

# Bio & Terror Bible

## EXPOSING THE COMING BIO-TERROR PANDEMIC

**BIOTERRORBIBLE.COM:** When a major bio-terror attack and subsequent pandemic hit the United States of America, it will most likely be executed from behind the scenes by [Ezekiel Emanuel](#), soon to be known as the "Doctor of Death". As it currently stands, the city of [Chicago appears to be bio-terror target #1](#) with Ezekiel's brother [Rahm Emanuel](#) in the power position of mayor. Both Emanuel brothers are dual U.S. and Israeli citizens whose father is a known Zionist terrorist who conducted attacks for the [terror state of Israel](#) who will likely provide the pathogens for the future bio-terror attack.

Israel is the only modern nation that has not signed the 1972 [Biological Weapons Convention](#) (refusal to engage in offensive biological warfare, stockpiling, and use of biological weapons). Israel is also the only modern nation that has signed but not ratified the 1993 [Chemical Weapons Convention](#) (refusal to produce, stockpile and use chemical weapons). Should a future biological terror attack hit America or any other nation, the state of Israel and its citizens will be prime suspects.

The following government and non-government agencies, institutions and organizations also appear to be intimately involved in some aspect of the upcoming bio-terror attack: [BARDA \(Biomedical Advanced Research and Development Authority\)](#), [CDC \(Center for Disease Control\)](#), [Center for Biosecurity of UPMC](#), [EIS \(Epidemic Intelligence Service\)](#), [INTERPOL \(International Criminal Police Organization\)](#), [NBACC \(National Biodefense Analysis and Countermeasures Center\)](#), [NIAID \(National Institute of Allergy & Infectious Diseases\)](#), [NIH \(National Institutes of Health\)](#), [OBFS \(Organization of Biological Field Stations\)](#), [USAMRICD \(U.S. Army Medical Research Institute of Chemical Defense\)](#), [USAMRIID \(U.S. Army Medical Research Institute of Infectious Diseases\)](#) and the [WHO \(World Health Organization\)](#).

**Title:** Epidemic Intelligence Service

**Date:** 2012

**Source:** [Wikipedia](#)

**Abstract:** The Epidemic Intelligence Service (EIS) is a program of the [United States' Centers for Disease Control and Prevention](#) (CDC). Established in 1951, due to [biological warfare](#) concerns arising from the [Korean War](#), it has become a hands-on two-year postgraduate training program in [epidemiology](#), with a focus on [field work](#). It is now run through the CDC's Office of Surveillance, Epidemiology, and Laboratory Services (OSELs). Persons participating in the program, popularly called "disease detectives", are called "EIS Officers" by the CDC and have been dispatched to investigate possible epidemics, due to both natural and artificial causes, including [anthrax](#), [hantavirus](#), and [West Nile virus](#) in the United States and [Ebola](#) in [Uganda](#) and [Zaire](#). For the duration of their service, EIS officers are assigned to operational branches within the CDC as the result of a highly competitive matching process. EIS service is also a common recruiting pathway into the [Public Health Service Commissioned Corps](#).

Since the smallpox crusade beginning in 1967, the CDC has paired an EIS officer and a [Public Health Advisor](#) or "PHA" as a scientist (EIS) and operations (PHA) team. These EIS/PHA management teams have made major contribution to the management and leadership of the CDC, with several former EIS officers serving in leadership capacity and closely supported by their deputy manager, the PHA. Together EIS officers and PHAs have worked on several epidemics worldwide ([Wikipedia, 2012](#)).

**Title:** Epidemic Intelligence Service (EIS)

**Date:** 2012

**Source:** [CDC](#)

**Abstract:** The Epidemic Intelligence Service (EIS) is a unique 2-year post-graduate training program of service and on-the-job learning for health professionals interested in the practice of applied epidemiology. Since 1951, over 3,000 EIS officers have responded to requests for epidemiologic assistance within the United States and throughout the world. EIS officers are on the public health frontlines, conducting epidemiologic investigations, research, and public health surveillance both nationally and internationally ([CDC, 2012](#)).

**Title:** CDC Enlists 146 Disease Detectives

**Date:** March 7, 2002

**Source:** [UCLA](#)

**Abstract:** Every summer, the Centers for Disease Control and Prevention takes about 65 new doctors, pharmacists, Ph.D.s and veterinarians and makes them its Special Forces in the war on disease. Members of the Epidemic Intelligence Service expect to spend two years working extreme hours on modest salaries for the chance to tackle problems they would face in no other job.

Recent months have exceeded all their expectations.

The EIS has a total of 146 members this year. Since September, 136 have been sent out from Atlanta on assignments related to terrorism. The mobilization is by far the biggest since the group was created in 1951 to respond to fears that returning Korean War troops might have been infected with biological weapons.

"Before this, the largest single deployment in EIS history was 46 people," said Dr. Douglas Hamilton, who runs the disease-detective corps from a souvenir-crammed office where Friday is Hawaiian-shirt day. "When I put out a call for volunteers on Sept. 11, I had 50 responses the next morning."

EIS officers must be able to leave at any hour to respond to any kind of public health emergency. They investigated the first cases of Legionnaires' disease, hantavirus and AIDS. Over the past six months, they were the front-line troops countering the first fatal bioterrorist attack on U.S. soil.

"Some have deployed four times. They come home, do their laundry and ask to go out again," Hamilton said. "I offer them time off, but people won't take it."

Jennita Reefhuis, a 30-year-old epidemiologist, is a specialist in analyzing birth defects. She expected to spend her two-year appointment at a computer examining data. The EIS realized her skills had another application.

Bioterror threat rises

The CDC began worrying about bioterrorism immediately after the Sept. 11 attacks. If disease organisms were used as weapons, the results would soon show up in doctors' offices and emergency rooms. But unless those cases were immediately distinguished from everyday problems, bioterrorism could go unnoticed and might spread.

To detect anything unusual, the agency needed statistical programs that Reefhuis could write. She left for Washington in late September, sacrificing a trip to her brother's wedding in the Netherlands. She came back Oct. 2. Two days later, she was sent to Florida.

"I wasn't allowed to tell anyone where I was going, and I couldn't tell anybody why I was going," she said. "I couldn't even tell my fiancé."

Reefhuis did four tours all told, constructing databases and teaching local health departments how to use them. Assignments for other EIS officers varied.

McKenzie Andre, a 31-year-old physician from Brooklyn, arrived at ground zero two days after the attacks. Health authorities were worried about conditions for emergency workers. Andre made sure recovery workers had respirators that fit.

"There were about six construction workers working in the basement in a nearby building, and they didn't want to come out," he said. "So I went in and I tested them. They were working 48 and 72 hours straight. They wouldn't stop."

On Sept. 11, Dr. Kelly Moore was in Cairo on her first EIS assignment, investigating fatal bloodstream infections among babies in intensive care. She didn't return to Atlanta until Sept. 20.

Moore, who grew up on a farm within sight of the Huntsville Space Center, was in New York a week later. She expected to stay two weeks. Then the city's first anthrax case was announced. The following day, she went to NBC News, explaining the disease to anxious employees who were far enough from the letters not to need antibiotics.

"One guy told me, 'My wife wouldn't let me sleep in the bed with her. She said I might give her anthrax,' " Moore said. "And I had to say, 'Well, sir, she's going to have to come up with a new excuse.' "

Loved ones left behind

The EIS credential carries long-term benefits: Prominent researchers and policy-makers are among the alumni. But this year especially, the experience has come at a sacrifice. When officers deploy, they often leave partners and young children behind.

Dejana Selenic, who worked eight years for Doctors without Borders before joining the EIS, had planned to marry her fiance Sept. 23. On Sept. 20, she got one of Hamilton's phone calls, putting her on a plane to Washington in several hours.

She called her fiance to tell him. Several minutes later, he called back. "Let's be married now," he said.

Her supervisor found a judge who would stay late at the DeKalb County Courthouse, and an hour later, they were married. She made the deployment with minutes to spare.

"The EIS is one of the great innovations in public health, and not only because it draws good people to the CDC," said Dr. William Foege, a dean of public health in America and a former CDC director. "People talk about what the experience does for individuals. But something that's not understood is how much it has improved the agency itself. The CDC has had to become worthy of the people it sends out there" ([UCLA, 2002](#)).

**Title:** New Troops Enlist At CDC To Fight Disease

**Date:** August 30, 2002

**Source:** [UCLA](#)

**Abstract:** In a concrete block hallway, nervous health workers crowd around a body on a gurney. They are shrouded in baggy white coveralls, thick boots and black rubber gloves that reach their elbows. Heavy respirators mask their faces.

The body on the gurney is a training dummy. But to the drill instructor barking orders at the class, it is a victim of a poison gas release.

"I know your training is to get the patient to treatment ASAP," the instructor says. "But you need to cut his clothes off first. You need to wipe him down with decontaminant. If you rush into the ER with this person, other people are going to die. You have to remember: You're in a new era now."

For 51 years, the disease detectives of the Centers for Disease Control and Prevention have been first on the scene of AIDS, Ebola and West Nile virus. Now the newest group of them -- M.D.s and Ph.D.s who started work last month -- must learn what it will be like to handle a terrorist attack.

The Epidemic Intelligence Service -- the formal name of the CDC's disease detective corps -- is the best known, and to outsiders the most glamorous, part of the agency. It is the rapid response force, featured in movies and best sellers, that always keeps a bag packed and can parachute into disease outbreaks overnight.

Like the rest of the CDC, the intelligence service is at a pivotal moment. Concerns about terrorism have transformed the Atlanta-based public health agency. Hundreds of staff members have been reassigned, budgets boosted and new labs and programs launched with unusual speed. And the service, a group founded at the height of the Korean War to investigate whether troops had been infected with biological weapons, is facing the reality of responding to bioterrorism for the first time.

New officers, as they are called, arrive every July. They serve two years of long hours at relatively low salaries, some in Atlanta and others in state health departments. In return, they get one of the most valuable credentials in public health and the chance to participate in the history of a group that helped eradicate smallpox, identify AIDS and solve the first major outbreaks of Legionnaires' disease, toxic shock syndrome and E. coli 0157.

"This is a critical time for the program," said Dr. Douglas Hamilton, a tall, genial microbiologist and family physician who has headed the corps for five years. "The focus of the country is turning to recognizing the potential for terrorism. But our mission is training epidemiologists, and epidemiology is not only finding a terrorist who is spewing anthrax. It's dealing with a whole range of health problems."

This year's class is the largest in corps history, due to extra funding voted by Congress. There are 89 members, ranging from 26 to 49 years old: 32 men and 57 women; 75 Americans and 14 internationals; 63 Caucasians, 14 Asians, nine of African heritage and three whose background is Spanish-speaking.

There are 56 physicians, 23 Ph.D.s, seven veterinarians, two nurses, a lawyer and a dentist; seven Phi Beta Kappa members, six college athletes and four Peace Corps volunteers. Two of them are married to each other. One is pregnant. Nine of them have children who are not walking yet.

They gathered in early July in a windowless modern conference room on the CDC's headquarters campus, sitting in alphabetical order, starting a month of days that would begin at 8 a.m. and sometimes go late into the night.

"We want them to be bonded as a group," said Hamilton, who joined the Epidemic Intelligence Service after hearing about it at his 20th high school reunion and served in Connecticut, Kazakhstan and Kyrgyzstan during his two years. "If we face a situation again like the anthrax attacks, the cohesion they have developed will help to pull them through."

### **Akin to Boot Camp**

The service's first weeks of training are the classroom equivalent of boot camp: hours of lectures on the basics of finding cases, handling lab samples and respecting the rights of patients. The jargon piles up rapidly: case control study, prevented fraction, population attributable risk percent.

"I advise you to fasten your seat belts," instructor Polly Marchbanks tells them in the first week. "This is going to be difficult."

Morning classes deal with theory: how to design a scientific study, write a questionnaire and run sophisticated software that can reveal disease trends. Afternoons are reserved for case studies of epidemics.

On a steamy afternoon, 10 new officers cluster with Hamilton in a cinder block basement classroom as he leads them through a 1999 investigation: seven children in Albany, N.Y., who have bloody diarrhea after visiting a county fair.

"Is this an outbreak?" he asks.

"An outbreak is more cases than expected in a certain time and place," replies Waimar Tun, an epidemiologist with experience in Bangladesh and Tibet. "We don't know what that baseline would be."

"So is it worth investigating?" Hamilton prods.

"The state health department asked us to investigate," Angela McGowan says. "When they ask us, don't we go?"

Hamilton nods. "We do investigations first to control disease," he says. "We do them because they are good training. And we do them to respond to public and political concern -- those are always important."

McGowan makes notes. Her presence is one sign of changes in the Epidemic Intelligence Service: She is the first lawyer accepted into the program. She is also a second-generation officer, born during her father's service 31 years ago.

"I always heard about it, and I was never going to do it," she said. "I was an international relations major as an undergrad, and in law school I went into a foreign relations program. But then I got interested in health after all. I realized that people make laws and people do research -- but no one looks at the policy that links them. That's what I want to do."

The New York diarrhea cases, it turns out, were part of a huge outbreak: more than 760 cases of *E. coli*, traced to an unchlorinated fairground well. But when investigators arrived, Hamilton reminds them, no one knew the source of the problem. It is an opportunity to reflect on risks they may run.

The work can be dangerous. One member died in an African plane crash in the 1960s. Officers at the 1999 World Trade Organization meeting in Seattle were accidentally tear-gassed. Those who work on Ebola outbreaks have seen African doctors die from a slight lapse in self-protectiveness.

"It is vital that you take care of yourselves," Hamilton lectures them. "If you get sick, you will not do anyone any good."

## **A Field Assignment**

Epidemic Intelligence Service officers need skills that classroom experience cannot teach: curiosity, resourcefulness and cultural sensitivity.

In their third week of training, they get an opportunity to exercise them. The DeKalb County Board of Health asks the class to conduct a survey of whether restaurants are observing a no-smoking ordinance.

It is their first taste of the core technique of CDC-brand research: conducting face-to-face interviews to draw out data for computer programs to crunch. (The service calls it "shoe leather epidemiology" and proudly uses as its symbol a shoe sole with a hole worn in it.) But it is the officers' first experience also with how their carefully gathered statistics might be used.

"You folks are at a point in your career where you're focusing on data," says Dr. Scott Wetterhall, Class of 1984 and now a DeKalb employee. "But data has to go somewhere, and where it usually ends up is tangled in politics."

So one blazing Saturday morning, new officers Leigh Ramsey and Dr. Jacek Mazurek are standing in the parking lot of a strip mall where I-285 crosses Buford Highway, trying to find a restaurant. They have a name. They are at the address. But the Buddha Express is missing.

"It has to be here somewhere," Ramsey says, frowning at an ad for noodles in a cafe window. "Someone has to know where it is."

It has not been a good morning. At a Waffle House, the manager refused to stop cooking to talk with them. At a Korean restaurant, a waitress who took them for inspectors waved insistently at a "98" health rating awarded two weeks earlier. At a Mexican seafood stand, no one spoke enough English to fill in the blanks on the 10-page questionnaire.

Mazurek is a rehabilitation specialist who trained in Warsaw, Poland, and upstate New York. Ramsey, 31, is an Atlanta native with a Ph.D. from the Medical College of Georgia. Small-framed and cheerful, she wears a bracelet of linked tennis rackets and has run seven marathons. In graduate school, she studied how sickle cell anemia responds when patients exercise.

"I have done lab work -- on blood samples, tissue samples -- and I've worked with people," she said. "But I wanted the experience of studying people in large groups and communities, and working for the EIS offers that."

After 45 minutes of hunting, the two find Buddha Express. It sits behind a pinball arcade and a Korean snack bar, wedged into a bowling alley with black light karaoke bowling and glow-in-the-dark shoes. But the restaurant has changed hands. It is a bar called Scrooge's Lounge now, and it is all-smoking, all the time.

It reminds them of another skill they need: a sense of humor.

### **New Focus: Terrorism**

The officers' training used to run three weeks. But last year, every officer who could travel -- 136 of 146 -- was sent to the World Trade Center, the Pentagon and the sites of the anthrax attacks. So this year, the CDC added an extra week of training, devoted only to terrorism and conducted by outside experts.

In the first days of August, the agency bused the group to the Noble Training Center in Anniston, Ala., a former Army hospital whose walls are covered with framed explanations of chemical hazard symbols and posters listing the most dangerous biological agents.

"I hope," Col. Ted Cieslak tells them, "that this week is a waste of all your time."

Cieslak is a pediatrician and a Marine Corps colonel whose brother was an Epidemic Intelligence Service officer in 1992. He worked for years at the Army Medical Research Institute for Infectious Diseases, a Maryland military reservation that led the U.S. biological weapons program.

"Biological agents are the ultimate terrorist weapon," Cieslak said. "In this day and age, with terrorism playing the role it now does in American society, you will all have to go about your business with that possibility in the back of your minds."

The Anniston week is a crash course in nightmares: When to use a Geiger counter. How to diagnose smallpox. When seizures are a sign of a toxic chemical release. How far anthrax spores spread in the wind.

There are lectures on improvising a mask when the air is not breathable (fold a T-shirt and scrunch the fabric over the mouth and nose) and coaching on hand signals to use with a scuba-like air tank: patting the head for "I need assistance," hands around the throat for "I can't breathe." Finally, there was learning how to suit up in coveralls made of impenetrable Tyvek, heavy boots, gloves and respirators -- which came with warnings that beards and bangs would disrupt the air-tight seal -- and how to doff the suits, without contaminating yourself, while standing inside a large plastic bag.

"I cannot emphasize this enough: You are a target, a target, a target," trainer Rick Schlegel told them somberly. "If they take you out, there will be no one to hold the line on the epidemic."

After the suits, the class got an extra-long lunch to recover. In the hospital's old brick entryway, new officer Dr. Wayne Duffus thought about the experience.

"It's good to have to do it for real, to check your tolerance," he said. "The goal is to help people, whatever it takes -- and whatever it takes means taking care of yourself, so you can get to all the people you need to treat."

Duffus, 37, is an internist and a virologist with a Ph.D. A native of Jamaica whose family moved to New York in the 1970s, he began publishing scientific papers in college and spent the past year at Emory on an infectious diseases fellowship. Like Ramsey and about half the class, he will serve his two years away from Atlanta -- in his case, in Columbia.

"I wish I could spend more time with my classmates," he said, looking around. "But I just can't wait to be with the people I'm going to work with. I want to get into the trenches."

### **West Nile Beckons**

Almost every year, a new officer is pulled from training early because some part of the CDC needs help. This year, too: Before the month of training ended, one officer was shipped to Texas to investigate an outbreak of disease among prairie dogs sold for pets. Another left two days later for six weeks in Kabul, Afghanistan, helping refugees.

Others got to their new jobs and were sent out within 24 hours. Dr. Susan Montgomery, a veterinarian, drove cross-country to Fort Collins, Colo., the CDC's insect-borne diseases lab -- and was immediately given a ticket to New Orleans to help with the West Nile virus outbreak. Joel Montgomery (no relation), a microbiologist from Texas, got two weeks to settle into a cubicle in the special pathogens branch in Atlanta, the group that works in the high-security labs. On Aug. 11, he left for Bolivia.

Montgomery is used to dangerous organisms and foreign travel: Before coming to the CDC, he had isolated deadly bacteria from Komodo dragons, sticking his hand into the mouths of the poisonous animals while six technicians held the beasts down. But like most of his classmates, he was reeling slightly from the pace. He had scientific papers to finish and new colleagues to meet; while he was in training, his wife, a special education teacher, had moved them into a new house in Lilburn.

"I wanted to move out of the lab, to get away from the organisms and appreciate the human impact of diseases," he said before leaving. "The point of this is complete immersion, to take these two years and do as much as possible. I'm ready to get to work" ([UCLA, 2002](#)).