



- [Simple Search](#)
- [Power Search](#)
- [Search News](#)
- [Special Editions™](#)
- [Business Search](#)
- [Investext Search](#)
- [Stock Quotes](#)
- [GeoSearch](#)
- [Try!](#)

[Return to Results](#)

[Format for Print](#)



- [Help](#)
- [Accounts](#)
- [About](#)
- [Alerts](#)
- [Portfolio](#)

Analysis: Hazmat Training Gains

Story Filed: Sunday, November 04, 2001 9:02 AM EST

WASHINGTON, Nov 04, 2001 (United Press International via COMTEX) -- The folks who teach required refresher courses to firefighters and emergency medical services workers on hazardous materials are used to getting only partial attention from their students. But these days, the instructors say they are getting peppered with questions from anxious first responders trying to make sense of hazmat guidelines and how they might keep biological terrorism at bay. Trouble is, the instructors are often in the same position of trying to make sense of the situation. In one large suburban East Coast fire academy, the instructors are telling their charges the "universal precautions" taken as a matter of course by all firefighters and emergency medical technicians responding to relatively routine medical calls offer adequate protection from anthrax.

Latex or nitrile exam gloves are tight enough to keep out anthrax spores -- which measure about 1 micron across -- and N-95 masks, which usually are worn near patients possibly infected with tuberculosis, can keep out any airborne anthrax so long as there is no an active spray of the microbes still occurring. Moreover, the latest medical consensus document from the Atlanta-based U.S. Centers for Disease Control and Prevention said that for hospitalized patients, "standard barrier isolation protections are recommended, but the use of high-efficiency particulate air filter masks or other measures for airborne protection are not indicated." But the CDC's own National Institute for Occupational Health, asked by the firefighters' union to weigh in on what first responders should do, recently issued a guideline calling for at least a full-face respirator or a power air-purifying respirator, also known as a PAPR, with a high-efficiency particulate air filter. "Disposable hooded coveralls, gloves and foot coverings should also be used," NIOSH told the International Association of Fire Fighters.

What to do?

"As a practical everyday thing, your N-95 (mask) is going to protect you against TB, which can be smaller than anthrax, so as long as we're doing our regular procedures right, every time, we should be fine," explained an official with the Federal Emergency Management Agency who works with local fire departments and emergency medical services agencies on training first responders. That's fine for the average paramedic or firefighter, but the hazardous materials specialists are finding themselves gearing up for war on nearly every call.

Their answer: full self-contained breathing apparatus, a level-A biohazard suit over their regular gear, and use of commercially available hand-held bioassays to check for anthrax contamination in the field. These devices, first developed during the Gulf War by a company called New Horizons Inc., under the trade name Smart Tickets, detect the presence of anthrax in an environment but do not offer any specific information on how much is present and the nature of the contamination. Improved versions of the technology from companies such as Alexeter of Wheeling, Ill., and Tetracore, in Rockville, Md., are touted to reduce a very high false-positive rate encountered with the Smart Tickets.

A small sample of suspicious material is mixed with a solution and dropped on the test strip. It then is passed through a specialized device, and within 15 minutes a colored band appears to tell the technicians whether it has found anthrax or not. Alexeter plans to unveil similar tests for ricin, botulism and plague.

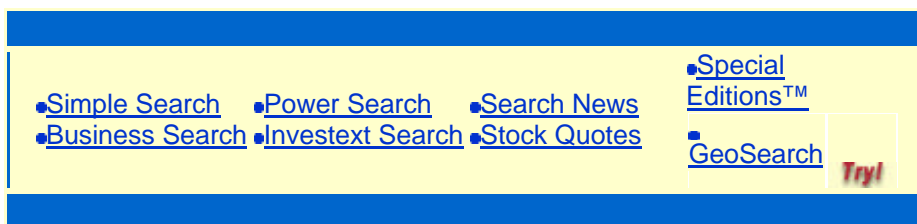
These units are in service in fire departments throughout the Midwest. In addition, the Fairfax County Fire & Rescue Dept., whose members also make up the Federal Emergency Management Agency's Virginia Task Force One emergency response force, carries the 15-minute assays on its hazardous materials unit. But here, too, opinions among experts are divided. For its part, CDC officials said they cannot recommend using these hand-held assays -- yet.

"The analytical sensitivity of these assays is limited by the technology and the data provided by the manufacturers indicate that a minimum of 10,000 spores is required to generate a positive signal," according to the CDC. Most health officials say it takes exposure to anywhere from 2,500 to 55,000 spores to become infected, although that is under review given the inhalation anthrax death of a woman in New York who apparently had no connection with the postal service, media or Congress, which are at the center of the anthrax scare.

Officials also worry the tests are not specific enough. Early reports from law enforcement agencies and fire departments responding to calls stemming from the expanding mail scare suggest the assays turn positive whenever they encounter non-anthrax bacillus bacteria in the environment. "Bottom line here is that you have to treat every scene like a hazmat scene, and that's clearly impractical," FEMA official said. "The first-responder community is groping with this issue like everyone else."

Copyright © 2001, UPI, all rights reserved.

You may now print or save this document.



•[Simple Search](#) •[Power Search](#) •[Search News](#)
•[Business Search](#) •[Investext Search](#) •[Stock Quotes](#)
•[Special Editions™](#)
•[GeoSearch](#) **Try!**

Portions of above Copyright © 1997-2001, Northern Light Technology, LLC. All rights reserved.