

Could You Be An Epidemiologist?

Teaching Guide and Answer Key

Have students share their ideas and their thinking process for tracing the original carrier in each of these activities.

Tracking Activity #1

Given that Ana is the first student named, Ana may be seen as having “started it all.” If Ana hadn’t interacted with Mike and Deon, this all wouldn’t have started. This is wrong, but this way of thinking may be the logic that some students applied to the problem. This is why the question is posed, “Did you change your mind?” As they thought about who *didn’t* get sick, or as they discussed with another person, students may have changed their minds.

If students disagree on the initial carrier, have them consider who did *not* get sick as a way to push their thinking and reasoning processes.

- Note the instruction for students that Ana, Mike, and Deon did not get sick.
- Because Ana and Deon had breakfast with Kim, and Kim did not get sick, Ana and Deon were not infected at breakfast time.
- Therefore, Mike is the initial carrier. Mike infected Ana in class and Deon at the movies.

Tracking Activity #2

Note the instruction for students that Kristin, Ebony, and Abel all got sick within a few hours of each other. Students should have marked those three names.

In this activity as well as in Activity #1, it is important not only who *got* sick but who *didn’t* get sick.

- Because Reese and Malik did not get sick, they could not have been infected during their interaction with Kristin.
- Therefore, Kristin was uninfected at the time that Kristin interacted with Reese and Malik. Kristin cannot be the initial carrier.
- The only other interaction Kristin had was with Abel; therefore, Kristin was infected by Abel.
- Because Ebony interacted with Reese, and Reese did not get sick, Ebony was not infected at the time of the interaction.
- The only other person Ebony interacted with was Abel, so Abel must have infected Ebony.
- Therefore, Abel must have been the initial carrier.