



# FOCUS on Field Epidemiology

## DISCUSSION QUESTIONS: Introduction to Public Health Surveillance

1. Can you think of any instances other than those listed on pages 1 and 2 of this issue in which surveillance provided important public health insight?

A few examples of possible answers include:

- Surveillance of adenovirus-associated respiratory illness among military recruits in the early years of a adenovirus vaccination program showed that vaccination with a single vaccine was much less effective than combined use of vaccines aimed at different adenovirus strains. (1)
- The Family Planning Program in West Virginia used surveillance data on pregnancy outcomes to demonstrate the need to increase awareness of the need to take folic acid among pregnant women. As a result, The Folic Acid Education Project was created that has educated women in health clinics and health fairs throughout the state (2).

2. If you were performing surveillance of a disease and found that one group (e.g. race or age group) appeared to have a disproportionate burden of disease compared to the other groups, what are some reasons that could account for this difference?

There are several reasons surveillance data may indicate that one group may appear to experience more disease than another group. For example, a difference could be due to higher incidence of disease in that group. This could occur for various reasons, such as a genetic tendency (e.g. sickle cell anemia) or due to low vaccination coverage for vaccine-preventable-diseases. Alternatively, surveillance data could show a difference because of different levels of disease testing and/or reporting. (3)

(1) Dudding BA, Top FH Jr, Winter PE, Buescher EL, Lamson TH, Leibovitz A. Acute respiratory disease in military trainees: the adenovirus surveillance program, 1966-1971. *Am J Epidemiol*. 1973 Mar;97(3):187-98.

(2) D'Angelo D, Colley Gilbert B, eds. *From Data to Action: Using Surveillance To Promote Public Health, Examples from the Pregnancy Risk Assessment Monitoring System (PRAMS), Executive Summary*. Atlanta, GA: Division of Reproductive Health, National Centers for Chronic Disease Prevention and Health Promotion, Centers for Disease Control and Prevention, 2002. <http://www.cdc.gov/PRAMS/dataAct2002/index.htm>. Accessed November 6, 2008.

(3) Wharton M, Roush SW. Analysis of Surveillance Data. In: *Manual for the surveillance of vaccine-preventable diseases*. Centers for Disease Control and Prevention, Atlanta, GA, 2008. <http://www.cdc.gov/vaccines/pubs/surv-manual/default.htm>. Accessed November 6, 2008.



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