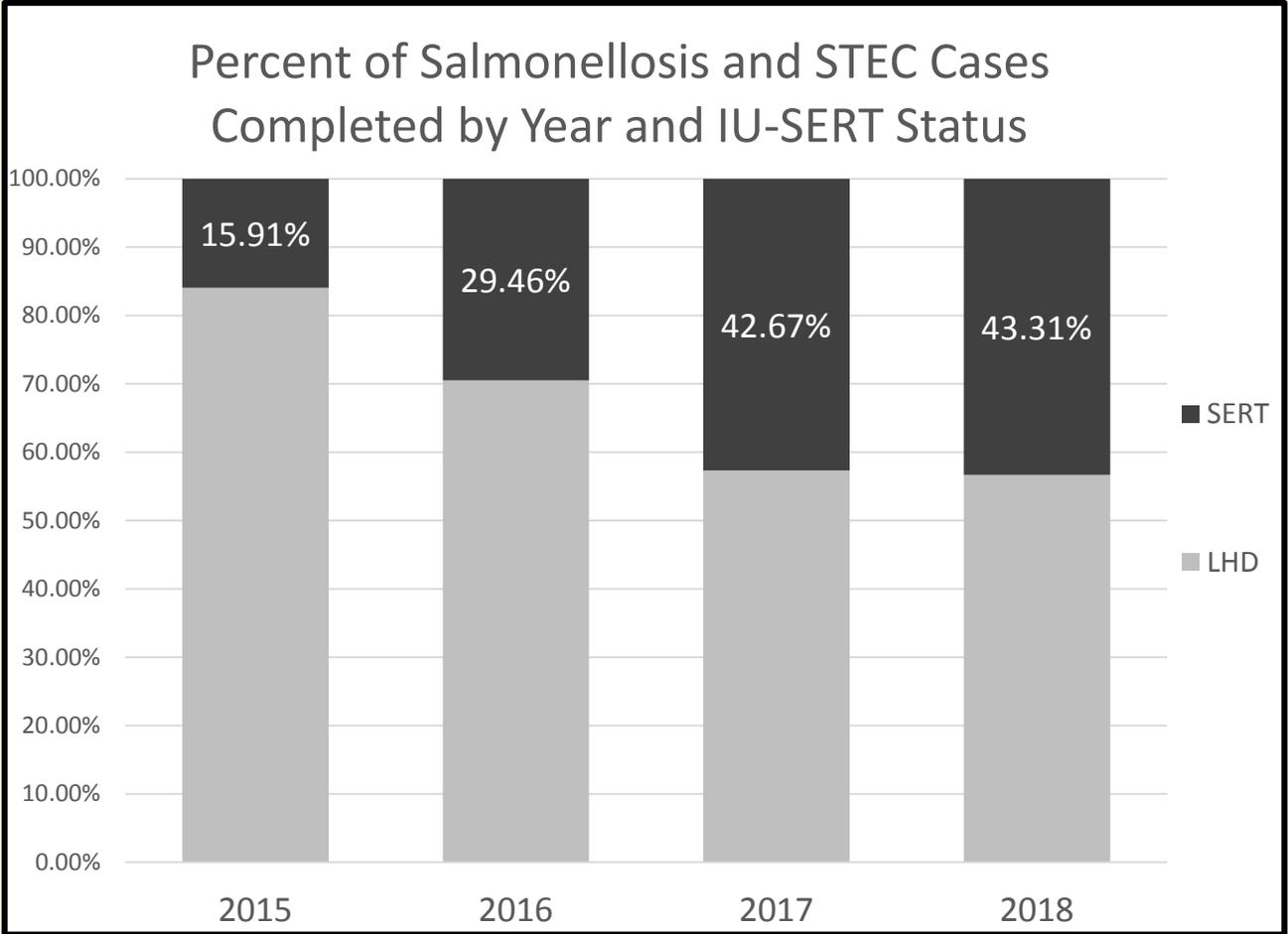
What grade is your child in?

Foods Eaten at School on Tuesday, August 13th

	Yes	Maybe	No	Don't Know	
Warrior Burger	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	reset
Baked Beans	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	reset
Choice Fruit	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	reset
Chips	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	reset
Hot Dog	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	reset
Soup of the Week	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	reset
Salad Bar	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	reset
Other (specify)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	reset
Ate Food from Home	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	reset

HOW IS IU-SERT SERVING INDIANA COUNTIES?

- Reducing burden of high volume case investigations
- Tracking clusters SERT conditions
- Providing assistance to non-SERT counties during outbreak situations





QUICKER RESPONSES TO
CASE INVESTIGATIONS



FEWER CASES LEFT
UNINVESTIGATED



REDUCED BURDEN/
INVESTIGATION
WORKLOAD FOR LHDS

IU-SERT EVALUATION

IU-SERT EVALUATION

QUICKER RESPONSES TO
CASE INVESTIGATIONS



Case Investigations with Completed Patient Interview

SERT Status	Mean Investigation Time	Median Investigation Time
Non-SERT	7.4 days	3 days
SERT	6.1 days	2 days

P-value = 0.0034

Case Investigations with or without Completed Patient Interview

SERT Status	Mean Investigation Time	Median Investigation Time
Non-SERT	11.7 days	4 days
SERT	9.1 days	4 days

P-value < 0.0001

IU-SERT EVALUATION

FEWER CASES LEFT
UNINVESTIGATED



In the four year study period, 220 cases (9.21%) were closed as not investigated for LHD investigations, versus just four cases (0.33%) for SERT.

0.33%

Versus

9.21%

P-value < 0.0001

IU-SERT EVALUATION

REDUCED BURDEN/
INVESTIGATION WORKLOAD
FOR LHDS



The average case investigation takes about 2 hours to complete.

Outbreak cases take additional time to investigate.

In four years, we provided counties with 2,420 hours of case investigation assistance.



Evaluating intern and LHD experiences with IU-SERT



Piloting CareWeb use for clinical information



Analyzing effectiveness of text messaging services to contact patients

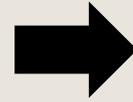


Testing use of Accruent to look up patient contact information

WHAT IS NEXT
FOR IU-SERT?

EXPANSION OF IU-SERT

15 Counties



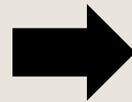
59 Counties

IU-SERT Interns



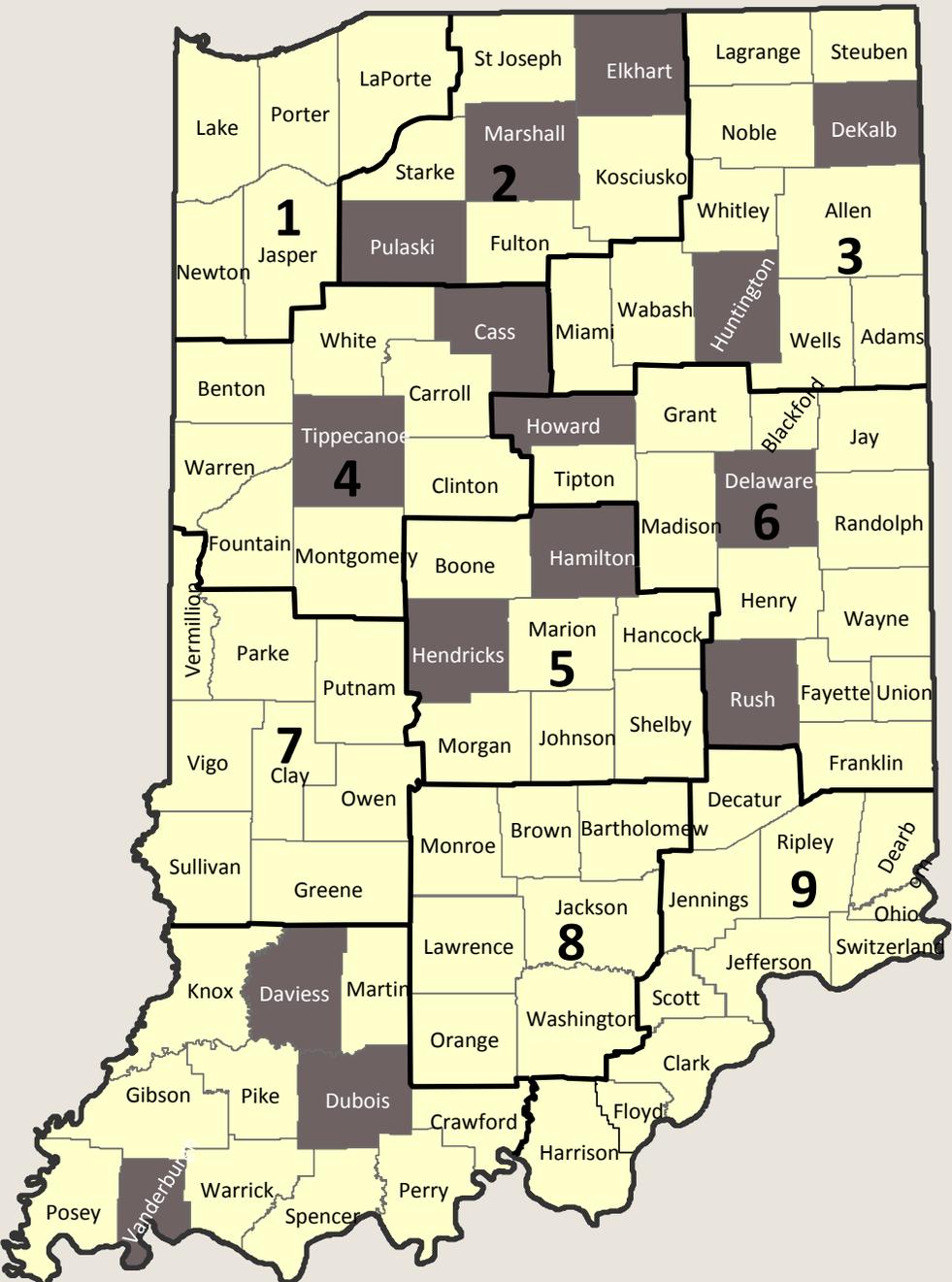
IU-SERT Fellow
&
IU-SERT Interns

One Condition

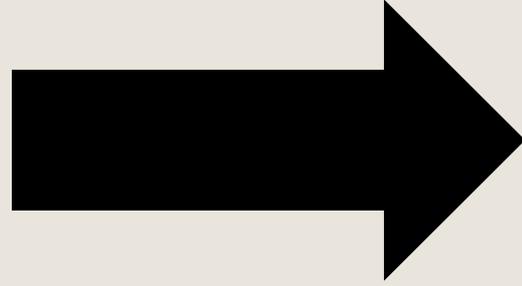


Six Conditions*

Gary East Chicago 2015



Thank You!



East Chicago & Gary 2019



SERT
Non-SERT