

STD Surveillance: Critical and Costly, but Do We Know if It Works?

CHARLOTTE KENT, PhD

One of the most essential, high-priority public health activities is surveillance, because it is intended to guide action that will reduce morbidity and mortality in populations.¹ To this end, thousands of public health workers around the world are collecting, reviewing, entering, and analyzing data on STDs. The justification for this tremendous effort is that it will assist public health programs in planning, implementing, and evaluating disease control efforts, as well as formulating research hypotheses.² Routine evaluation of these STD surveillance systems is therefore key to assure effective and efficient use of our limited public health resources.²

The global body of literature about STD surveillance systems is small. In this issue, Zwahlen et al.³ contribute to this limited literature by describing the strengths and limitations of the Swiss STD surveillance system. The Swiss system was based on 3 sources of data: laboratory reports of infections in both men and women, reports of infections in women from sentinel gynecologists in the Swiss Sentinel Surveillance Network, and reports about infections from men from the 6 dermatology clinics comprising the Swiss Network of Dermatology Polyclinics. Between 1988 and 1994, data from laboratory reports and the dermatology polyclinics consistently showed declines in gonorrhea and syphilis.⁴ Zwahlen et al. report in this issue that surveillance data from the 3 Swiss STD surveillance systems collected between 1997 and 2003 are no longer in concordance. Thus, they could not effectively interpret STD trends in Switzerland, making appropriate planning and public health action challenging. In their final paragraph, the authors describe the substantial changes to the Swiss STD surveillance system initiated this year in response to their important findings. One response was the discontinuation of costly STD data collection from the Swiss Network of Dermatology Polyclinics.

The United States Centers for Disease Control and Prevention (CDC) highlights the importance of surveillance and its evaluation, by requiring that all CDC Epidemic Intelligence Service (EIS) Officers perform a surveillance system evaluation. Another required training activity of EIS Officers is to conduct an outbreak

*From STD Prevention and Control Services, San Francisco
Department of Public Health, San Francisco, CA*

investigation. Graduating EIS Officers in the last 10 years have completed more than 1000 surveillance evaluations and investigated more than 1000 outbreaks. Given the purported public health importance of surveillance, and the number of surveillance systems evaluated, one might expect a rich literature about these systems, their strengths and weaknesses, and how to improve them. In reality there is a paucity of literature. By contrast, there is voluminous literature on the findings of outbreak investigations. If publications reflect the value placed on an activity, it would appear that a critical public health function is undervalued.

Recently there has been a tremendous effort to improve the performance and consistency of STD surveillance data among European Union (EU) partners (Switzerland is not an EU member) to inform public health policy and planning. In 2001, the European Surveillance of Sexually Transmitted Infections (ESSTI) network was established to meet these aims, and during the past 5 years it has made substantial strides in meeting them.^{5–9} The ESSTI and Swiss are not alone in struggling to interpret data from their STD surveillance systems. In the United States, there have been recent increases in reported gonorrhea rates in the West.¹⁰ Despite the variety of surveillance data we collect, several of us from this region are finding it challenging to determine whether recent increases are artifacts of biases in our surveillance systems or are real. While we collect copious amounts of data, is it telling us what we need to know?

Persons working in surveillance have the responsibility to not collect data for data's sake. My experience over the past 17 years suggests there is substantial unused and underutilized data and data collected that will do little to inform public health action. Much of this is a result of the lack of epidemiologic capacity to analyze and evaluate the data. Most programs, from the local to the national level, do not have sufficient midlevel staff to adequately work with surveillance data, and the limited staff often gets pulled to work with more "interesting" projects.

Zwahlen et al.'s work demonstrates how useful, and even interesting, the critical assessment of a surveillance system can be. It is time to begin using our existing STD surveillance data more effectively and to apply analogous evaluations to the enormous quantities

Correspondence: Charlotte Kent, STD Prevention and Control Services, San Francisco Department of Public Health, San Francisco, CA. E-mail: charlotte_kent@dph.sf.ca.us.

Received for publication October 23, 2006, and accepted November 24, 2006.

of data being collected worldwide. Our diminishing pool of public health resources demands that we look hard at what we routinely do.

References

1. Division of STD Prevention. Program operations guidelines for STD prevention: Surveillance and data management. Atlanta, GA: Centers for Disease Control and Prevention, 2002. Available at: <http://www.cdc.gov/std/program/surveillance/TOC-PGsurveillance.htm>. Accessed Sept 12, 2006.
2. CDC. Updated guidelines for evaluating public health surveillance systems. *MMWR Morb Mortal Wkly Rep* 2001; 50 RR-13:1–35.
3. Zwahlen M, Spoerri A, Gebhardt M, et al. Surveillance systems for sexually transmitted diseases in Switzerland. *Sex Transm Dis* 2007; 76–80.
4. Paget WJ, Zimmermann HP. Surveillance of sexually transmitted diseases in Switzerland, 1973–1994: Evidence of declining trends in gonorrhoea and syphilis. *Soz Praventivmed* 1997; 42:30–36.
5. Fenton KA, Lowndes CM. Recent trends in the epidemiology of sexually transmitted infections in the European Union. *Sex Transm Infect* 2004; 80:255–263.
6. Fenton KA, Lowndes CM. Improving sexual health—Local data are needed to improve local responsiveness. *Commun Dis Public Health* 2004; 7:94–95.
7. Lowndes CM, Fenton KA. Surveillance systems for STIs in the European Union: Facing a changing epidemiology. *Sex Transm Infect* 2004; 80:264–271.
8. Fenton K, Giesecke J, Hamers FF. Europe-wide surveillance for sexually transmitted infections: A timely and appropriate intervention. *Euro Surveill* 2001; 6:69–70.
9. European Surveillance of Sexually Transmitted Infections. Available at: www.essti.org. Accessed Sept 12, 2006.
10. Newman L. Recent trends in gonorrhoea in the United States. Presented at 2006 National STD Prevention Conference, May 8–11, 2006, Jacksonville, FL.