

Brazil FETP

Improving Brazil's Surveillance Capacity

Created in 2000, the Brazil Field Epidemiology Training Program (called EPISUS) had 58 graduates as of 2008, with another 23 trainees enrolled. One of the program's significant contributions has been improving Brazil's surveillance system evaluation efforts. In the past, surveillance data were not analyzed because the public health workforce lacked appropriate skills.

With knowledge gained in the FETP, graduates enhance the ability of the Brazilian MOH to evaluate systems that track diseases, deaths, and injuries. These skills have allowed the MOH to prioritize public health activities and track progress towards disease prevention in order to implement effective public health policies.

Strengthening the Public Health Workforce

Two-thirds of FETP graduates stay within the Secretariat of Health Surveillance whose function in the MOH roughly corresponds to that of CDC. Many also stay at the federal MOH level where they have supervisory roles such as staff supervisors and senior epidemiologists. Their largest contribution is introducing modern assessment techniques and complex analyses to Brazil's public health efforts. Graduates now routinely use data, which was not the norm before the creation of the program.

Achieving Sustainability

The Brazil MOH is highly committed to the FETP and has funded the program since its inception. FETP trainees are MOH fellows, and the MOH pays for their travel and other expenses. The MOH also pays salaries of directors and supervisors, and part of the cost of the CDC Technical Advisor. In 2008, the FETP became an official program within the MOH.

Effecting Policy Changes

Some of the work performed by FETP trainees has led to policy changes in the public health arena. For example, a Beri Beri outbreak was thought to stem from eating polished rice. Through their investigations, FETP trainees concluded that a combination of microtoxins and polished rice likely caused the outbreak. This led to a unique intervention involving government alternative food supplies and long-term federal agricultural oversight.

In another instance, an outbreak of non-TB mycobacterial infection following laparoscopic surgeries led to nationwide efforts to promote sanitation in surgical settings.



Promoting Sustainability

Sixty percent of Brazil's population of 200 million live in the Amazon rainforest, a hotspot for emerging infectious diseases. This results in an unmet need and an opportunity for further research. The FETP provides a valuable foundation for beginning this research.



Responding to Health Threats

Trainees respond to an average of 20–22 outbreaks a year. Some of their recent investigations include

- **Brazilian Purpuric Fever:** The disease has a 60–80% mortality rate in children. Little is known about the disease and only about 100 cases have ever been diagnosed. Trainees and supervisors conducted the investigation in a remote region of Brazil. They diagnosed the cases correctly and established an ongoing surveillance system. Since then, no new cases have occurred.
- **Continuous outbreak of non-TB mycobacterial infections following laparoscopic surgeries:** Since 2005, several thousand cases have occurred, suggesting an absence of infection control measures following surgeries and a need to raise awareness about best practices for sterile surgeries. Trainees traced and characterized the infection and identified risk factors. Because of their efforts, the government has raised awareness about the importance of sterile surgeries, leading to a drop in the number of reported cases of infections.
- **Oral transmission of Chagas disease:** This tropical disease is usually transmitted by bites of blood-sucking insects or by blood transfusions. However, FETP trainees identified a novel mode of transmission in this outbreak, which was linked to consumption of the açai fruit that had been contaminated by insects. An FETP graduate is in charge of control efforts and has established a new surveillance and response network.

