

Epi Team Challenge



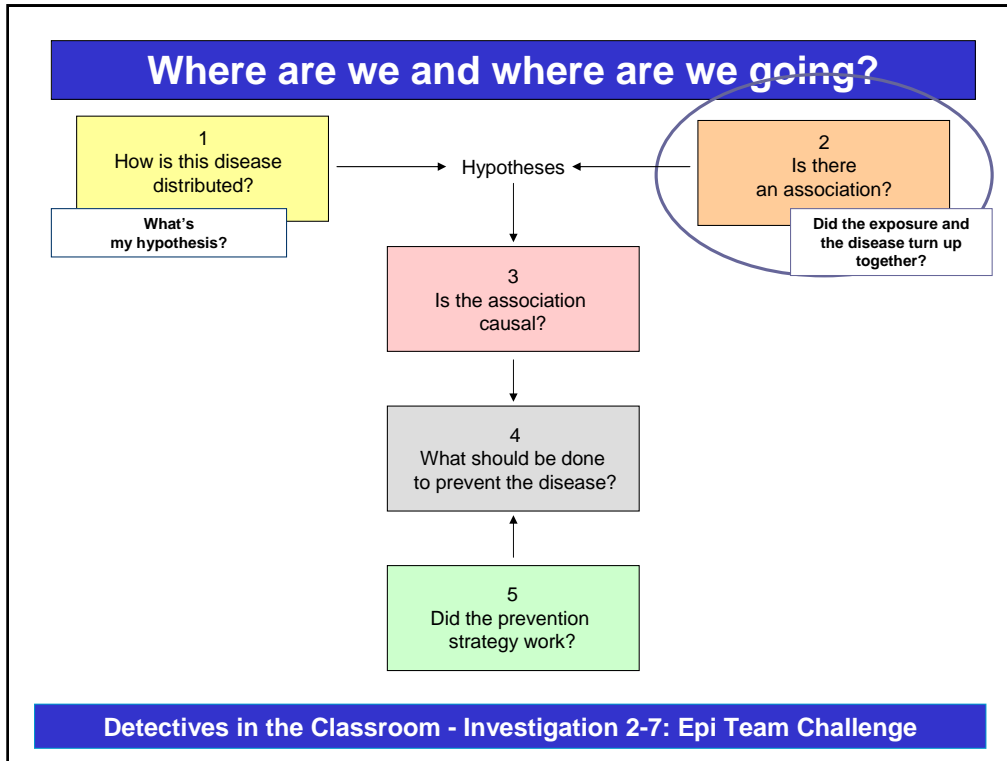
Epi Team Challenge

Detectives in the Classroom - Investigation 2-7: Epi Team Challenge

In **Investigation 2-7: Epi Team Challenge**, students will practice distinguishing between the four study designs by participating in an Epi Team Challenge.

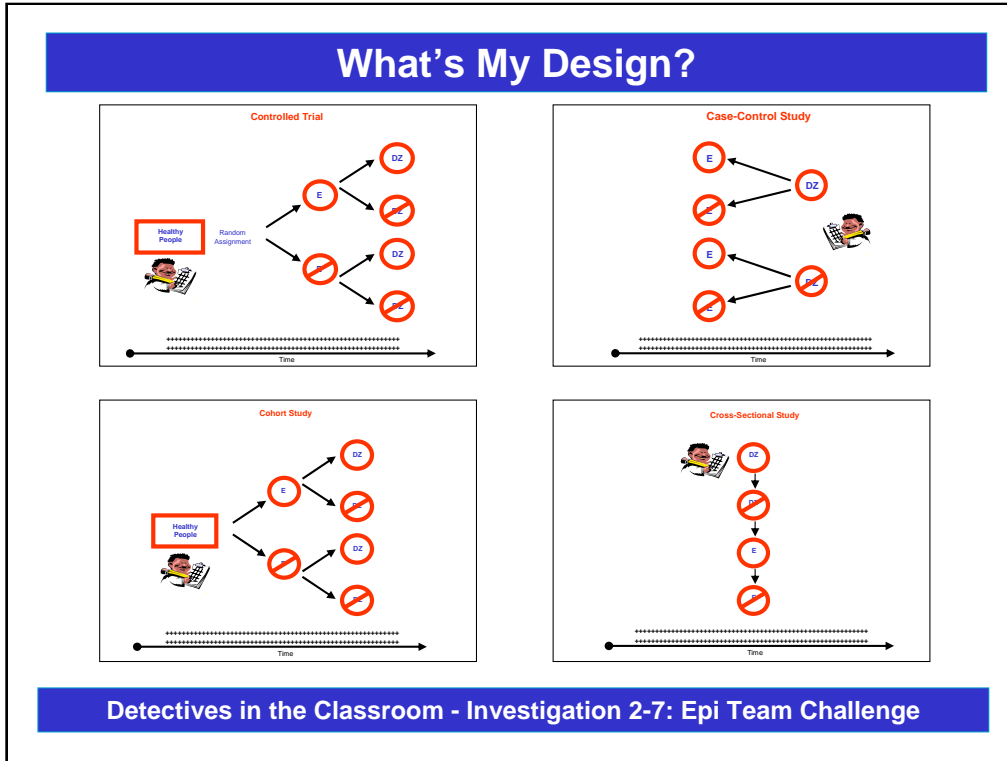
Divide the class into Epi Teams of four or five students per team.

Next Slide



Remind students again that in the Module 2 investigations, they are learning how to answer the second Essential Question: “Is there an association between the hypothesized cause and the disease?”

Next Slide



Give each Epi Team a set of **Study Design Cards**.

Students will now practice for the Epi Team Challenge they were introduced to during the previous class.

You are going to show them a clue for a study design. Members of each Epi Team should decide among themselves what study design or designs the clue describes and, when you call for “Cards,” should hold up the appropriate **Study Design Card** or **Cards**.

Next Slide

What's My Design?

Practice Clue

Assign treatment and control groups.

Give exposure to treatment group, but not control group.

Follow through time and compare risk of disease in treatment group with risk of disease in control group.

Epidemiologist is involved during the entire time from exposure to disease.

Trial

Detectives in the Classroom - Investigation 2-7: Epi Team Challenge

Show students the clue.

Give Epi Teams time to discuss.

Ask for "Cards."

Show students the correct answer.

Discuss as needed.

Next Slide

What's My Design?

Begin Epi Team Challenge

Clue 1

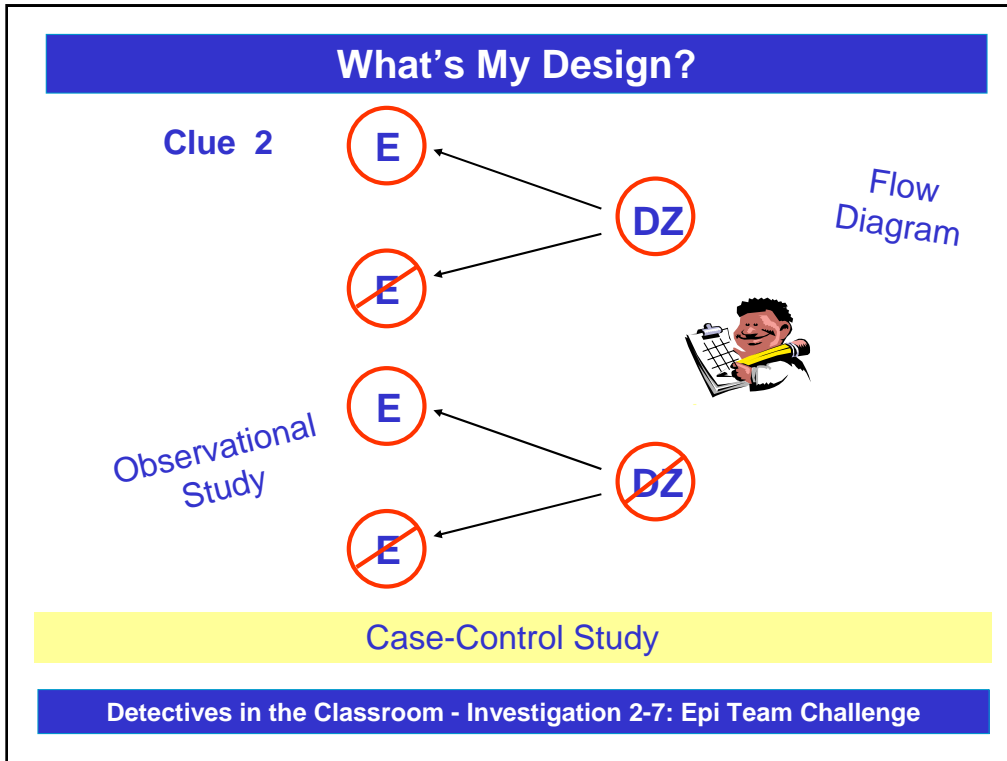
Assign treatment and control groups.

Trial

Detectives in the Classroom - Investigation 2-7: Epi Team Challenge

- Show students the clue.
- Give Epi Teams time to discuss.
- Ask for "Cards."
- Show students the correct answer.
- Discuss as needed.

Next Slide



Show students the clue.

Give Epi Teams time to discuss.

Ask for "Cards."

Show students the correct answer.

Discuss as needed.

Next Slide

What's My Design?

Clue 3

Flow Diagram

Observational Study

Cohort, Case-Control, and Cross-Sectional Studies

Detectives in the Classroom - Investigation 2-7: Epi Team Challenge

Show students the clue.

Give Epi Teams time to discuss.

Ask for "Cards."

Show students the correct answer.

Discuss as needed.

Next Slide

What's My Design?

Clue 4

Follow through time and compare risk of disease in exposed group with risk of disease in the unexposed group.

Trial and Cohort Study

Detectives in the Classroom - Investigation 2-7: Epi Team Challenge

Show students the clue.

Give Epi Teams time to discuss.

Ask for "Cards."

Show students the correct answer.

Discuss as needed.

Next Slide

What's My Design?

Clue 5

Follow through time and compare risk of disease
in treatment group with risk of disease in control group.

Give exposure to treatment group, but not control group.

Trial

Detectives in the Classroom - Investigation 2-7: Epi Team Challenge

Show students the clue.

Give Epi Teams time to discuss.

Ask for "Cards."

Show students the correct answer.

Discuss as needed.

Next Slide

What's My Design?

Clue 6

Epidemiologist is involved during
the entire time from exposure to disease.

Trial and Cohort Study

Detectives in the Classroom - Investigation 2-7: Epi Team Challenge

Show students the clue.

Give Epi Teams time to discuss.

Ask for "Cards."

Show students the correct answer.

Discuss as needed.

Next Slide

What's My Design?

Clue 7

Select a group of people with disease
and a similar group of people without disease.

Case-Control Study

Detectives in the Classroom - Investigation 2-7: Epi Team Challenge

Show students the clue.

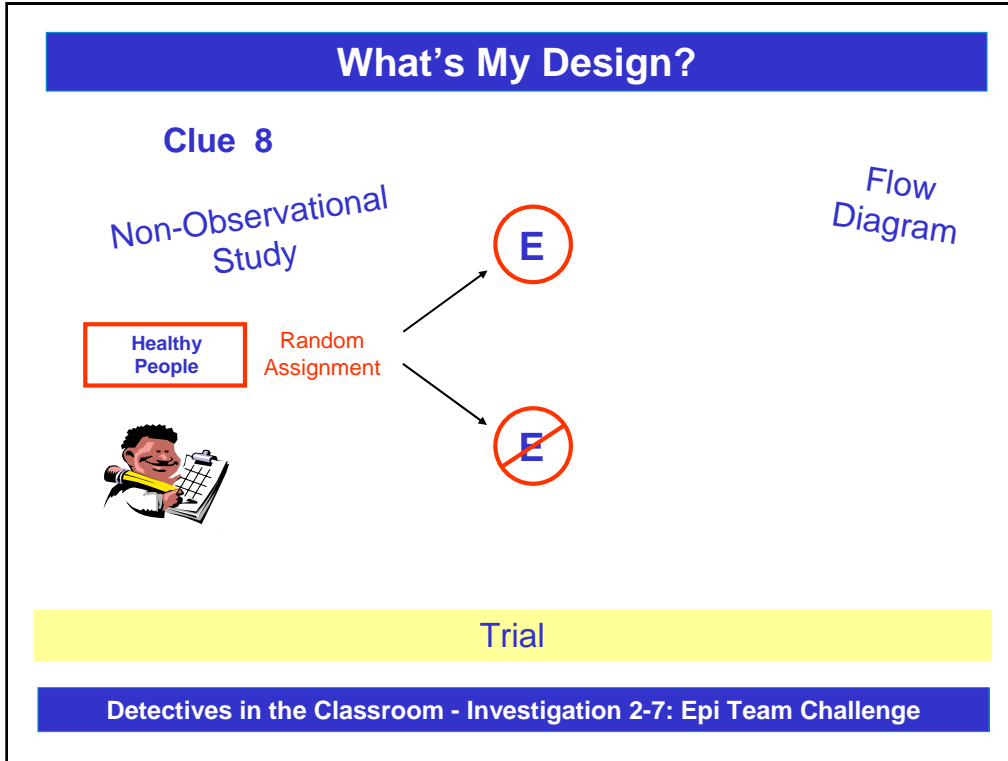
Give Epi Teams time to discuss.

Ask for "Cards."

Show students the correct answer.

Discuss as needed.



Next Slide



- Show students the clue.
- Give Epi Teams time to discuss.
- Ask for “Cards.”
- Show students the correct answer.
- Discuss as needed.

Next Slide

What's My Design?

Clue 9  

Flow Diagram

DZ
↓
~~DZ~~
↓
E
↓
~~E~~

Observational Study

Cross Sectional Study

Detectives in the Classroom - Investigation 2-7: Epi Team Challenge

- Show students the clue.
- Give Epi Teams time to discuss.
- Ask for "Cards."
- Show students the correct answer.
- Discuss as needed.

Next Slide

What's My Design?

Clue 10

Compare percent of exposed people in the two groups.

Case-Control Study

Detectives in the Classroom - Investigation 2-7: Epi Team Challenge

Show students the clue.

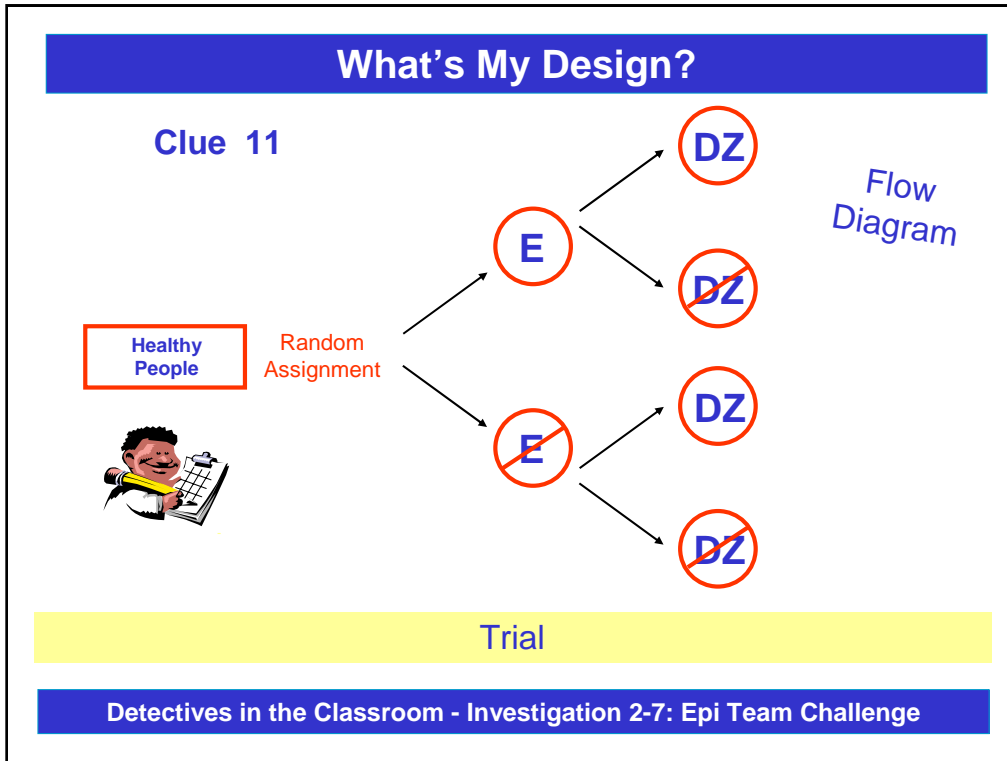
Give Epi Teams time to discuss.

Ask for "Cards."

Show students the correct answer.

Discuss as needed.

Next Slide



Show students the clue.

Give Epi Teams time to discuss.

Ask for “Cards.”


Show students the correct answer.

Discuss as needed.

Next Slide

What's My Design?

Clue 12



*Flow
Diagram*

Cross Sectional Study

Detectives in the Classroom - Investigation 2-7: Epi Team Challenge

- Show students the clue.
- Give Epi Teams time to discuss.
- Ask for "Cards."
- Show students the correct answer.
- Discuss as needed.

Next Slide

What's My Design?

Clue 13

Observational Study

Flow Diagram

Cohort Study

Detectives in the Classroom - Investigation 2-7: Epi Team Challenge

- Show students the clue.
- Give Epi Teams time to discuss.
- Ask for "Cards."
- Show students the correct answer.
- Discuss as needed.

Next Slide

What's My Design?

Clue 14

Ask each person about both exposure and disease
at that point in time.

Cross Sectional Study

Detectives in the Classroom - Investigation 2-7: Epi Team Challenge

Show students the clue.

Give Epi Teams time to discuss.

Ask for "Cards."

Show students the correct answer.

Discuss as needed.

Next Slide

What's My Design?

Clue 15

Ask both groups about their exposures in the past.

Case-Control Study

Detectives in the Classroom - Investigation 2-7: Epi Team Challenge

Show students the clue.

Give Epi Teams time to discuss.

Ask for "Cards."

Show students the correct answer.

Discuss as needed.

Next Slide


What's My Design?

Clue 16

Flow Diagram

Healthy People

Random Assignment



Trial

Detectives in the Classroom - Investigation 2-7: Epi Team Challenge

- Show students the clue.
- Give Epi Teams time to discuss.
- Ask for "Cards."
- Show students the correct answer.
- Discuss as needed.

Next Slide

What's My Design?

Clue 17

Disease risk in exposed group
is compared to disease risk in unexposed group.

Trial, Cohort Study, and Cross Sectional Study

Detectives in the Classroom - Investigation 2-7: Epi Team Challenge

Show students the clue.

Give Epi Teams time to discuss.


Ask for "Cards."

Show students the correct answer.

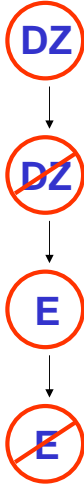
Discuss as needed.

Next Slide

What's My Design?

Clue 18 

Flow Diagram



```
graph TD; A((DZ)) --> B((DZ)); B --> C((E)); C --> D((E))
```

Cross Sectional Study

Detectives in the Classroom - Investigation 2-7: Epi Team Challenge

- Show students the clue.
- Give Epi Teams time to discuss.
- Ask for "Cards."
- Show students the correct answer.
- Discuss as needed.

Next Slide

What's My Design?

Clue 19

Select a healthy study sample.

Trial (?) and Cohort Study

Detectives in the Classroom - Investigation 2-7: Epi Team Challenge

Show students the clue.

Give Epi Teams time to discuss.

Ask for "Cards."

Show students the correct answer.

Discuss as needed.

Next Slide

What's My Design?

Clue 20

Observe who has and has not been exposed.

Cohort and Cross-Sectional Studies

Detectives in the Classroom - Investigation 2-7: Epi Team Challenge

Show students the clue.

Give Epi Teams time to discuss.

Ask for "Cards."

Show students the correct answer.

Discuss as needed.

Next Slide

What's My Design?

Clue 21

Give exposure to treatment group, but not control group.

Trial

Detectives in the Classroom - Investigation 2-7: Epi Team Challenge

Show students the clue.

Give Epi Teams time to discuss.

Ask for "Cards."

Show students the correct answer.

Discuss as needed.

Next Slide

What's My Design?

Clue 22

Observational Study

Healthy People

Flow Diagram

Cohort Study

Detectives in the Classroom - Investigation 2-7: Epi Team Challenge

- Show students the clue.
- Give Epi Teams time to discuss.
- Ask for "Cards."
- Show students the correct answer.
- Discuss as needed.

Next Slide

What's My Design?

Clue 23

Epidemiologist is involved after disease has occurred
and relies on subjects' memories
to gather information about exposure.

Case-Control Study

Detectives in the Classroom - Investigation 2-7: Epi Team Challenge

Show students the clue.

Give Epi Teams time to discuss.

Ask for "Cards."

Show students the correct answer.

Discuss as needed.

Next Slide

What's My Design?

Clue 24

Select a study sample.

Trial, Cohort, Case-Control, and Cross Sectional Studies

Detectives in the Classroom - Investigation 2-7: Epi Team Challenge

Show students the clue.

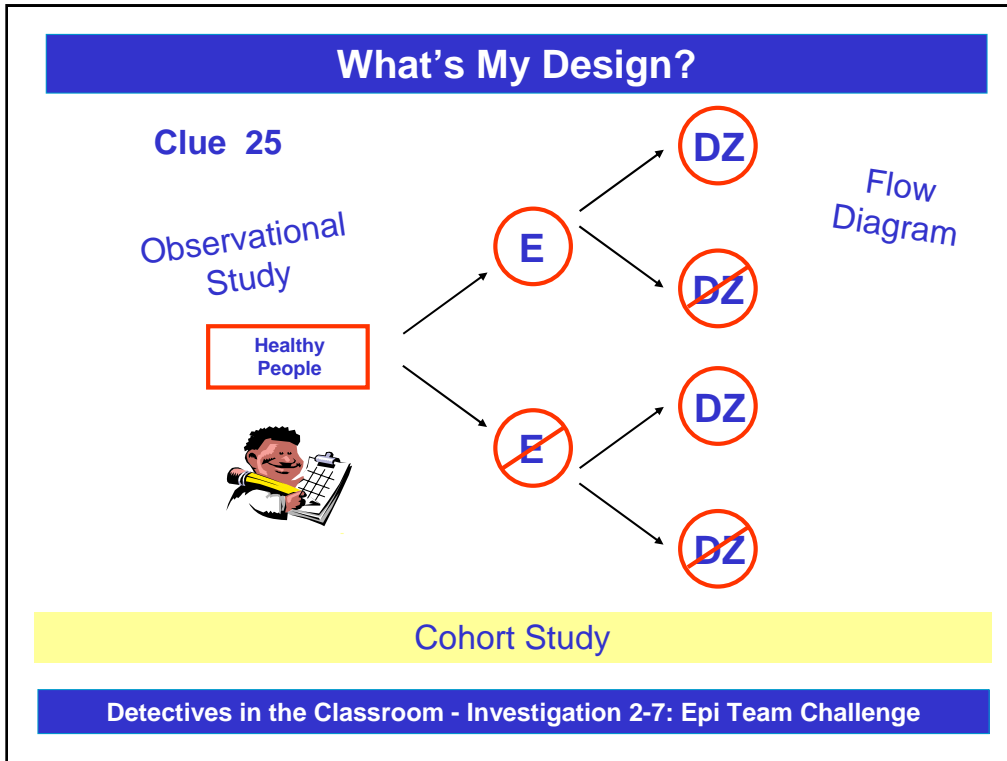
Give Epi Teams time to discuss.

Ask for "Cards."

Show students the correct answer.

Discuss as needed.

Next Slide



- Show students the clue.
- Give Epi Teams time to discuss.
- Ask for “Cards.”
- Show students the correct answer.
- Discuss as needed.

Next Slide

What's My Design?

Clue 26

Epidemiologist gathers data only at that one point in time.

Cross Sectional Study

Detectives in the Classroom - Investigation 2-7: Epi Team Challenge

Show students the clue.

Give Epi Teams time to discuss.

Ask for "Cards."

Show students the correct answer.

Discuss as needed.

Next Slide

What's My Design?

Clue 27

Flow Diagram

Trial and Cohort Study

Detectives in the Classroom - Investigation 2-7: Epi Team Challenge

Show students the clue.

Give Epi Teams time to discuss.

Ask for "Cards."

Show students the correct answer.

Discuss as needed.

Next Slide

What's My Design?

Clue 28

Follow through time and compare risk of disease in exposed group to risk of disease in unexposed group.

Trial and Cohort Study

Detectives in the Classroom - Investigation 2-7: Epi Team Challenge

Show students the clue.

Give Epi Teams time to discuss.

Ask for "Cards."

Show students the correct answer.

Discuss as needed.

Next Slide

What's My Design?

Clue 29

Epidemiologist is involved
during the entire time from exposure to disease.

Trial and Cohort Study

Detectives in the Classroom - Investigation 2-7: Epi Team Challenge

Show students the clue.

Give Epi Teams time to discuss.

Ask for "Cards."

Show students the correct answer.

Discuss as needed.

Next Slide

What's My Design?

Clue 30

DZ
↓
~~DZ~~
↓
E
↓
~~E~~

Flow Diagram

Cross Sectional Study

Detectives in the Classroom - Investigation 2-7: Epi Team Challenge

- Show students the clue.
- Give Epi Teams time to discuss.
- Ask for "Cards."
- Show students the correct answer.
- Discuss as needed.

Next Slide


What's My Design?

Clue 31

DZ

DZ

Flow Diagram



Case-Control Study

Detectives in the Classroom - Investigation 2-7: Epi Team Challenge

The slide features a blue header with the text 'What's My Design?'. Below the header, on the left, is the text 'Clue 31'. In the center, there are two 'DZ' labels. The top 'DZ' is inside a red circle with a blue border, and two arrows point from it to the left. The bottom 'DZ' is also inside a red circle with a blue border, but it has a red diagonal slash through it, and two arrows also point from it to the left. To the right of these labels is the text 'Flow Diagram' in blue. Below the 'DZ' labels is a cartoon detective character with a clipboard and a yellow highlighter. At the bottom of the slide, there is a yellow bar with the text 'Case-Control Study' and a blue bar with the text 'Detectives in the Classroom - Investigation 2-7: Epi Team Challenge'.

Show students the clue.

Give Epi Teams time to discuss.

Ask for "Cards."

Show students the correct answer.

Discuss as needed.

Next Slide

What's My Design?

Clue 32

Select a study sample.

Ask each person about both exposure and disease at that point in time.

Disease risk in exposed group is compared to disease risk in unexposed group.

Epidemiologist gathers data only at that one point in time.

Cross Sectional Study

Detectives in the Classroom - Investigation 2-7: Epi Team Challenge

Show students the clue.

Give Epi Teams time to discuss.

Ask for "Cards."

Show students the correct answer.

Discuss as needed.

Next Slide

What's My Design?

Clue 33

Select a group of people with disease and a similar group of people without disease.

Ask both groups about their exposures in the past.

Compare percent of exposed people in the two groups.

Epidemiologist is involved after disease has occurred and relies on subjects' memories to gather information about exposure.

Case-Control Study

Detectives in the Classroom - Investigation 2-7: Epi Team Challenge

Show students the clue.

Give Epi Teams time to discuss.

Ask for "Cards."

Show students the correct answer.

Discuss as needed.

Next Slide

What's My Design?

Clue 34

Select a healthy study sample.

Observe who has and has not been exposed.

Follow through time and compare risk of disease in exposed group to risk of disease in unexposed group.

Epidemiologist is involved during the entire time from exposure to disease.

Cohort Study

Detectives in the Classroom - Investigation 2-7: Epi Team Challenge

Show students the clue.

Give Epi Teams time to discuss.

Ask for "Cards."

Show students the correct answer.

Discuss as needed.

Next Slide

What's My Design?

Clue 35

Assign treatment and control groups.

Give exposure to treatment group, but not control group.

Follow through time and compare risk of disease in treatment group with risk of disease in control group.

Epidemiologist is involved during the entire time from exposure to disease.

Trial

Detectives in the Classroom - Investigation 2-7: Epi Team Challenge

Show students the clue.

Give Epi Teams time to discuss.

Ask for "Cards."

Show students the correct answer.

Discuss as needed.

Next Slide

What's My Design?

End Epi Team Challenge

Detectives in the Classroom - Investigation 2-7: Epi Team Challenge

End the Epi Team Challenge by reviewing any misconceptions that were uncovered.

Next Slide

What's My Design?

Detectives in the Classroom Name: _____
Investigation 2-7: Epi Log Worksheet Date: ____/____/____
Circle the design that is described by each clue. Some clues describe more than one design.

Clue	Study Designs			
1.	Trial	Cohort	Case-Control	Cross-Sectional
2.	Trial	Cohort	Case-Control	Cross-Sectional
3.	Trial	Cohort	Case-Control	Cross-Sectional
4.	Trial	Cohort	Case-Control	Cross-Sectional
5.	Trial	Cohort	Case-Control	Cross-Sectional
6.	Trial	Cohort	Case-Control	Cross-Sectional
7.	Trial	Cohort	Case-Control	Cross-Sectional
8.	Trial	Cohort	Case-Control	Cross-Sectional
9.	Trial	Cohort	Case-Control	Cross-Sectional
10.	Trial	Cohort	Case-Control	Cross-Sectional
11.	Trial	Cohort	Case-Control	Cross-Sectional
12.	Trial	Cohort	Case-Control	Cross-Sectional
13.	Trial	Cohort	Case-Control	Cross-Sectional
14.	Trial	Cohort	Case-Control	Cross-Sectional
15.	Trial	Cohort	Case-Control	Cross-Sectional
16.	Trial	Cohort	Case-Control	Cross-Sectional
17.	Trial	Cohort	Case-Control	Cross-Sectional
18.	Trial	Cohort	Case-Control	Cross-Sectional
19.	Trial	Cohort	Case-Control	Cross-Sectional
20.	Trial	Cohort	Case-Control	Cross-Sectional
21.	Trial	Cohort	Case-Control	Cross-Sectional
22.	Trial	Cohort	Case-Control	Cross-Sectional
23.	Trial	Cohort	Case-Control	Cross-Sectional
24.	Trial	Cohort	Case-Control	Cross-Sectional
25.	Trial	Cohort	Case-Control	Cross-Sectional
26.	Trial	Cohort	Case-Control	Cross-Sectional
27.	Trial	Cohort	Case-Control	Cross-Sectional
28.	Trial	Cohort	Case-Control	Cross-Sectional
29.	Trial	Cohort	Case-Control	Cross-Sectional
30.	Trial	Cohort	Case-Control	Cross-Sectional

Detectives in the Classroom - Investigation 2-7: Epi Team Challenge

Show students how to complete the **Investigation 2-7: Epi Log Worksheet** by reviewing the next few slides.

Next Slide

What's My Design?

Detectives in the Classroom

Name: _____

Investigation 2-7: Epi Log Worksheet

Date: ____/____/____

Circle the study design(s) that is described or depicted by each clue.
Some clues describe more than one design.

<u>Clue</u>	<u>Study Designs</u>			
1.	Trial	Cohort	Case-Control	Cross-Sectional

Practice Clue 1

Assign participants to treatment and control groups.

Detectives in the Classroom - Investigation 2-7: Epi Team Challenge

Students will be given a numbered clue—in this case, “Practice Clue 1.”
Have them study the clue. (Assign participants to treatment and control groups.)
They should circle the study design or designs that the clue describes.

Next Slide

What's My Design?

Detectives in the Classroom

Name: _____

Investigation 2-7: Epi Log Worksheet

Date: ____/____/____

Circle the study design(s) that is described or depicted by each clue.
Some clues describe more than one design.

Clue	Study Designs			
1.	Trial	Cohort	Case-Control	Cross-Sectional
2.	Trial	Cohort	Case-Control	Cross-Sectional

Practice Clue 2

Ask both groups about their exposures in the past.

Detectives in the Classroom - Investigation 2-7: Epi Team Challenge

Students will be given a numbered clue—in this case, “Practice Clue 2.”
Have them study the clue. (Ask both groups about their exposures in the past.)
They should circle the study design or designs that the clue describes.

Next Slide

What's My Design?

Detectives in the Classroom

Name: _____

Investigation 2-7: Epi Log Worksheet

Date: ____/____/____

Circle the study design(s) that is described or depicted by each clue.
Some clues describe more than one design.

Clue	<u>Study Designs</u>			
1.	Trial	Cohort	Case-Control	Cross-Sectional
2.	Trial	Cohort	Case-Control	Cross-Sectional
3.	Trial	Cohort	Case-Control	Cross-Sectional

Practice Clue 3

Ask each person about both exposure and disease
at that point in time.

Detectives in the Classroom - Investigation 2-7: Epi Team Challenge

Students will be given a numbered clue—in this case, “Practice Clue 3.”

Have them study the clue. (Ask each person about both exposure and disease at that point in time.)

They should circle the study design or designs that the clue describes.

Next Slide

What's My Design?

Detectives in the Classroom

Name: _____

Investigation 2-7: Epi Log Worksheet

Date: ____/____/____

Circle the study design(s) that is described or depicted by each clue.
Some clues describe more than one design.

<u>Clue</u>	<u>Study Designs</u>			
1.	Trial	Cohort	Case-Control	Cross-Sectional
2.	Trial	Cohort	Case-Control	Cross-Sectional
3.	Trial	Cohort	Case-Control	Cross-Sectional
4.	Trial	Cohort	Case-Control	Cross-Sectional

Practice Clue 4

Epidemiologist is involved
during the entire time from exposure to disease.

Detectives in the Classroom - Investigation 2-7: Epi Team Challenge

Students will be given a numbered clue—in this case, “Practice Clue 4.”

Have them study the clue. (Epidemiologist is involved during the entire time from exposure to disease.)

They should circle the study design or designs that the clue describes.

Next Slide

What's My Design?

Detectives in the Classroom Name: _____
 Investigation 2-7: Epi Log Worksheet Date: ____/____/____
 Circle the design that is described by each clue. Some clues describe more than one design.

Clue	Study Designs			
1.	Trial	Cohort	Case-Control	Cross-Sectional
2.	Trial	Cohort	Case-Control	Cross-Sectional
3.	Trial	Cohort	Case-Control	Cross-Sectional
4.	Trial	Cohort	Case-Control	Cross-Sectional
5.	Trial	Cohort	Case-Control	Cross-Sectional
6.	Trial	Cohort	Case-Control	Cross-Sectional
7.	Trial	Cohort	Case-Control	Cross-Sectional
8.	Trial	Cohort	Case-Control	Cross-Sectional
9.	Trial	Cohort	Case-Control	Cross-Sectional
10.	Trial	Cohort	Case-Control	Cross-Sectional
11.	Trial	Cohort	Case-Control	Cross-Sectional
12.	Trial	Cohort	Case-Control	Cross-Sectional
13.	Trial	Cohort	Case-Control	Cross-Sectional
14.	Trial	Cohort	Case-Control	Cross-Sectional
15.	Trial	Cohort	Case-Control	Cross-Sectional
16.	Trial	Cohort	Case-Control	Cross-Sectional
17.	Trial	Cohort	Case-Control	Cross-Sectional
18.	Trial	Cohort	Case-Control	Cross-Sectional
19.	Trial	Cohort	Case-Control	Cross-Sectional
20.	Trial	Cohort	Case-Control	Cross-Sectional
21.	Trial	Cohort	Case-Control	Cross-Sectional
22.	Trial	Cohort	Case-Control	Cross-Sectional
23.	Trial	Cohort	Case-Control	Cross-Sectional
24.	Trial	Cohort	Case-Control	Cross-Sectional
25.	Trial	Cohort	Case-Control	Cross-Sectional
26.	Trial	Cohort	Case-Control	Cross-Sectional
27.	Trial	Cohort	Case-Control	Cross-Sectional
28.	Trial	Cohort	Case-Control	Cross-Sectional
29.	Trial	Cohort	Case-Control	Cross-Sectional
30.	Trial	Cohort	Case-Control	Cross-Sectional

Detectives in the Classroom - Investigation 2-7: Epi Team Challenge

Now give each student an **Investigation 2-7: Epi Log Worksheet**.

Next Slide

What's My Design?

Begin Assessment

Clue 1

Assign treatment and control groups.

Detectives in the Classroom - Investigation 2-7: Epi Team Challenge

Show students the clue.

Give students time to circle the appropriate response on the **Investigation 2-7: Epi Log Worksheet**.

⚙ Teacher Alert: Do not review the answers until students have completed the **Investigation 2-7: Epi Log Worksheet**.

Next Slide

What's My Design?

Clue 2

Flow Diagram

Observational Study

```
graph LR; DZ1((DZ)) --> E1((E)); DZ1 --> E2((E)); DZ2((DZ)) --> E3((E)); DZ2 --> E4((E));
```

Detectives in the Classroom - Investigation 2-7: Epi Team Challenge

Show students the clue.

Give students time to circle the appropriate response.

Next Slide

What's My Design?

Clue 3

Flow Diagram

Observational Study

Detectives in the Classroom - Investigation 2-7: Epi Team Challenge

Show students the clue.

Give students time to circle the appropriate response.

Next Slide

What's My Design?

Clue 4

Follow through time and compare risk of disease in treatment group with risk of disease in control group.

Detectives in the Classroom - Investigation 2-7: Epi Team Challenge

Show students the clue.

Give students time to circle the appropriate response.

Next Slide

What's My Design?

Clue 5

Select a group of people with disease
and a similar group of people without disease.

Detectives in the Classroom - Investigation 2-7: Epi Team Challenge

Show students the clue.

Give students time to circle the appropriate response.

Next Slide

What's My Design?

Clue 6

Non-Observational Study

Flow Diagram

```
graph LR; A[Healthy People] -- Random Assignment --> B((E)); A -- Random Assignment --> C((E)); style B stroke:#f00,stroke-width:2px; style C stroke:#f00,stroke-width:2px,stroke-dasharray: 5 5;
```

Healthy People Random Assignment

Healthy People

Random Assignment

E

E



Detectives in the Classroom - Investigation 2-7: Epi Team Challenge

Show students the clue.

Give students time to circle the appropriate response.

Next Slide

What's My Design?

Clue 7  

DZ

~~DZ~~

E

~~E~~

Flow Diagram

Observational Study

Detectives in the Classroom - Investigation 2-7: Epi Team Challenge

Show students the clue.

Give students time to circle the appropriate response.

Next Slide

What's My Design?

Clue 8

Compare percent of exposed people in the two groups.

Detectives in the Classroom - Investigation 2-7: Epi Team Challenge

Show students the clue.

Give students time to circle the appropriate response.

Next Slide

What's My Design?

Clue 9

Non-Observational Study

Healthy People

Random Assignment

Flow Diagram

Detectives in the Classroom - Investigation 2-7: Epi Team Challenge


Show students the clue.

Give students time to circle the appropriate response.

Next Slide

What's My Design?

Clue 10



Flow Diagram

Detectives in the Classroom - Investigation 2-7: Epi Team Challenge

Show students the clue.

Give students time to circle the appropriate response.

Next Slide

What's My Design?

Clue 11

Observational Study

Flow Diagram

DZ

~~DZ~~

DZ

~~DZ~~

Detectives in the Classroom - Investigation 2-7: Epi Team Challenge

Show students the clue.

Give students time to circle the appropriate response.

Next Slide

What's My Design?

Clue 12

Ask each person about both exposure and disease
at that point in time.

Detectives in the Classroom - Investigation 2-7: Epi Team Challenge

Show students the clue.

Give students time to circle the appropriate response.

Next Slide

What's My Design?

Clue 13

Ask both groups about their exposures in the past.

Detectives in the Classroom - Investigation 2-7: Epi Team Challenge

Show students the clue.

Give students time to circle the appropriate response.

Next Slide

What's My Design?

Clue 14

Flow
Diagram

Healthy
People

Random
Assignment



Detectives in the Classroom - Investigation 2-7: Epi Team Challenge

Show students the clue.

Give students time to circle the appropriate response.

Next Slide

What's My Design?

Clue 15

Disease risk in exposed group
is compared to disease risk in unexposed group.


Detectives in the Classroom - Investigation 2-7: Epi Team Challenge

Show students the clue.

Give students time to circle the appropriate response.

Next Slide

What's My Design?

Clue 16 

Flow Diagram

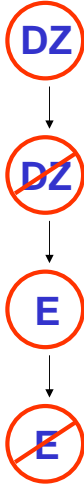
DZ

~~DZ~~

E

~~E~~

Detectives in the Classroom - Investigation 2-7: Epi Team Challenge



Show students the clue.

Give students time to circle the appropriate response.

Next Slide

What's My Design?

Clue 17

Observe who has and has not been exposed.

Detectives in the Classroom - Investigation 2-7: Epi Team Challenge

Show students the clue.

Give students time to circle the appropriate response.

Next Slide

What's My Design?

Clue 18

Give exposure to treatment group, but not control group.

Detectives in the Classroom - Investigation 2-7: Epi Team Challenge

Show students the clue.

Give students time to circle the appropriate response.

Next Slide

What's My Design?

Clue 19

Flow Diagram

```
graph LR; A[Healthy People] --> B((E)); A --> C((E/));
```

Detectives in the Classroom - Investigation 2-7: Epi Team Challenge

Show students the clue.

Give students time to circle the appropriate response.

Next Slide

What's My Design?

Clue 20

Epidemiologist is involved after disease has occurred
and relies on subjects' memories
to gather information about exposure.

Detectives in the Classroom - Investigation 2-7: Epi Team Challenge

Show students the clue.

Give students time to circle the appropriate response.

Next Slide

What's My Design?

Clue 21

Select a study sample.

Detectives in the Classroom - Investigation 2-7: Epi Team Challenge

Show students the clue.

Give students time to circle the appropriate response.

Next Slide

What's My Design?

Clue 22

Epidemiologist gathers data only at that one point in time.

Detectives in the Classroom - Investigation 2-7: Epi Team Challenge

Show students the clue.

Give students time to circle the appropriate response.

Next Slide

What's My Design?

Clue 23

Flow Diagram

Detectives in the Classroom - Investigation 2-7: Epi Team Challenge

Show students the clue.

Give students time to circle the appropriate response.

Next Slide

What's My Design?

Clue 24

Epidemiologist is involved
during the entire time from exposure to disease.

Detectives in the Classroom - Investigation 2-7: Epi Team Challenge

Show students the clue.

Give students time to circle the appropriate response.

Next Slide

What's My Design?

Clue 25

Flow Diagram

```
graph TD; A((DZ)) --> B((DZ)); B --> C((E)); C --> D((E));
```

Detectives in the Classroom - Investigation 2-7: Epi Team Challenge

Show students the clue.

Give students time to circle the appropriate response.

Next Slide

What's My Design?

Clue 26

Flow Diagram

Detectives in the Classroom - Investigation 2-7: Epi Team Challenge

Show students the clue.

Give students time to circle the appropriate response.

Next Slide

What's My Design?

Clue 27

Select a study sample.

Ask each person about both exposure and disease at that point in time.

Disease risk in exposed group is compared to disease risk in unexposed group.

Epidemiologist gathers data only at that one point in time.

Detectives in the Classroom - Investigation 2-7: Epi Team Challenge

Show students the clue.

Give students time to circle the appropriate response.

Next Slide

What's My Design?

Clue 28

Select a group of people with disease and a similar group of people without disease.

Ask both groups about their exposures in the past.

Compare percent of exposed people in the two groups.

Epidemiologist is involved after disease has occurred and relies on subjects' memories to gather information about exposure.

Detectives in the Classroom - Investigation 2-7: Epi Team Challenge

Show students the clue.

Give students time to circle the appropriate response.

Next Slide

What's My Design?

Clue 29

Select a healthy study sample.

Observe who has and has not been exposed.

Follow through time and compare risk of disease in exposed group to risk of disease in unexposed group.

Epidemiologist is involved during the entire time from exposure to disease.

Detectives in the Classroom - Investigation 2-7: Epi Team Challenge

Show students the clue.

Give students time to circle the appropriate response.

Next Slide

What's My Design?

Clue 30

Assign treatment and control groups.

Give exposure to treatment group, but not control group.

Follow through time and compare risk of disease in treatment group with risk of disease in control group.

Epidemiologist is involved during the entire time from exposure to disease.

End Assessment

Detectives in the Classroom - Investigation 2-7: Epi Team Challenge

Show students the clue.

Give students time to circle the appropriate response.

End the assessment.

Next Slide

What's My Design?

**Could I identify
the different
study designs?**

**Could I accurately
describe the different
study designs to
someone else?**

**Could I identify a
single characteristic
of a study design
that distinguishes it
from the other
designs?**

Detectives in the Classroom - Investigation 2-7: Epi Team Challenge

Ask students to use the following questions to judge their progress:

- Could I identify the different study designs?
- Could I accurately describe the different study designs to someone else?
- Could I identify a single characteristic of a study design that distinguishes it from the other designs?

Discuss with students their answers to these questions.

Probe.

Address misconceptions.

Next Slide

What's My Design?

Clue 1

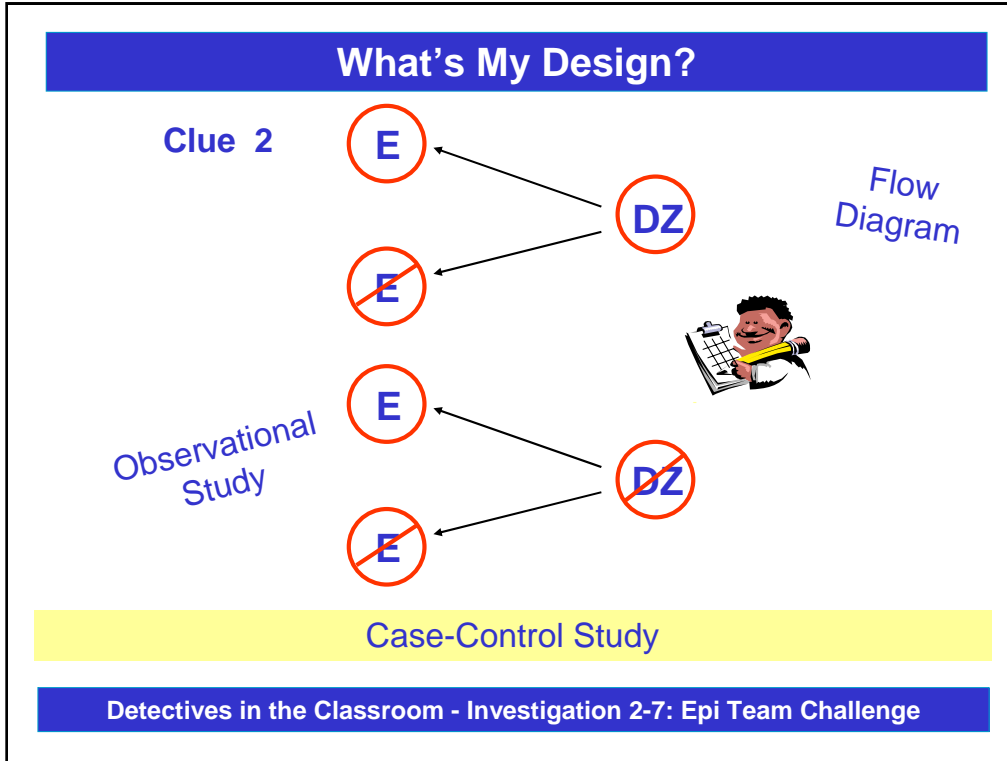
Assign treatment and control groups.

Trial

Detectives in the Classroom - Investigation 2-7: Epi Team Challenge

Show students the correct answer(s). Address misconceptions. Ask students to score their assessment.

Next Slide



Show students the correct answer(s). Address misconceptions. Ask students to score their assessment.

Next Slide

What's My Design?

Clue 3

Flow Diagram

Observational Study

Cohort, Case-Control, and Cross Sectional Studies

Detectives in the Classroom - Investigation 2-7: Epi Team Challenge

Show students the correct answer(s). Address misconceptions. Ask students to score their assessment.

Next Slide

What's My Design?

Clue 4

Follow through time and compare risk of disease in treatment group with risk of disease in control group.

Trial and Cohort Study

Detectives in the Classroom - Investigation 2-7: Epi Team Challenge

Show students the correct answer(s). Address misconceptions. Ask students to score their assessment.

Next Slide

What's My Design?

Clue 5

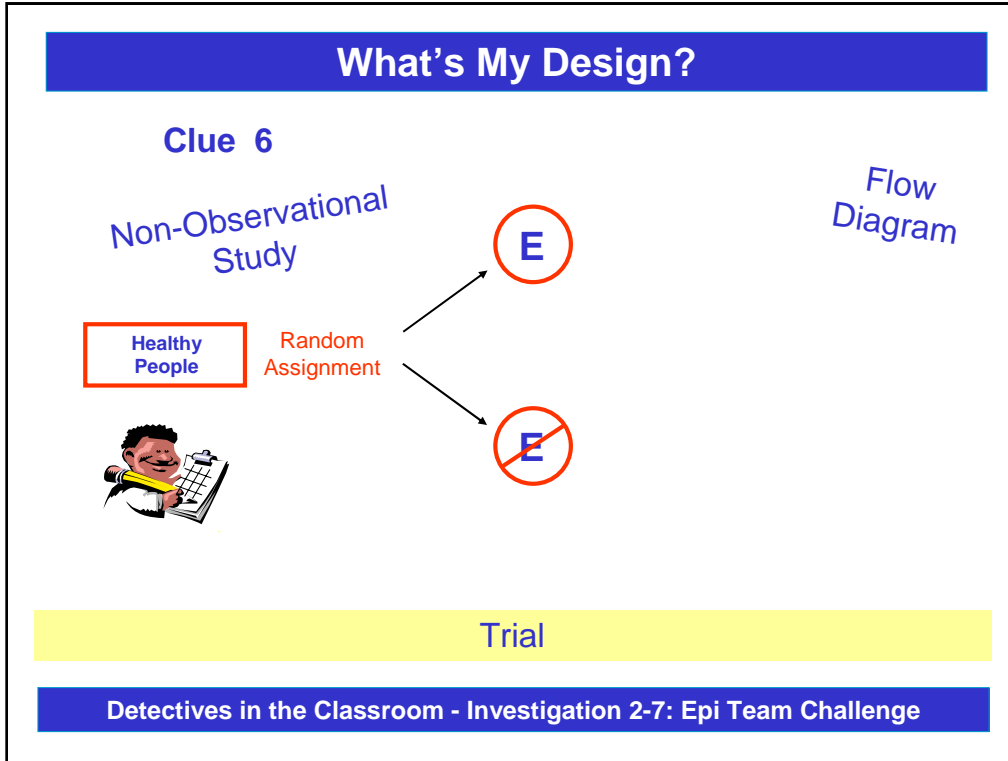
Select a group of people with disease
and a similar group of people without disease.

Case-Control Study

Detectives in the Classroom - Investigation 2-7: Epi Team Challenge

Show students the correct answer(s). Address misconceptions. Ask students to score their assessment.



Next Slide



Show students the correct answer(s). Address misconceptions. Ask students to score their assessment.

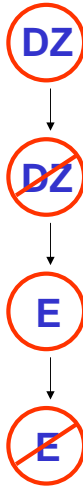
Next Slide

What's My Design?

Clue 7  

Flow Diagram

Observational Study



Cross Sectional Study

Detectives in the Classroom - Investigation 2-7: Epi Team Challenge

Show students the correct answer(s). Address misconceptions. Ask students to score their assessment.

Next Slide

What's My Design?

Clue 8

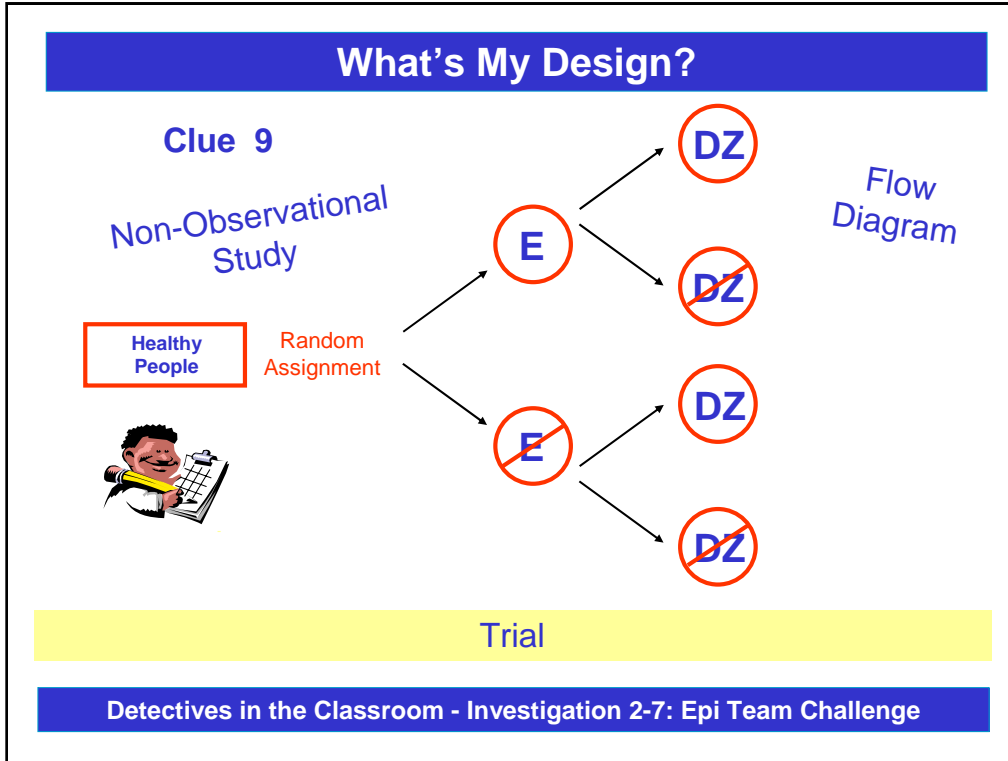
Compare percent of exposed people in the two groups.

Case-Control Study

Detectives in the Classroom - Investigation 2-7: Epi Team Challenge

Show students the correct answer(s). Address misconceptions. Ask students to score their assessment.

Next Slide




Show students the correct answer(s). Address misconceptions. Ask students to score their assessment.

Next Slide

What's My Design?

Clue 10



*Flow
Diagram*

Cross Sectional Study

Detectives in the Classroom - Investigation 2-7: Epi Team Challenge

Show students the correct answer(s). Address misconceptions. Ask students to score their assessment.

Next Slide

What's My Design?

Clue 11
Observational Study

Flow Diagram

Cohort Study

Detectives in the Classroom - Investigation 2-7: Epi Team Challenge

Show students the correct answer(s). Address misconceptions. Ask students to score their assessment.

Next Slide

What's My Design?

Clue 12

Ask each person about both exposure and disease
at that point in time.

Cross Sectional Study

Detectives in the Classroom - Investigation 2-7: Epi Team Challenge

Show students the correct answer(s). Address misconceptions. Ask students to score their assessment.

Next Slide

What's My Design?

Clue 13

Ask both groups about their exposures in the past.

Case-Control Study

Detectives in the Classroom - Investigation 2-7: Epi Team Challenge

Show students the correct answer(s). Address misconceptions. Ask students to score their assessment.


Next Slide

What's My Design?

Clue 14

Flow Diagram

Healthy People Random Assignment



Trial

Detectives in the Classroom - Investigation 2-7: Epi Team Challenge

Show students the correct answer(s). Address misconceptions. Ask students to score their assessment.

Next Slide

What's My Design?

Clue 15

Disease risk in exposed group
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Trial, Cohort Study, and Cross Sectional Study

Detectives in the Classroom - Investigation 2-7: Epi Team Challenge

Show students the correct answer(s). Address misconceptions. Ask students to score their assessment.

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What's My Design?

Clue 16 

Flow Diagram

DZ

~~DZ~~

E

~~E~~

Cross Sectional Study

Detectives in the Classroom - Investigation 2-7: Epi Team Challenge

Show students the correct answer(s). Address misconceptions. Ask students to score their assessment.

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What's My Design?

Clue 17

Observe who has and has not been exposed.

Cohort Study

Detectives in the Classroom - Investigation 2-7: Epi Team Challenge

Show students the correct answer(s). Address misconceptions. Ask students to score their assessment.

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Clue 18

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Trial

Detectives in the Classroom - Investigation 2-7: Epi Team Challenge

Show students the correct answer(s). Address misconceptions. Ask students to score their assessment.

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graph LR; A[Healthy People] --> B((E)); A --> C((E/));
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Cohort Study

Detectives in the Classroom - Investigation 2-7: Epi Team Challenge

Show students the correct answer(s). Address misconceptions. Ask students to score their assessment.

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What's My Design?

Clue 20

Epidemiologist is involved after disease has occurred
and relies on subjects' memories
to gather information about exposure.

Case-Control Study

Detectives in the Classroom - Investigation 2-7: Epi Team Challenge

Show students the correct answer(s). Address misconceptions. Ask students to score their assessment.

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What's My Design?

Clue 21

Select a study sample.

Trial, Cohort, Case-Control, and Cross Sectional Studies

Detectives in the Classroom - Investigation 2-7: Epi Team Challenge

Show students the correct answer(s). Address misconceptions. Ask students to score their assessment.

Next Slide

What's My Design?

Clue 22

Epidemiologist gathers data only at that one point in time.

Cross Sectional Study

Detectives in the Classroom - Investigation 2-7: Epi Team Challenge

Show students the correct answer(s). Address misconceptions. Ask students to score their assessment.

Next Slide

What's My Design?

Clue 23

Flow Diagram

Trial and Cohort Study

Detectives in the Classroom - Investigation 2-7: Epi Team Challenge

Show students the correct answer(s). Address misconceptions. Ask students to score their assessment.

Next Slide

What's My Design?

Clue 24

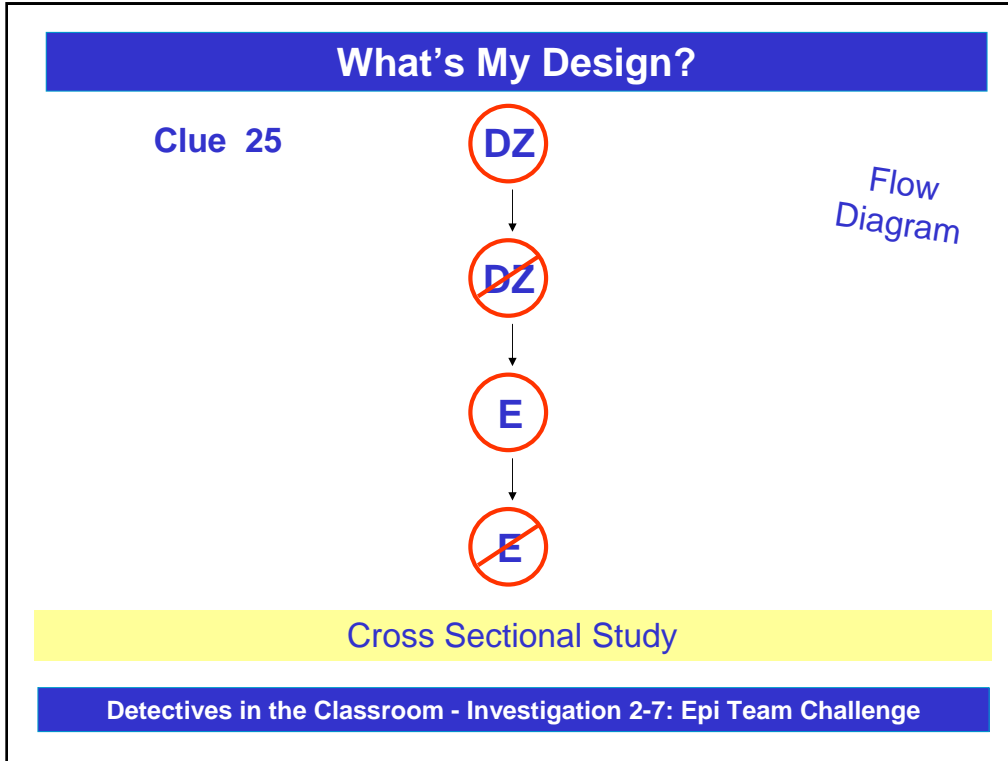
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during the entire time from exposure to disease.

Trial and Cohort Study

Detectives in the Classroom - Investigation 2-7: Epi Team Challenge

Show students the correct answer(s). Address misconceptions. Ask students to score their assessment.

Next Slide



Show students the correct answer(s). Address misconceptions. Ask students to score their assessment.

Next Slide

What's My Design?

Clue 26

Flow Diagram

Case-Control Study

Detectives in the Classroom - Investigation 2-7: Epi Team Challenge

Show students the correct answer(s). Address misconceptions. Ask students to score their assessment.

Next Slide

What's My Design?

Clue 27

Select a study sample.

Ask each person about both exposure and disease at that point in time.

Disease risk in exposed group is compared to disease risk in unexposed group.

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Cross Sectional Study

Detectives in the Classroom - Investigation 2-7: Epi Team Challenge

Show students the correct answer(s). Address misconceptions. Ask students to score their assessment.

Next Slide

What's My Design?

Clue 28

Select a group of people with disease and a similar group of people without disease.

Ask both groups about their exposures in the past.

Compare percent of exposed people in the two groups.

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Case-Control Study

Detectives in the Classroom - Investigation 2-7: Epi Team Challenge

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Cohort Study

Detectives in the Classroom - Investigation 2-7: Epi Team Challenge

Show students the correct answer(s). Address misconceptions. Ask students to score their assessment.

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What's My Design?

Clue 30

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Give exposure to treatment group, but not control group.

Follow through time and compare risk of disease in treatment group with risk of disease in control group.

Epidemiologist is involved during the entire time from exposure to disease.

Trial

Detectives in the Classroom - Investigation 2-7: Epi Team Challenge

Show students the correct answer(s). Address misconceptions. Ask students to score their assessment.

Next Slide

Epi Team Challenge



Detectives in the Classroom - Investigation 2-7: Epi Team Challenge

This concludes **Investigation 2-7: Epi Team Challenge** and students can now put away their **Epi Logs**.