



Clifton R. Lacy, M.D.,
Commissioner

NJ Communi-CABLE

Salmonellosis, marked by fever, abdominal cramps and diarrhea, is caused by one of 2,000 strains of the bacteria salmonella. Symptoms generally occur one to three days after exposure but can be delayed for as long as a week. Salmonellosis generally is not life-threatening but can be fatal in the elderly or people with depressed immune systems.

In late June 2004, the NJ Department of Health and Senior Services (NJDHSS) noticed an increase in the incidence of gastroenteritis in the state. The illnesses in this outbreak were caused by *Salmonella berta*, a particularly unusual strain, which is only found in 1 percent of all salmonella cases nationwide.

A total of 81 laboratory-confirmed cases were reported; of these 61 had matching gene strains. The patients' ages ranged between 14 months to 81 years with a median age of 37 years. Twelve patients were hospitalized and a total of 16 counties reported cases (Atlantic, Bergen, Burlington, Camden, Essex, Gloucester, Hudson, Hunterdon, Mercer, Middlesex, Monmouth, Ocean, Passaic, Somerset, Union, Warren). The majority of the patients resided in central New Jersey.

During 2002, a total of eight *S. berta*

cases were reported to the NJDHSS, of which five occurred during July-August 2002. During 2003, a total of five *S. berta* cases were reported; three occurred during July-August 2003. Of note, testing of all salmonella specimens received by PHEL during 2003 was incomplete, so the 2003 totals may be underestimated.

S. berta cases with onset dates during the same time period have also been identified in three other states. New York has 45 cases, including 6 cases from New York City and Pennsylvania has 34 cases; all with matching gene strains.

No common source has been identified to date and investigation is ongoing with all states participating.



Personal Emergency Preparedness



Do you have an emergency plan in place for yourself and your family? Despite world events, many families do not have a plan. Please visit www.state.nj.us/njhomelandsecurity or www.redcross.org for helpful information on how to create a plan and emergency kit.

NJDHSS Communicable Disease Service

- Eddy Bresnitz, MD, MS, State Epidemiologist, Senior Assistant Commissioner
- Janet DeGraaf, MPA, Director, Communicable Disease Service
- Christina Tan, MD, Medical Director, Communicable Disease Service
- Suzanne Miro, MPH, CHES, Editor, Health Educator, Communicable Disease Service

Special Report—Influenza Vaccine Shortage 2004-05

In an interesting and challenging turn of events, the 2004-05 influenza season made headlines as news of a vaccine shortage surfaced. One of the two vaccine manufacturers, Chiron Corporation of Emeryville, CA, announced that the United Kingdom regulatory body, the Medicines and Healthcare Products Regulatory Agency (MHRA), had temporarily suspended the company's license to manufacture Fluvirin® influenza virus vaccine in its Liverpool facility, preventing the company from releasing any of the product during the 2004-05 influenza season.

This announcement prompted an abrupt halt to the New Jersey Department of Health and Senior Services (NJDHSS) influenza vaccine promotional campaign and shifted the educational message to one of preventing the spread of the flu. Developed last year in the event that SARS would make an appearance in the United States, the NJDHSS coined the term "Universal Respiratory Precautions" (URP) which encompasses several easy steps to reducing the spread of respiratory illness. For health care providers, URP entails:

- Cover coughs and sneezes with tissues or surgical masks
- Wash hands frequently
- Wear gloves and gowns and replace often
- Get your flu and pneumonia vaccines

For the public URP entails:

- Cover coughs and sneezes with tissues or surgical masks
- Wash hands frequently
- Stay home if you are feeling sick
- Get your flu and pneumonia vaccines

The NJDHSS is working hard to distribute remaining vaccine in a manner that will ensure people at highest risk will be able to receive the vaccine. The CDC has identified the following priority groups to be vaccinated this season:

- Children aged 6-23 months;
- Adults aged 65 years and older;

- Persons aged 2–64 years with underlying chronic medical conditions;
- All women who will be pregnant during the influenza season;
- Residents of nursing homes and long term care facilities;
- Children aged 6 months–18 years on chronic aspirin therapy
- Health-care workers involved in direct patient care
- Out-of-home caregivers and household contacts of children less than 6 months old

Vaccine will be distributed in an equitable manner, regardless of which company the orders were originally placed. Many local health departments have already received shipments of vaccine and are planning clinics to begin immediately. According to an announcement by Secretary of the U.S. Department of Health and Human Services, Tommy Thompson, and Aventis Pasteur (AvP) on October 19, 2004, AvP would be producing an additional 2.6 million doses to be delivered by January 2005. These additional doses would bring the total of vaccine produced by AvP for use this influenza season to 58 million. AvP plans to ship two to three million doses per week as vaccine is approved off the production line.

According to the November 12, 2004 NJDHSS press release, New Jersey expects to receive 342,000 additional doses of flu vaccine between now and early 2005 under a nationwide reallocation of the vaccine supply. This additional vaccine supply will be used to protect high-risk people and their high-priority caregivers.

New Jersey's local health departments are receiving 119,360 doses out of 3.1 million currently being distributed nationwide to fill state public health contracts. An additional 223,000 doses of Aventis-manufactured vaccine will be available for distribution to the state's

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Disease of the Quarter: Lassa Fever

Lassa fever is an acute viral illness caused by Lassa virus, which is hosted by rodents in the *Mastomys natalensis* species complex and rarely imported to countries outside of those areas in Africa where the disease is endemic. Lassa fever is characterized by fever, muscle aches, sore throat, nausea, vomiting, and chest and abdominal pain. Approximately 15%-20% of patients hospitalized for Lassa fever die from the illness; however, approximately 80% of human infections with Lassa virus are mild or asymptomatic, and 1% of infections overall result in death. On August 28, 2004, a man aged 38 years residing in New Jersey died from Lassa fever after returning from travel to West Africa.

The patient, a business man born in Liberia, had been traveling in West Africa for the 4 months prior to returning to New Jersey. One day in August, the patient began to experience fever, chills, severe sore throat, diarrhea, and back pain. Two days later, he left Freetown, Sierra Leone, and traveled by airplane through London, England, arriving in Newark, New Jersey. He then traveled from Newark to his home by train.

Within hours of his arrival in the United States, the patient sought treatment and was hospitalized in

Trenton, New Jersey. Differential diagnoses at this time included malaria and typhoid fever. On the third and fourth days of hospitalization, despite treatment with antimalarial and antibiotic therapy, the patient's condition deteriorated, and adult respiratory distress syndrome was diagnosed. Yellow fever and Lassa fever were considered as possible diagnoses. The New Jersey Department of Health and Senior Services (NJDHSS) was notified, CDC was consulted, and arrangements to administer intravenous ribavirin under an investigational new drug protocol were initiated. However, six hours later, the patient died before the drug could be administered. Clinical and postmortem specimens were sent to CDC for specific diagnostic testing and Lassa fever was confirmed.

An investigation was conducted to identify persons who might have had direct contact with the patient or his body fluids while he was ill. Contacts were categorized into low and high-risk categories. A total of 188 persons had contact with the patient during the period when he was likely infectious; of these, five persons were classified as at high risk and 183 as at low risk. **Continued on page 4.**

Influenza Vaccine Shortage

Continued from page 2

hospitals, long-term care facilities, federally qualified health centers (FQHCs), Department of Human Services facilities for the developmentally disabled and other providers for a total of 342,000 doses. The NJDHSS also announced in early November that it has purchased 8,000 doses of injectable inactivated flu vaccine for immediate distribution to key facilities and plans to purchase an additional 2,000 doses for use in the event of an emergency or large outbreak in an institution.

NJDHSS will also purchase 7,400 doses of FluMist®, the live attenuated, nasally administered vaccine approved for use by healthy people ages 5 to 49.

To date, the NJDHSS Emergency Communication Center has received approximately 22,000 calls from physicians, politicians, health care facilities, health departments, and the general public with inquiries related to the vaccination shortage. This hotline remains in effect for the foreseeable future and can be reached at 866-234-0964 (toll free) for the most current information on the situation. The hotline is available Monday through Friday from 8 a.m. to 5 p.m.

Visit www.nj.gov/flu to download educational materials created to assist you in promoting flu prevention messages, view important updates, and to see influenza-like illness surveillance data.

Disease of the Quarter: Lassa Fever

Continued from page 3. The five at high risk were the patient's wife, three of their children, and the patient's brother. Contacts at low risk included nine other family members, 139 health care workers, and 16 laboratory workers. In addition, 19 contacts at low risk were exposed as passengers on the flight from London to Newark.

All contacts at high risk were monitored for temperature of $\geq 101^\circ$ F twice daily for 21 days after their last potential exposure to the patient on August 28. A public health nurse visited the family contacts each morning and recorded their temperatures. In the afternoon, the contacts recorded their own temperatures and reported the results.

The majority of contacts at low risk (i.e., nine other family members and 139 health care workers) were instructed to record their own temperatures at least twice daily and report the results. Other contacts at low risk (i.e., the 16 laboratory workers and 19 air passengers) were asked to self monitor for temperature of $\geq 101^\circ$ F and other symptoms compatible with Lassa fever.

No restriction was placed on work or movement for asymptomatic adults at either high or low risk. However, to facilitate monitoring, the patient's

children were restricted from participating in school activities. None of the contacts at high risk reported any illness compatible with Lassa fever as of September 18, which ended the 21-day incubation period.

High Risk

- Exposure from a percutaneous injury (e.g., needlestick or cut with sharp object) to blood, tissue, or other body fluids that are potentially infectious (e.g., urine, vomitus, or stool).
- Exposure from direct, unprotected contact with potentially infectious material (e.g., touching vomitus with an ungloved hand).
- Mucosal exposure (e.g., of eyes, nose, or mouth) to splashes or droplets of potentially infectious blood and body fluids or sexual contact with a symptomatic patient.

Low Risk

- Sharing a room or sitting in a vehicle within 6 feet (i.e., coughing distance) of a potentially infectious patient without direct contact with a potentially infectious material.
- Providing routine medical care while using personal protective equipment (PPE) appropriately.
- Routine cleaning and laundry of contaminated linens and surfaces while using PPE appropriately.
- Transport of a potentially infectious patient or specimen without direct contact with potentially infectious material.
- Handling of clinical specimens while using PPE appropriately.

Source: CDC. Imported Lassa Fever-New Jersey, 2004. MMWR 2004; 53:894-7.



Concerned About Sexual Health in NJ?



The New Jersey Department of Health & Senior Services (NJDHSS) STD Program is excited to announce the launch of the New Jersey Prevention Health Education Network (NJ PHEN) website. In response to health prevention educators throughout New Jersey who expressed concerns about insufficient collaborative opportunities, training, and up-to-date information that is easily accessible pertaining to STD-prevention, the NJDHSS STD Program developed NJ PHEN. NJ PHEN is a program designed to connect sexual health prevention professionals throughout the state and provide them with access to information, funding opportunities, resources, and each other. NJ PHEN already has member agencies and individuals from all areas of New Jersey.

The website, which was launched October 1, 2004, contains information about trainings, funding, upcoming network meetings, educational resources, and also has a bulletin board where members can communicate with one another about various issues and topics of concern.

Portions of the site are accessible to NJ PHEN members only. In order to become a member, an agency or individual simply needs to submit a membership form, which is accessible on the NJ PHEN website, or by emailing a request to njphen@doh.state.nj.us. Join your colleagues today at: <http://www.state.nj.us/health/njphen/>

West Nile Virus Update

The New Jersey Department of Health and Senior Services (NJDHSS), in collaboration with local health departments and mosquito control agencies, the New Jersey Departments of Environmental Protection and Agriculture, is in its fifth year of West Nile virus (WNV) surveillance and reporting for the detection of viral activity among avian, mosquito, equine and human populations. As per the WNV Geographic Information System (GIS) surveillance and reporting application, WNV has been identified in 19 of the 21 counties in New Jersey, as of October 13, in the 2004 season.

Surveillance highlights to date in the 2004 season in New Jersey:

Avian – In the 2004 season, information on approximately 1197 birds has been entered into the system; 271 of these birds were tested, with the others reported as bird sightings (if not submitted for testing) or labeled unacceptable for testing (if birds have decomposed or the forms are incomplete). Eighty-six (86) of the birds tested were found positive for the presence of WNV. In 2003, at this point in time, we had tested 1462 birds of which 509 were positive for the presence of West Nile virus.

Mosquito Pools – To date, the Public Health and Environmental Laboratories (PHEL) have tested over 6,116 mosquito pools. They have reported 263 positive pools from 19 different counties. The earliest WNV positive mosquito pool was collected in the first week of June.

Human – So far in the 2004 season, one human case

of WNV infection has been diagnosed. NJDHSS has received 93 applications for testing, of which 56 suspect cases have been approved for testing. Thirty-eight of the specimens submitted have tested negative at PHEL, while four are pending, and specimens have not been received for the remainder. The state continues to reach out to physicians, infection control practitioners, and laboratory staff to submit case reports to NJDHSS for approval and confirmatory testing.

Equine – As in previous years, the Department of Agriculture laboratory is performing WNV testing in horses exhibiting neurological signs around the state. To date they have reported six WNV positive horses.

Eastern Equine Encephalitis (EEE)

As part of the arboviral surveillance, PHEL also identified eighteen EEE positive mosquito pools in three different counties in the state. The department of Agriculture has reported six horses that tested positive for EEE to date in 2004. In 2003, New Jersey had reported three human cases, eight equine cases and 42 mosquito pools.

Additional information on WNV, including fact sheets, protection tips, testing protocols, etc. can be found at the NJDHSS website at <http://www.state.nj.us/health/cd/enceph.htm> and national surveillance results can be seen at the CDC website at <http://www.cdc.gov/ncidod/dvbid/westnile/surv&control.htm>.

Hepatitis C Support Project Comes to NJ

A free two-day training was held on August 9–10, 2004 in Newark, NJ which enabled 37 participants to become certified hepatitis C educators for their clients. NJDHSS partnered with the California-based Hepatitis C Support Project in this train-the-trainer workshop. It was only the third time it has been offered on the east coast.

The Hepatitis C Support Project is funded by the Centers for Disease Control and Prevention, and

Roche Pharmaceuticals to offer the training across the United States with a target audience of health educators, HIV/STD counselors, substance abuse counselors, and support group leaders.

Alan Franciscus, the director of the Hepatitis C Support Project, received rave reviews for his presentation. He has collaborated with state hepatitis C virus coordinators to offer this workshop throughout the west coast area.

CDRS Corner

An Increase in the Use of the CDRS – and a New Design in the Making

The intent of the Communicable Disease Reporting System (CDRS) is to facilitate the timely reporting and investigation of communicable diseases in New Jersey. The CDRS has facilitated improved disease reporting in New Jersey; in 2003, over 23,000 initial reports were entered into CDRS from labs, LHDs and hospitals, compared to 11,637 in 2002. An increase from approximately 200 users in the beginning of 2003 to almost 800 in August 2004 demonstrates an enthusiasm for electronic reporting and brings with it an interest in increasing the scope of the system.

The CDRS is a case-centric system. It allows users to track individual cases of disease. As users get progressively more familiar with the system, they want to be able to do more of their investigative and case management work in one central clearinghouse instead of having to utilize multiple systems to do business. Developmental work has begun to build a patient-centric reporting system that would allow users to track a patient's disease history as well as do the individual reporting required in New Jersey. New functions such as outbreak management, case management, incidence of disease reporting, investigations will be executable in the new CDRSS, Communicable Disease Reporting and Surveillance System. The CDRS will expand its reporting capabilities to include the surveillance functions required as the basis for public health monitoring and protection within the CDRSS.

Scheduled for a fall 2005 roll-out, the new patient-centric system will be developed with the end user in mind and incorporate capabilities and functions long requested by users – a reporting system truly capable of surveillance activities, instantly updated and readily accessible statewide. Numerous feedback sessions have been and will continue to be held throughout the developmental process to ensure that a comprehensive, capable, user-friendly, functional system is implemented.



CDRS Helplines:
1-800-883-0059

An Electronic Future: Direct Line Feeds From Hospital Labs and the PHEL in Addition to our Commercial Lab

In 2005 we can look forward to electronic reporting directly from the NJDHSS Public Health and Environmental Laboratories (PHEL) and Meridian Health in addition to the existing direct line reporting from the commercial laboratory, LabCorp. Having rolled-out the CDRS to 114 local health departments, and 81 acute care hospitals, energy is also being invested in encouraging direct line feeds from hospital laboratories to minimize the data entry function, thereby freeing public health workers at the hospital and local levels to spend more time on the investigational part of their jobs. A labor-intensive undertaking, establishing direct line feeds from 81 acute care hospitals will take several years to implement, but will yield huge returns on the resources expended to bring this capability to fruition. Both the PHEL and Meridian Health projects are in the test phase and will be functional in 2005 – a solid expansion of the direct electronic reporting capability currently limited to LabCorp.

After careful data verification, New Jersey reported data for 38 reportable diseases to the Centers for Disease Control and Prevention (CDC) for the 2003 reporting year (MMWR Weeks 1-53, December 29, 2002—January 3, 2004). See table on page 6. Breakdown of disease data by county can be seen at http://www.state.nj.us/health/cd/web_stat.pdf

Contact Patty Jordan at 609-588-7551 or toll free at 1-800-883-0059 for:

- Programmatic help or program information regarding the CDRS;
- On-site training or to reserve a spot in one of the Thursday morning trainings held at 3635 Quakerbridge Road, Hamilton, NJ;
- Reporting changes in personnel regarding access to the CDRS;
- Technical support.

Ms. Jordan can also be reached by e-mail at: patricia.jordan@doh.state.nj.us.

Final Infectious Disease Case Counts in 2003					
DISEASE	UNKNOWN	SUSPECT STATUS	PROBABLE	CONFIRMED STATUS	TOTAL REPORTED TO CDC
	STATUS		STATUS		
Anthrax	0	0	0	0	0
Botulism, foodborne	0	0	0	0	0
Botulism, Infant	0	0	0	3	3
Botulism, other/wound	0	0	0	0	0
Botulism, other unsp.	0	0	0	0	0
Botulism, wound	0	0	0	0	0
Brucellosis	0	0	0	1	1
Chickenpox (Varicella)	0	0	0	0	0
Cholera	0	0	0	1	1
Coccidioidomycosis	0	0	0	0	0
Cryptosporidiosis	0	0	0	19	19
Cyclosporiasis	0	0	0	9	9
Diphtheria	0	0	0	0	0
E. coli 0157:H7	0	0	0	31	31
E. coli shiga toxin + (non-0157)	0	0	0	2	2
E. coli shiga toxin + (non serogrouped)	0	0	0	0	0
Ehrlichiosis hum. other/unsp	0	0	0	0	0
Ehrlichiosis hum. granu. (HGE)	0	0	0	10	10
Ehrlichiosis hum. mono. (HME)	0	0	0	3	3
Enceph., California serogroup viral	0	0	0	0	0
Enceph., Eastern equine	0	0	0	1	1
Enceph., Powassan	0	0	0	0	0
Enceph., St. Louis	0	0	0	0	0
Enceph., West Nile	0	0	0	33	33
Enceph., Western Equine	0	0	0	0	0
Giardiasis	0	0	0	520	520
Haemophilus influenzae	0	0	0	70	70
Hansen disease	0	0	0	3	3
Hantavirus Pulmonary Syndrome	0	0	0	0	0
Hemolytic uremic syndrome post-diarrheal	0	0	0	3	3
Hepatitis A	0	0	0	208	208
Hepatitis B	0	0	0	183	183
Hepatitis B Virus Infection, chronic	0	0	0	0	0
Hepatitis B Virus Infection, perinatal	0	0	0	5	5
Hepatitis C Virus Infection, Past/Present	0	0	0	3,193	3,193
Hepatitis C, acute	0	0	0	0	0
Legionellosis	0	0	0	94	94
Listeriosis	0	0	0	24	24
Lyme disease	0	0	0	2,887	2,887
Malaria	0	0	0	61	61
Measles, total	0	0	0	2	2
Meningococcal disease	0	0	0	31	31
Mumps	0	0	0	6	6
Pertussis	0	0	129	59	188
Plague	0	0	0	0	0
Polio, paralytic	0	0	0	0	0
Psittacosis	0	0	0	0	0
Q fever	0	0	0	0	0
Rabies, animal	0	0	0	62	62
Rabies, human	0	0	0	0	0
Rocky Mountain sp. fever	0	0	16	0	16
Rubella	0	0	0	2	2
Rubella, cong. Syndrome	0	0	0	0	0
SARS-CoV disease	0	0	0	1	1
Salmonellosis	1	0	0	856	857
Shigellosis	0	0	0	360	360
Streptococcal disease, inv. Group A	0	0	0	174	174
Streptococcal toxic-shock Syndrome	0	0	0	1	1
Streptococcus pneumoniae, drug-resistant	0	0	0	0	0
Streptococcus pneumoniae, invasive disease	0	0	0	4	4
Tetanus	0	0	0	0	0
Toxic-shock Syndrome	0	0	0	0	0
Trichinosis	0	0	0	0	0
Tuberculosis	0	0	0	495	495
Tularemia	0	0	0	0	0
Typhoid fever	0	0	0	21	21
Yellow Fever	0	0	0	0	0

NJDHSS Educates Prison Inmates on MRSA

In conjunction with the New Jersey Department of Corrections (NJDOC), the New Jersey Department of Health and Senior Services (NJDHSS) has created an educational video to teach inmates about a growing health threat, methicillin-resistant *Staphylococcus aureus* (MRSA).

The video is the culmination of months of planning and research. Several focus groups were conducted with current inmates to assess their level of knowledge regarding MRSA and to learn more about how the NJDHSS could make the video relevant to the inmates. “Including the inmates in the video creation process was an important step. We took their input seriously when developing the script, content and look of the video” according to Suzanne Miro, Health Educator for the NJDHSS Communicable Disease Service.

MRSA infections have become more frequent in prisons where the infection can spread easily from

person to person. MRSA bacteria not only spread among inmates, but also spread to prison employees and visitors. The NJDOC has been working toward enhanced policies regarding the identification and treatment of infected inmates.

Prevention is a key goal in controlling MRSA outbreaks and the video will help play a role in making inmates more aware of the risk factors and preventive measures that can be taken. Handwashing is emphasized as a control measure.

The NJDOC is currently developing a plan to implement the video, and the NJDHSS is planning a video evaluation strategy.



For more information, please contact Suzanne Miro at (609) 588-7500.

Smallpox Spot—Counties Exercise Plans

As one component of emergency preparedness, the New Jersey Department of Health and Senior Services (NJDHSS) asked all Local Information Network Communication System (LINCS) agencies and acute care hospitals to exercise their smallpox plans. As a result, other public health, healthcare and first responder partners were included (i.e., local health departments, federally qualified health centers, local and county offices of emergency management, mental health providers and law enforcement). Twenty-two smallpox tabletop exercises were held statewide between October 2003 and August 2004.

Tabletops are low-stress simulated exercises, which bring decision-makers together to discuss current operating policies and procedures. The purpose of exercising is to test plans, not people. It is important, however, that emergency plans be shared with all who have a role in the response, so that those individuals know their role and what is expected in an emergency situation.

Smallpox tabletop exercises were designed and facilitated by the NJDHSS Division of Health and Emergency Preparedness and Response's Exercise Unit and focused on smallpox identification, surveillance and response. Each exercise was tailored to include the demographic and geographic nuances of the county. Members of the county exercise planning committee developed goals and objectives to test the effectiveness of their organization's smallpox plan. Exercises were well attended and included participants, observers, facilitators and evaluators.

This is the first time that public health has initiated statewide exercises, and the overall response was positive. These exercises helped to define the lines of authority and reporting procedures, identified strengths and weakness in current emergency plans and provided a forum to communicate and coordinate resources. The exercises encouraged organizations to recognize the importance of practicing simulated public health threats and initiating an appropriate response *before* an incident occurs.

Our Mission

The mission of the Division of Epidemiology, Environmental and Occupational Health is to protect the citizens of the State and the visiting public from hazards found in the environment, home, and workplace through appropriate surveillance, intervention, education, and outreach.

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The NJDHSS Communicable Disease Service Includes:

- Infectious & Zoonotic Disease Program (IZDP)
- Vaccine Preventable Disease Program (VPDP)
- Sexually Transmitted Disease Program (STDP)
- Tuberculosis Program (TBP)

Past editions of the NJ Communi-CABLE are available on the Communicable Disease Service website:

<http://www.state.nj.us/health/cd/index.html>



December 5—11, 2004

National Hand Washing Awareness Week

Welcome to new NJDHSS Communicable Disease Service Staff!!

TB Program:

Kelly Morrissey, Public Health Representative Trainee
Jennifer Stork, Public Health Representative 3
Erick Cortes, Public Health Representative Trainee

Infectious and Zoonotic Disease Program:

Patricia Puplampu, Clerk Typist
Stefanie Smith, Senior Data Entry Machine Operator

Vaccine Preventable Disease Program:

Lisa Fair, Public Health Representative Trainee
Asha Caldwell, Public Health Representative Trainee
Kathleen Mannion, Public Health Representative Trainee