

Fairfax County PHL: At the Edge of the Nation's Capital

Director

Mary Sue Kitchen, a medical technologist with 30+ years experience, has been directing the Fairfax County public health laboratory in northern Virginia for nearly a decade. Kitchen said her first public health experience occurred “way back in the ‘70s”—investigating an urban outbreak of North American blastomycosis while working as a hospital mycologist in Chicago—and “it hooked me there and then on the excitement of public health.” However, it was not until the early 1990s, after moving to the Washington, DC area from England, that circumstances led Kitchen into the field. “I saw an ad in *The Washington Post* for a public health lab technologist right close to home in Fairfax County,” she said, “and was hired.” Kitchen began her tenure as an STD technologist, moving to rabies testing before becoming director in 1995.

Location

In the city of Fairfax, right across the Potomac River from the nation's capital.

Facility

The 10,000-square-foot facility is on the top floor of the Fairfax County Public Health Department's administrative building. The only drawback to this situation, said Kitchen, “is that labs leak. We've had several accidents over the years and we always have to worry about leaking on the (health agency's) director's desk that is right underneath us.” A new security system was recently installed and plans are underway to renovate the 20-year-old space.

Staff

22. “I wish I had more positions to fill. We are to the bare bones. If one person gets sick or has a family emergency, everyone else scrambles for weeks to keep up with the workload.”

Revenue

About 55% of the laboratory's funding comes from Fairfax County, about 25% from user fees and 20% from the Virginia Department of Health. Because the state laboratory—the Virginia Divi-

sion of Consolidated Laboratory Services—is not part of the state public health agency, there is no direct funding from the state laboratory (although it does sometimes provide reagents, technical support and training).

Distinguishing Characteristics

- ▶ The largest local public health laboratory in Virginia, serving a sprawling population of 1.2 million people and providing additional fee-for-service testing to agencies in neighboring counties. (For example, the laboratory does all the drinking water microbiology testing for nearby Dulles International Airport.)
- ▶ Has had a BSL-3 tuberculosis suite since 1985 to respond to an unusually high TB case rate; about a third of all new Virginia cases occur in the Fairfax County area.
- ▶ Functions as both a public health laboratory and a general county laboratory.

Highest Volume Testing

Just under a third of all laboratory tests are for substance abuse screening, performed on behalf of county drug treatment programs and the county courts. STD tests—mainly for HIV, chlamydia and gonorrhea—are next in line in terms of volume. The laboratory also performs maternity testing, enteric testing for foodborne disease investigations, environmental testing (drinking

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water, stream water, air pollution filters and dairy products) and rabies testing. “We do a lot of rabies work: about 1,000 tests per year and 10 or 15 per day in the summer. I think it's because we're such a densely populated county, but still with a lot of wooded areas; it's more common for wild animals to come into contact with people and with people's pets.”

Notable Success Stories

- ▶ Quickly developing an e-mail distribution list for all hospital and private laboratories in the area in the midst of the 2001 anthrax investigations. “This was developed out of necessity. We didn't have any other way of notifying people about what was happening.”
- ▶ Working with first responders during the anthrax crisis to develop an efficient system to collect and pre-screen suspicious samples, particularly those of a politically sensitive nature. “I ended up sitting here under our biohazard hood opening hundreds of letters late at night. Anything truly suspect was sent straight on to Richmond.”
- ▶ Implementing a new laboratory information management system (LIMS) in 2001 (a modified hospital system developed by Soft Computer Consultants of Palm Harbor, FL) “We had been a totally paper-driven lab up until then. Now we have the lab bar-coded as well as automated. Test tubes are bar-coded. Even microbiology is bar-coded. Other than the initial paper requisition, it's a virtually paperless system. It's made life so much easier.”
- ▶ Responding to several major enteric outbreaks each year. “Fairfax County is a multicultural area with lots of people coming and going from abroad,” thus increasing the risk for transporting pathogens into the area.

Biggest Challenges

- ▶ Trying to do state-of-the-art work in an aging facility. “We need a better infrastructure to do PCR effectively.”
- ▶ Coordinating emergency response activities with first responders and with

federal authorities. The military leases ordinary office buildings all over Fairfax County. When an emergency arises—as happened when a sample from a biode-tector in a Skyline office building tested positive for anthrax in 2004—local county responders respond. “Since we are not a Laboratory Response Network (LRN) reference lab, we need to make sure that our local law enforcement officers and local first responders are tied into the LRN. We’re the intermediary that does the communication. We need to be more a part of the LRN than an ordinary sentinel lab. We need to know what kind of testing is out there. We at least need to have the information—up-to-date and current—to communicate to our first responders to make sure they’re getting the right kinds of specimen collection instructions. There’s a disconnect between what a non-LRN reference lab has access to and what the whole system needs to be effective.” Moreover, when federal authorities become involved, Kitchen said, “You don’t know what kind of samples have been collected or where they’ve been sent. But it’s clearly the authority of the local health officer to declare buildings safe or unsafe.”

Goals

- ▶ Continue to upgrade our LIMS. “We’re moving to a Windows-based environment so order-entry can be accomplished in district offices. Then we will have a truly paperless system!”
- ▶ Renovate the facility “so we can more efficiently and effectively utilize our laboratory system and be ready for new technologies.”
- ▶ Expand and re-certify the BSL-3 suite.
- ▶ Continue to facilitate communication with first responders and to “clarify chains-of-command in the laboratory world in the Washington metropolitan area.”



APHL Welcomes Institutional Members

On July 1, APHL opened institutional membership to local public health laboratories and environmental and agricultural state laboratories. APHL welcomes its newest institutional members.

Public Health Institutional—Local Members

Chicago Department of Health
Judith Schermond, MS

Contra Costa County Public Health Laboratory
Richard C. Alexander, MS MPH

Denver Public Health Laboratory
Michael Wilson, MD

Detroit Health Department, Public Health Laboratory
Aloysius P. Hanson, PhD

Erie County Regional Public Health Laboratories
Scott Zimmerman, DrPH, MPH

Fairfax County Health Department, Public Health Laboratory
Mary Kitchen, MT(ASCP)

Fresno County Public Health Laboratory
James J. Spolsdoff

Town of Greenwich Public Health Laboratory
Doug Serafin, MS, MPH

Kalamazoo County Health and Community Services, Public Health Laboratory
Linda Vail Buzas, MPA

Kern County Department of Public Health, Public Health Laboratory
Charles Burke

Maricopa County Public Health Department, Public Health Laboratory
James Kneip

Marion County Health Department, Public Health Laboratory
Matthew M. Matusiak, PhD

City of Milwaukee Health Department, Bureau of Laboratories
M. Stephen Gradus, PhD

City of Philadelphia Public Health Laboratory
Kerry L. Buchs, MHA, MT(ASCP)

Saginaw County Department of Public Health, Public Health Laboratory
Tamara Theisen, MT (ASCP)

San Diego County HHSA, Public Health Laboratory
Christopher R. Peter, PhD

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Stephen A. Willis

San Luis Obispo County Health Department, Public Health Laboratory
Thomas W. Maier, PhD

Wichita Falls-Wichita County Public Health Laboratory
Paul G. Gwynn, Jr, MEd, MT (AMT), CLS

Associate Institutional Members

Florida Department of Agriculture, Division of Food Safety
Yvonne M. Hale, MS

Missouri Department of Natural Resources, Environmental Services Program
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Beverly A. Byrum, DVM, PhD

Oregon Department of Environmental Quality Laboratory
Mary M. Abrams, PhD

Pennsylvania Department of Environmental Protection, Bureau of Laboratories
Roger H. Carlson, PhD

APHL Members:

Invite your colleagues in local and environmental labs to join APHL. New members receive full benefits at an introductory rate of \$500. For information, contact Anna Dillingham, 202.822.5227, x221, adillingham@aphl.org.