



**Statement of A. Richard Melton, Dr.P.H.
Deputy Director, Utah Department of Health
Before The Subcommittee on Bioterrorism and Public Health Preparedness on
reauthorization of the Public Health Security and Bioterrorism Preparedness Act
March 16, 2006**

Mr. Chairman and distinguished committee members. It is an honor for me to address you today. I hope you will find the information I share both interesting and informative. My name is Dr. A. Richard Melton. I served as the laboratory director for the state of South Dakota for about 12 years followed by about 5 in Utah before being appointed as the Deputy Director for the Utah Department of Health (UDOH) about 14 years ago. One of my assignments as Deputy Director is to administer the Public Health Security and Bioterrorism Preparedness and Response Act funds from both HRSA and CDC. I was also involved along with Dr. Scott Williams as we prepared for the Salt Lake 2002 Winter Olympics. I have been asked to share with you how these Olympic preparations influenced our use of funds provided under this Act.

Salt Lake City was named as the host city for the 2002 Olympics in June of 1995. We watched with interest as the 1996 Atlanta games unfolded, but had no real understanding of what preparations we would need to make for our upcoming event. We finally started to consider seriously what was involved during the 1998 Nagano games. It was at that time we started to develop the coalition of partners we felt would be necessary to assure the public's health during the two months surrounding the 17 days of the 2002 games. While these considerations provided a strong base for cooperation and planning, and an alliance was formed around public health issues, it was not until we sent a representative to the 2000 Sydney games that we fully understood extent of the challenge that lay ahead. I have provided the staff with some documentation of what was done and what we learned. Time only permits me to touch briefly on our experiences which provided an extraordinary foundation for what we have been able to accomplish with the funds provided by this Act.

One of the foremost benefits the preparation and games provided was the close working relationship that we developed not only with agencies with whom we normally work such as local and federal public health partners, but we developed such relationships with local, state and federal law enforcement agencies, fire agencies and interestingly the Department of Energy (DOE).

The DOE approached us early in our preparations about testing some experimental equipment that could sample air in selected Olympic venues for the presence of biological agents. We agreed to work with them and began our introduction to the technology now used in BioWatch. We are now able to use the analysis part of the system daily in our surveillance activities.

The actual instrumentation provided by the DOE was removed after the games and Utah is not a BioWatch state, but our laboratory staff developed expertise using this technology and since have been able to easily implement the testing procedures now use for biological agents. The DOE instrumentation monitored such locations as the airport and the medals plaza. The one exciting experience we had with the system is one to which then Governor Leavitt often refers. A sample from the airport returned a presumptive positive result. On confirmatory testing, the sample was not a bioagent. The experience provided a live - real time test of our plan and processes. Frankly, the plan did not work as outlined, but the underlying process did. The key to the effective use of this technology, either as used by DOE during the Olympics or as implemented in BioWatch, and the most difficult to get right, is a well thought through and well defined response when a positive result is reported.

It was important as we prepared for the Olympics that we take an all-hazards approach, for there is no way of predicting whether a disaster will be from a terrorist or if it will be a natural disaster, whether an incident will be an explosion in a single location, or a disease across the entire population or within a selected group. Our preparation following the Olympics has continued to address all aspects of preparedness – all-hazards.

Our Olympic planning concentrated on five areas of preparedness that represent this all-hazards approach.

1. EMS and Hospital Preparedness (Surge Capacity)
2. Environmental and Food Safety Regulation
3. Disease Surveillance and Outbreak Response
4. Public Information and Health Promotion
5. Event Operations and Disaster Preparedness

We did make statutory and regulatory changes, during Olympic preparation that gave the UDOH clearer authority for all aspects of medical and public health response. I could speak at some length on each of these issues, but I will just mention an item or two for each area.

1. EMS

In order to increase the number of ambulances available for the venues, vehicle replacement was planned for two to three years in advance and staged to create a period of service overlap where both new and aging vehicles were used. Additional emergency technicians were recruited from other areas to staff the needed response capacity.

To provide surge capacity for major hospitals, arrangements were made with large long term care facilities nearby that had a low occupancy rate and thus beds available for use. We developed a coalition of all of the hospitals in the Olympic footprint to plan with us all aspects of medical response outside the actual Olympic medical responsibility. The Olympic medical service was awarded to the Intermountain Health Care system. They were, of course, also a part of our planning coalition.

2. Environmental and Food Regulation

An estimated 150,000 meals per day were prepared and served in the Olympic venues. The safety and security of these meals had to be assured. Also drinking water and solid

and sanitary waste disposal was a problem especially for the mountain venues. Processes and staffing were developed and implemented with the cooperation of the local health departments, the Utah Departments of Environmental Quality and Agriculture as well as the USDA.

3. Disease Surveillance and Outbreak Response

Traditional disease surveillance for this event was clearly not sufficient. The typical disease report often takes two weeks to make it to public health. The need to see potential terrorism agents or natural disease outbreaks for the games demanded real time monitoring. The DOE system provided one real time detection system. Collaboration with the University of Pittsburgh using a system called Realtime Outbreak Detection System (RODS) reported and evaluated major complaints in the emergency room of LDS hospital or what is referred to as syndromic surveillance. Collaboration with the University of Utah reported syndromic information from the University of Utah Medical Center emergency room and the Olympic village. These systems were effective in monitoring disease in the population. It is unclear if they really would have detected a bioagent because seasonal influenza peaked in Utah during the games. I have included, on the following pages, 3 charts outlining the data which was produced over the 17 day period of the games. We continue to use the RODS system and are working to expand the number of health care providers report through it.

4. Public Information and Health Promotion

It is not uncommon in the Salt Lake Valley to have temperature inversions that increase air pollution. The UDOH along with the Utah Department of Environmental Quality developed pre-written statements that were used when levels of pollutants were high. These included recommendations for at-risk populations. Many other pre-written press statements were prepared for issues that might present during the games. All of the public information processes were coordinated across all agencies.

5. Olympic Operations and Disaster Preparedness

Table top training and exercises in public health were conducted in the two years preceding the games. These covered almost 20 topics and included in excess of 40 agencies and organizations. The topics ranged from mass gathering issues through medical management to fatality management. During the games we did experience incidents that tested the system. These included the airport incident mentioned earlier and a chemical incident in downtown Salt Lake. Because of the preparation, these were handled "without incident."

I would comment that while we had good cooperation from the Salt Lake Organizing Committee command system and other partners on general public health issues such as sanitation and health preparedness, with the exception of the Department of Energy, no one took our concern for bioterrorism seriously until after the 2001 Anthrax attacks. Following those attacks, HHS agreed to station a contingent of the National Pharmaceutical Stockpile (NPS) (now called the Strategic National Stockpile) in Utah during the games and other assistance became more generous. Our preparations during the Olympics had included our federal partners at the regional level (Denver Regional Office), and they were very good at responding to our needs where they had the resources. Since the NPS was not something they could just call in for us in the absence of a

declared disaster we made the request to the Secretary. Our current planning assumes that in a disaster, we could make requests through the Denver Office and it would be forthcoming. Following the Salt Lake City tornado of 1999, our requests through Denver brought the needed response. We have no reason to believe, even in light of the experience of Katrina, that this processes would not continue to work.

The attacks of September 11 and the following Anthrax attacks focused our Olympic preparations. As stated previously, our planning took an all-hazard approach. We had planned for bioagents. With the attacks of late 2001 our focus on terrorism became more intense. We also finally had the attention of all of our partner agencies, both state and federal. There were discussions of canceling the Olympic games entirely. After reviewing our preparations, we all concluded the games should go on. By the time the games started, federal resources on the ground included; the DOE detection system, National Guard Civil Support Hazmat Teams, Urban Search and Rescue Teams, Disaster Medical Assistance Teams, National Medical Response Teams, Disaster Mortuary Assistance Teams and the National Pharmaceutical Stockpile. IOC president Jacques Rogge summarized the impact that these attacks had on the games when he said "No major sporting event will ever be the same because of heightened security concerns following the terrorist attack in the United States....because, of course, when it comes to security, everything has changed since Tuesday."

Let me move to the impact this experience had on our use of the HRSA and CDC funding provided by this Act. We had, of course, received a small amount of preparedness funding through CDC prior to the Olympics which were very helpful in our preparations. During the preparation and games, many of our staff along with those of the other agencies involved assumed double duties, preparing for the games as well as whatever duties were normal. There was little funding provided by the SLOC, the state or federal government. We could accomplish what we did only because it was as seen as a short, two year, defined period. This also highlights the advantage of having to meet a set preparedness deadline. We knew when this disaster would occur. We recognized that we could not maintain this level of expectation after the games. Following the games then we searched for ways to take advantage of what we had accomplished. With the funds that became available later in the year through this Act we were not only able to maintain but to build on our experience.

One challenge that the Olympic experience did present early in our use of the CDC funds surrounded the limited footprint of the Olympic games. The Olympic preparations had included only 7 counties and 6 local health departments of the 29 counties and 12 local health departments that make up Utah. I have included a map on following pages that shows the Olympic footprint. The challenge we faced was how to continue the progress with the 6 LHOs who had worked closely with us for 4 years and yet bring the other 6 up to the same level of preparedness. Does one distribute the funds disproportionately to those who have not been involved or equally to all based on some formula. There was no choice but to spend some additional resource on the non-Olympic venue departments. That then caused concerns from those who had been working with us so long that they were being "punished" for having already done so much. Over time we have resolved the issue though the non-Olympic venue departments are still not quite to the level of those who experienced the Olympics. We also had to bring the non-Olympic hospitals (mostly rural) our medical response coalition the hospitals. We had somewhat the same dilemma with hospitals and our expenditure of the HRSA funds.

Let me share with you in the limited time left to me, just two of many recent experiences that demonstrate how much these funds have changed how public health operates in Utah and how preparedness is a local issue.

At 6:00 one morning, a long haul truck driver who had just arrived in Salt Lake valley from Seattle, having stopped at a number of truck stops along the way, presented at an emergency room with skin lesions and fever. The attending ER physician determined that the appearance of the lesions were compatible with smallpox. She immediately recognized the complexity of the situation and called the Salt Lake Valley Health Department. The emergency room was also immediately closed and all of those who were there were isolated and not allowed to leave. After consulting with the UDOH and CDC a sample was taken to the UDOH laboratory and tested. It was quickly determined that the man had atypical chicken pox and not smallpox. Everything went, well not quite like clockwork, but within about 7 hours the people in the emergency room were released and the emergency room was reopened. What really made this happen was that the people were trained to communicate with the local health department and the Utah laboratory had the technology to do the diagnosis within a couple of hours. Had this happened one year before, the sample would have been sent to CDC for testing and would have taken at least a couple of days if not more. In Utah we can now test, within a few hours, for all of the BT agents and our local health departments have a working relationship with the hospitals in their area.

Another recent event took place in a remote part of Utah near one of our beautiful national parks. A lodge - Ruby's Inn- had a chemical irritant intentionally introduced into the air handling system, exposing a large number of visitors. These guests were quickly transported to the small local hospital not far away. The hospital had a decontamination tent, provided with HRSA funds, and were trained in its use. Though, as it turned out, the agent was not life threatening, the visitors were all appropriately decontaminated and treated. Interestingly, just two weeks prior to this event, the hospital administrator had complained that he didn't know why he had to store one of those tents, no one would ever use it in such a remote area. The fallacy of course is that the risk of such events is limited to large metropolitan areas.

I could detail for you many such incidents we now manage, in Utah, almost daily, which we would could not easily have managed before. A SARS case in Saint George, A chemical explosion at Thiakol in remote northern Utah, a meningitis outbreak at Job Corps site, and last summer we efficiently received and cared for 600 evacuees from Katrina.

Each year continue to build our level of preparedness. We have recently implemented a radio system we believe to be unequalled anywhere in the nation. We do not have statewide coverage of 800 mhz radio service. However, though a system called Omnilink, we can set up radio communication with all emergency providers in the state, regardless of the frequency they use, and make on-the-fly bridges to connect groups as required by the situation. All local health departments, ambulances and emergency rooms, fire and law enforcement agencies and the national guard are a part of this system so we can link to them as needed. We are now working on adding wireless data service to this same system. This system was tested during a recent military exercise when one of the coordinating 800mhz towers was struck by lightning. Radio dispatch saw the tower service go down and used Omnilink to reroute the signals to another tower and no one on the ground knew the tower was lost. We also have a notification system,

called UNIS (Utah Notification and Information System) that is statewide and can be used to send automated notifications to all emergency personnel, including primary care physicians who sign up for the service. This also includes reverse 911 capacity across the state. We hope to add primary care physician disease reporting to the syndromic surveillance system within a year or two.

Our legal review of the Utah health statutes recently found that our quarantine and isolation laws still would not allow us to deal with large groups of ill or exposed populations such as one might have with terrorism in a large office building or an airplane landing at one of our airports, and certainly not the numbers expected if we have an influenza pandemic similar to 1918. Our legislature just passed and the Governor signed a revision to our enabling statute that now allows us to address such situations. It is clear that the Executive Director of the UDOH has the legal authority as well as the networks to deal with all medical and public health situations that may arise.

I am sure that most states can give you similar information about how much the CDC and HRSA funding has helped and how wisely we have expended the funds - how many epidemiologists and laboratorians have been added and how much training has been provided to health and public health professionals. They will also assure you that continuation of this funding is vital to our continued preparedness and to test those preparations. They will tell you that Biosurveillance should include all levels of government and that disease reporting should be through the local and state health agencies and not directly to federal agencies. They will also encourage you that it is vital that we begin training a new generation of public health leaders by enacting language proposed for the Public Health Preparedness Workforce Development Act. All of these things are true for us to continue strengthening the local and state health response and should be included in the reauthorization.

I appreciate the opportunity to share with you these thoughts and our thanks for the vital funds that have allowed us to become more prepared. I have listed for you, on the last couple of pages some of the many things we accomplished with these funds in just the last year. I also want to emphatically state that we are far from fully prepared. I could give you another list of the things that we yet need to do and I assume others who address you will do so. I would like only to say that it is vital that these funds continue to come to us to maintain what we have and to assist us in making further progress toward preparedness. Thank you for your time and attention.

Health and Public Health Planning Organizations for the 2002 Olympics

Utah Olympic Public Safety Command (UOPSC)

Unified command of local, state and federal public safety agencies involved in Olympic security

Environmental & Public Health Alliance (EPHA)

3 state agencies (UDOH, UDEQ, UDAF)

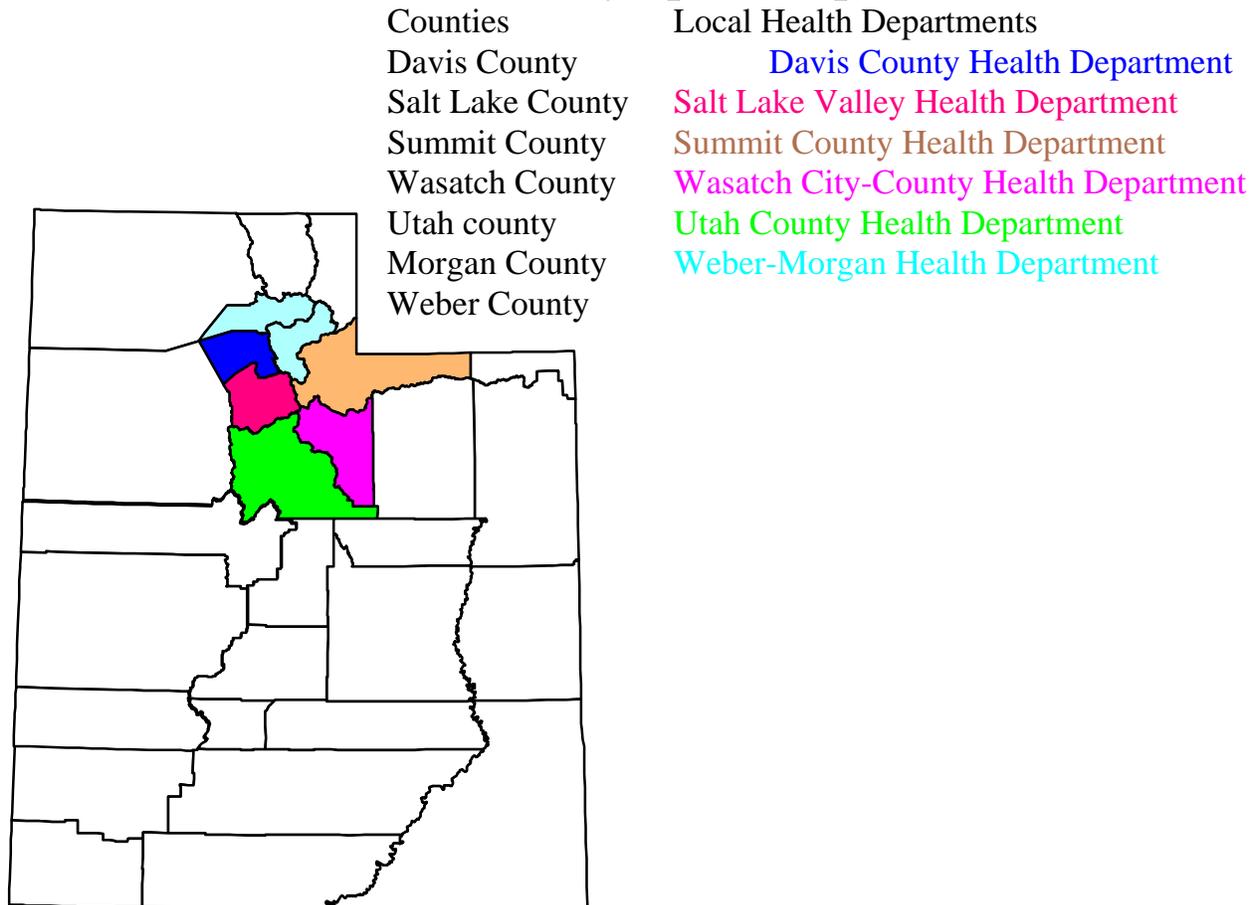
6 local health departments

Coordination with federal agencies (EPA, FDA, CDC, HHS)

Salt Lake Organizing Committee (SLOC)

SLOC Medical Services

SLC 2002Olympic Footprint

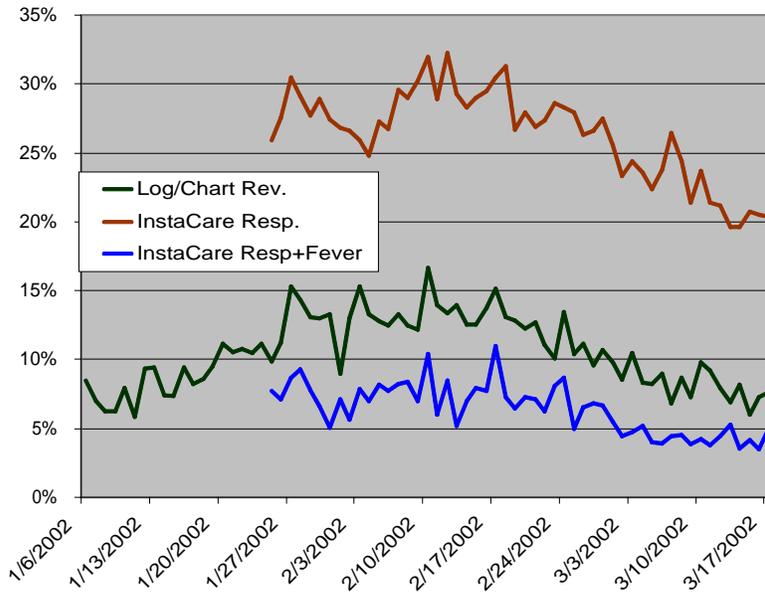


Urgent Care Visits by Syndrome Jan 6– Mar 17

Non-syndrome visit	133,577		86.0%
Respiratory illness	14,910		9.6%
Gastroenteritis	5,203		3.3%
Central nervous system	688	} follow -up on 772 of these cases ↙ 65 notifiable diseases	0.4%
Rash with fever	429		0.3%
Bloody diarrhea	184		0.1%
Botulism -like	156		0.1%
Lymphadenitis	89		0.1%
Sepsis	84		0.1%
Suspected hepatitis	41		<0.1%
Unexplained death	3		<0.1%
Total visits	155,364		100.0%

Respiratory Illness Syndromes

Jan 6 through March 17, 2002

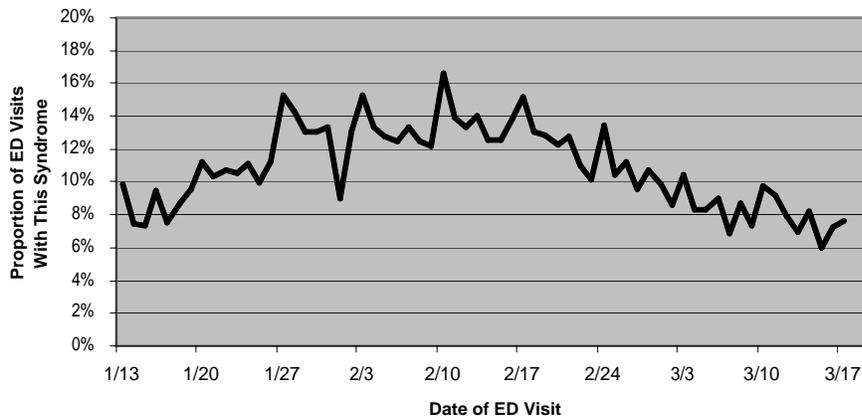


2002 Olympic Winter Games

Daily Surveillance Report

Respiratory Illness with Fever

Respiratory Illness With Fever, Proportion of ED Visits,
January 13 - March 17, 2002



Accomplishments: Grant Year 2004

- A major response exercise conducted by the University of Utah and ten of the major Salt Lake County hospitals allowed SNS and notification systems to be further tested. The exercise was held May 11, 2005.
- SNS training has been provided to UDOH and local health department staff members. Training has included attendance to SNS courses in Atlanta, Georgia for local health emergency response coordinators.
- Pandemic Response Plan has been developed and includes information about immunization.
- Pediatric considerations in emergency response were developed and presented at the Health Resources Services Administration (HRSA) trainings throughout Utah.
- The Utah Smallpox Response Plan was revised to include the National Response Plan and the National Incident Response Plan as well as updated information.
- Development and implementation of the Adult Immunization Management System (AIMS) is continuing. Significant progress was made this year.
- Lessons learned from participation in mass vaccination clinic exercises or real events were included in the mass vaccination and medication plans.
- UDOH has implemented two data management tools called
 - SERPH (Surveillance and Epidemiological Response for Public Health), which provides a single web-based tool supporting surveillance and outbreak investigation, linking UDOH and the 12 local health departments; and
 - RODS (Real-time Outbreak and Disease Surveillance), which provides early warning of outbreaks or bioterrorism through monitoring emergency department visits and sales of over-the-counter medicine.
- UDOH has hired four skilled epidemiologists (disease experts) to work in different parts of the state. The epidemiologists strengthen Utah's ability to detect and respond to diseases.
- In partnership with Utah's local health departments, a workgroup has been formed to coordinate and improve laboratory testing and disease outbreak detection and response.
- A system has been established to assure 24/7 response to urgent reports of diseases or outbreaks across Utah, including procedures for testing and improving the system.
- The UDOH state public health laboratories had developed testing capabilities for most of the bioterrorism agents and other emerging infectious disease agents. They train weekly to stay current in running the tests.
- This past year, the laboratory developed testing capability for avian influenza, a disease of concern around the world. The laboratory's ability to test for this particular disease will allow for rapid public health intervention to stop the spread of the infection.
- The lab began the implementation of a new Laboratory Information Management System. This new system allows the laboratory to collect, manage and report data used for making rapid and informed public health decisions by local, state and federal public health workers. The laboratory had been using a data management system that is over 15 years old.
- The microbiology laboratory purchased leading edge equipment that significantly decreases the time needed to identify the organisms that cause infectious diseases.
- Microbiologists from the public health laboratory provided regular training to community and hospital clinical laboratory staff, emergency first responders, local health departments and other interested parties on bioterrorism organisms, diseases, and how to handle and pack specimens safely for delivery to the lab for testing.
- The UDOH public health laboratory has achieved proficiency to detect and confirm twelve heavy metals in urine and cyanide in blood samples. The laboratory is one of 37 laboratories in the country deemed proficient by the CDC for detecting these chemicals in response to a chemical emergency incident.
- UDOH took the lead in identifying various problems with the cyanide analytical method. The experience reported to CDC was made available by CDC to all 50 states to raise awareness of data quality and of potential problems that could arise with cyanide testing.
- A Round Robin study to test the efficiency of field testing equipment was conducted. Findings of the study will help Utah better characterize contaminants of concern in a bio/chem-terrorism emergency.
- Training was provided to hospitals and clinics to ensure safe packaging and shipping of samples to the state health lab. Training included how to safely package and ship blood and urine samples exposed to chemical agents.
- A laboratory response plan for a chemical terrorism incident is in place. Follow-up training is planned.
- The Utah Notification and Information System (UNIS) is being used on a regular basis. UNIS is a statewide, integrated, web-based information and communications system serving as a platform for distribution of alerts, dissemination of guidelines and other information to local, state and federal partners. Various enhancements to improve the system have been developed and implemented during the past year. Numerous additional users

statewide have been enrolled in the system.

- The UDOH has partnered with other state agencies to purchase and implement the Utah Wireless Integrated Network (UWIN) - OmniLink. This system allows agencies in the state to patch together various communication channels on one frequency. Various types of radios as well as cell and land lines can be connected to facilitate emergency communications.
- Application, Database, and Web servers have been added to increase the redundancy, efficiency and capacity of the network. This will also allow bioterrorism applications and databases to be integrated with each other. In some cases, data can be reused instead of gathered multiple times.
- New server room chillers have been purchased and installed. These chillers maintain a constant, safe operating temperature for all bio-terrorism and UDOH systems.
- The UDOH developed a public service campaign that encouraged action from the public. The campaign's primary goal was to provide Utahns with the tools needed to develop emergency plans and emergency kits. The highly successful campaign focused its efforts on two primary tools to reach Utahns: a video documentary and an emergency planning guide brochure. Research performed after the campaign showed that the UDOH was successful in reaching its audience and prompting action.
- From July 2004 to July 2005 approximately 3,208 public health and health care professionals and emergency response partners were reached through the implementation of a Statewide Public Health Preparedness Training Plan. A wide range of delivery methods were used to implement training and exercises in areas across the public health preparedness spectrum. Some highlights were a Suicide Bombing Conference (471 people trained), Bioterrorism Track at the Utah Public Health Association Conference 2005: Making Public Health Visible! (203 people trained) and ongoing distance learning outreach (837 people trained).
- Emergency Preparedness in the Healthcare Setting: Bioterrorism and other WMDs (weapons of mass destruction). From May to September 2005, hospitals and clinics were provided with a two-day train-the-trainer course in hospital bioterrorism preparedness. Eight locations throughout the state received this training, with a total attendance of 247 people. The target audience was primarily the healthcare setting. Additionally, key partners from the community, such as emergency management services (EMS), military medical centers, surgery centers, emergency management, local health departments, convalescent care managers/staff and public health officials, were also encouraged to attend.
- Local Health Department partnerships and reporting. The UDOH worked closely with 12 local health departments to implement and report on the status of the Statewide Public Health Preparedness Training Plan. Utah has put a major focus on training partnerships, guidance, and reporting tools with local health departments. Each local health department was very responsive with their reporting and coordination with UDOH. This mutual effort has made reaching our preparedness goals attainable.
- Countering Bioterrorism 2005: Breaking New Ground. UDOH sponsored and facilitated the implementation of a regional conference titled Countering Bioterrorism 2005: Breaking New Ground. This year we partnered with the Department of Public Safety and presented both the Public Officials Conference and the Countering Bioterrorism Conference. Over 400 people attended this conference and learned from many national experts in preparedness. The combination of these two conferences strengthened ties and coordination between all parties involved in emergency response.
- Utah expanded bioterrorism response capabilities through the stockpiling of N95 Masks, gloves, gowns, and 500,000 three-day antibiotics to prevent the spread of disease. This is a solid beginning, with plans to expand the medication cache to include antidotes for Acute Radiation Sickness and increased personal protection equipment.
- A comprehensive Emergency Operations Plan for the UDOH was developed and implemented. The plan includes the National Incident Management System. This plan has been exercised, and continued exercises will need to be conducted to assess for shortfalls.
- Legislation was passed to allow hospitals to expand beds 20% beyond licensure without seeking permission from UDOH, and to protect medical volunteers from lawsuits through expansion of the Good Samaritan Act. These actions will enhance the ability of healthcare facilities to meet surge needs during a Mass Casualty Incident.