

**INSTRUCTOR'S GUIDE**

**for Facilitating**

**Classroom Epidemiologic Case Studies**

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The classroom epidemiologic case studies were developed for use in a group setting with a knowledgeable instructor and 5-15 students from the target audience. Each case study includes background information and a series of questions about an evolving public health problem that are designed for open discussion by the students. Students should be encouraged to share their ideas and respond to those of their classmates. Both the teacher-to-student interaction and the student-to-student interactions are important and will facilitate learning from the materials.

Teaching these case studies can be challenging. They take advanced preparation and care in execution. The instructor's version of each case study provides teaching points and basic information about the questions specific to that case study. Below are some general tips for instructors using the case studies in the classroom.

## Advanced Preparation

1. *Figure out the timing.* Some questions take much longer than others. Check how much time is allotted for the case study. Then review the case study and estimate how much time you want or think you need to spend on each question. Then outline what pace to follow, where you want to take a break, or if you wish to omit any questions or sections of the case study.
2. *Decide how you will teach each question.* For many questions, you can simply have an immediate, open discussion. For other questions, you might ask the students to take a few minutes to write down a list or do a calculation. For some questions, small groups are better than individuals or large groups. For most questions, a verbal discussion of the answer will be sufficient. For some questions, however, you might want to write the answers on the board or a flip chart. This is particularly true of questions that require mathematical calculations or development of a list.
3. *Think up good examples.* Come up with examples from different subject areas that illustrate the same epidemiologic points as illustrated in the case study. Use examples from your own background since you will be able to talk about them convincingly.
4. *If there are two or more instructors, decide which instructor will do what.* Alternating the lead on the questions is a good approach. The instructor who does not have the lead on a particular question can provide support by writing student ideas on the board, offering other examples, or keeping an eye on the time.
5. *Review appropriate background materials.* At a minimum, you should know the epidemiologic principles addressed in the case study (e.g., measures of association, how to construct an epidemic curve, developing a questionnaire). You should also know something about the subject matter (e.g., botulism, *E. coli* O157:H7) although you needn't be an expert on it.
6. *Know your audience.* Know what background they have so that you can pitch the discussion and examples at the appropriate level.

## Execution

1. *ENTHUSIASM is CRITICAL!*
2. *Read the case study objectives at the beginning and focus on them during the session.* This will keep you from going astray and spending too much time on less important issues.
3. *Keep it simple.* It is appropriate for you to try to explain the material so everyone knows the basics. But don't try to impress students with how much you know. Similarly, don't be driven by the most advanced students who might be interested in issues that are too complex or tangential for the majority of the group. If such a situation arises, suggest that the student talk with you after class.
4. *General tips:*
  - Listen attentively.
  - Use eye contact effectively.
  - Don't be condescending. Don't say anything that could be construed as a put-down or as an indication that a student is not respected.
  - If possible, do not directly correct or contradict what a student says. Instead, ask other students what they got for an answer or ask the student to review how he/she came up with that answer in order to identify the source of the error.
5. *You do not need to comment on every statement made by a student.* Rather, try to have students react to what others say. Likewise, if a student asks a question, direct it back to the group.
6. *Get as many people involved in each question as possible.* Don't pick on the initial responder. After he/she attempts to answer the question, thank them, and open it up for others by saying "Would anyone like to add to that? Would anyone like to disagree?" Similarly, if a question requires a list of items or ideas, have the initial responder provide only one item. Then go around the room and ask each student to contribute an idea.
7. *During the discussion, bring to bear your (and the students') unique backgrounds.* Seek out examples from different backgrounds that illustrate the same principle.
8. *Try to draw the quieter students into the discussion.* Be careful, however, in calling on non-volunteers. One method might be to appeal to the experiences of that individual. For example, "You mentioned that you were involved in \_\_\_\_\_. When you worked on that project, how did your team handle \_\_\_\_\_?"
9. *At the end of a lengthy or far-ranging discussion, summarize (or have someone summarize) the main or "take home" points of the discussion.* This is a good time to call on the most advanced students, since they will feel more comfortable providing a summary.
10. *Keep an eye on the time.* Time will always be limited so keep the discussion moving. Do not allow yourself (or students) to go off on tangents or ramble. Some discussions will take longer than expected. That is not particularly a bad thing, but you must be prepared to adjust or shorten the time spent on subsequent questions or parts of the case study.