

Office of Health, Safety and Security

August 2009



# Message

## **DOE Prepares for H1N1 Influenza Outbreak**

Health experts believe that we are experiencing the first wave of a major influenza pandemic in 40 years due to the novel H1N1 influenza virus. Depending on the characteristics of this virus, an additional two waves can be expected, each lasting 8 to 12 weeks. At this writing, symptoms appear relatively mild and people under the age of 25 appear more susceptible, but no one can predict with certainty the path or severity of this virus.

DOE is preparing for the possibility of a more widespread and severe H1N1 influenza outbreak this fall, in addition to the regular seasonal flu. It is our joint responsibility to protect the health of the DOE workforce, while continuing to ensure that the Department meets its critical obligations and the expectations of our country and the President. DOE

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has a structure in place to address H1N1 influenza in 2009: the Biological Event Monitoring Team (BEMT).

Glenn Podonsky, DOE's Chief Health, Safety and Security Officer, has primary responsibility for the BEMT, which provides medical. epidemiologic, and public health expertise and is responsible for providing guidance and coordinating pandemic planning efforts for the Department. The National Administration Nuclear Security (NNSA), responsible for Department's Continuity of Operations (COOP), provides advice and direction on COOP activities related to pandemic planning. The BEMT supports the four main functions outlined in the National Strategy for Pandemic Influenza, including: (1) first and foremost, ensuring the safety and well-being of the Department's workforce, (2) ensuring the Department's continuing performance and mission-essential functions, (3) supporting the Federal response to a pandemic or other outbreak, and (4) communicating with stakeholders.

In addition to the Office of Health, Safety and Security (HSS) and NNSA, the BEMT working group includes representatives from the Offices of Human Capital Management, Management, General Counsel, Chief Information Officer, Science, Environmental Management, Fossil Energy, as well as others. The chair of this working group is Dr. Bonnie Richter, senior epidemiologist in HSS. The working group is guidance documents, developing recommendations, and policy on the Department's response to an influenza pandemic. Recommendations are being developed for Federal and contractor supervisors, employees, facilities management, security, and childcare centers, both at DOE Headquarters and across the complex.

The BEMT Executive Steering Group provides direction to the BEMT working group. Bill Eckroade, the HSS Deputy Chief for Operations, and Carl Pavetto, the NNSA Deputy Administrator for Emergency Operations, co-chair the BEMT Executive Steering Group, and Dr. Michael Ardaiz, DOE Chief Medical Officer, serves as an advisor to both the working and steering groups.

The guidance documents being developed by the BEMT working group follow the recommendations from the Department of Health and Human Services, the Centers for Disease Control and Prevention (CDC), and the Department of Homeland Security. The scope of guidance ranges from routine personal preparedness (handwashing and cough etiquette, home preparedness), to complex guidance for

DOE occupational medicine providers on the use of antiviral medicines and vaccines, personnel guidance on sick leave options and absenteeism reporting requirements, and other pandemic-related topics. These documents are expected to be issued in late summer or early fall and will be posted on the HSS website under "Influenza Information."

Currently, there are several things that you can do to stay healthy – start

now so that they become habit before seasonal flu or the next pandemic wave occurs. First, if you are sick, stay home. If you are ill but feel you are still capable of working, then work from home and use telework options. (You can be contagious for up to seven days after becoming sick!) Speak with your supervisor to set a telework agreement in place. Second, wash your hands. Twenty seconds with soap and water is best, but use alcohol-based hand

gels if you can't get to a sink. Wash frequently, but especially before eating and after sneezing, using the restroom, or touching items frequently touched by others, such as door knobs, handrails, and telephones. For other ways to remain healthy, DOE guidance, and links to CDC websites, go to: http://www.hss.energy.gov/HealthSafety/pandemic.html.

#### **Radiation Effects Research Foundation Links Past and Future**

The Radiation Effects Research Foundation (RERF) is one of the major HSS programs. HSS provides funding and management oversight to the RERF in Hiroshima and Nagasaki, Japan, in partnership with the Japanese Ministry of Health, Labour and Welfare. The RERF program is believed to have the longest duration of any international research program.

The history of the DOE and the history of RERF are intertwined. At the end of World War II, the Atomic Energy

Act was signed in 1946 and the civilian Atomic Energy Commission (AEC) was formed. One mission of the AEC was to promote nuclear applications for scientific, medical, and industrial purposes. In August 1947, the first contract between the AEC and the National Academy of Sciences (NAS) was signed to establish the laboratories of the Atomic Bomb Casualty Commission (ABCC), which later became RERF. This was the foundation for the long-term study of the survivors and the long history of support for ABCC/RERF by

DOE and its predecessor agencies. The Energy Research and Development Administration was instrumental in establishing RERF under Japanese law as the full successor to ABCC to continue the research under a binational system, shortly before DOE was established in 1977. Today, DOE is the major U.S. funder of both basic research and epidemiological studies involving environmentally-relevant doses of radiation, and HSS has the leadership role in supporting studies of exposed populations.

The RERF Act of Endowment states its objective "to conduct research and studies, for peaceful purposes, on medical effects of radiation on man and on diseases which may be affected by radiation, with a view to contributing to the maintenance of the health and welfare of atomic bomb survivors and to the enhancement of the health of all mankind." The results of RERF research are the primary basis for radiation protection standards throughout the world. Radiation risk estimates rely on an accurate dosimetry system, which has been established through funding to international scientists through DOE and the Japanese Ministry of Health, Labour and Welfare.

The core projects of RERF are the Life Span Study, the Adult Health Study, the  $F_1$  (Children of the A-bomb Survivors)



Hiroshima after bombing. The large building in the background, now called the A-bomb dome, remains standing within the Peace Memorial Park. This area is near the hypocenter of the bomb blast. Irradiated material, such as granite and copper samples, have been collected at various distances from the hypocenter and used in the estimation of radiation doses from the bomb.

Study, and the In Utero Study. The Life Span Study consists of a large cohort (120,000 persons) encompassing a wide range of known doses. Risks are evaluated for cancer incidence, cancer mortality, and non-cancer effects in relation to radiation dose. About 40 percent of the study population are still living, and about 90 percent of the survivors exposed under the age of ten are still living. Clinical examinations of atomic-bomb survivors are conducted every two years in a smaller population in the Adult Health Study and provide a continuing health profile of an aging population. In addition, blood samples are collected under informed consent for future analysis. The F<sub>1</sub> Study determines whether genetic effects might be apparent that could be related to parental exposures. Thus far, no genetic effects have been observed. The In Utero Study is a unique evaluation of the lifetime health experience of those who were in utero at the time of the bombings (about 3,600 persons).

The funding agencies recognize continuation of the atomic bomb survivor studies is essential so that we can come to definitive answers on the health effects of radiation. However, the RERF program is not a typical research program since it aims at fostering the health and welfare of these survivors. Similar to other HSS programs, a major concern is the individuals who have been adversely affected by the legacy of nuclear weapons

production and use. The cooperation of the atomic-bomb survivors has been the backbone of the RERF research program, and we owe a debt of gratitude to the survivors, past and present.



The RERF Hiroshima Laboratory (quonset hut shape) sits atop Hijiyama in a public park located in the southern ward of Hiroshima, a modern city with a population of more than 1 million. Ground zero would be to the left of the river and approximately 1800 meters from RERF.

Further information about RERF can be obtained at http://www.rerf.or.jp.

## **HSS Efforts Aimed at Improving Protection Programs**

HSS has stepped up efforts in support of its continuing goal to improve the effectiveness and increase the efficiency of the Department's safeguards and security programs. As the organization responsible for developing complexwide safeguards and security policies. providing technical assistance to organizations implementing policies, and assessing the effectiveness of protection program performance throughout the Department, HSS is uniquely positioned to assist program offices and field elements in their efforts to implement effective and protection affordable mechanisms guarding national security assets. Major activities currently under way in support of this goal include significant policy reforms, development of more flexible approaches to the independent oversight process, increased outreach and coordination with stakeholders

when shaping HSS actions and activities, and continued cooperation with stakeholders to support internal efforts to shape and implement their protection programs.

For many months, the HSS Office of Security Policy, supported by subject matter experts from program and field offices, has conducted detailed reviews and revisions of major Departmentlevel safeguards and security policies. This cooperative policy reform is intended to improve policy clarity effectiveness by eliminating redundancies unnecessarily and prescriptive requirements, more clearly identifying Federal and contractor roles and responsibilities, and reorienting policy requirements toward identifying "what" ends protection programs must accomplish, rather than specifically "how" they must accomplish those

ends. To date, this substantial effort has resulted in the publication of revised policies governing protective force, physical protection, and information security programs, and is currently revising other safeguards and security policies, including those dealing with protection program management and nuclear material control and accountability. Additional HSS policy reform initiatives include establishment of a working group and other actions to evaluate the adoption of some National **Industrial Security Program Operations** Manual (NISPOM) requirements to replace current policy in various information security-related areas. and the review and possible revision of policies for accountable classified removable electronic media.

HSS recognizes the potential benefits associated with increasing and

### **Upcoming Activities**

Savannah River Site ES&H and Emergency Management Inspection, August/ September 2009

Idaho National Laboratory Safeguards and Security Inspection, August/ September 2009

Los Alamos National Laboratory Cyber Security Inspection, August/ September 2009

Integrated Safety Management (ISM) Conference, August 2009

Lawrence Livermore National Laboratory ES&H Inspection, October/November 2009

Hanford Emergency Management Inspection, October 2009

Oak Ridge National Laboratory Safeguards and Security Inspection, October/ November 2009

improving communications with the Headquarters and field elements and sites that must implement the Department's protection programs. As host of the Department's National Security Working Group (NSWG) and Safeguards and Security Directors meetings held last June, HSS took advantage of those forums to increase its outreach and initiate more expansive and effective dialogue with program and field offices and field sites. Discussions included feedback on recent and contemplated policy reforms, potential improvements in the independent oversight process, and additional means by which HSS can assist local efforts to improve protection program effectiveness and efficiency. NSWG members are analyzing the reform ideas generated by the discussion and will present their results and recommendations at a later date.

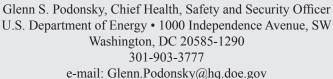
HSS continues to partner with the NNSA and support its Zero-Based Security Review (ZBSR) effort by providing topical-area security expertise to assist in review activities. The ZBSR process is intended to identify the most efficient common means by which NNSA sites can effectively implement security policy. HSS intends to closely examine the final ZBSR results to identify the potential for additional safeguards and security policy improvements.

The HSS Office of Independent Oversight has ongoing initiatives aimed at improving the efficiency of the oversight process. A primary initiative involves closer coordination with stakeholders and more extensive analyses during the scheduling and scoping phases of inspections to determine the best approach for each review. This change is expected to result in more varied kinds of reviews, more flexible scheduling, smaller teams, and a variable sampling approach, all more closely geared toward site-specific needs and more efficient oversight processes. Additionally, having participated in the ZBSR, Independent Oversight intends to appropriately incorporate the resulting set of performance expectations for each security topical area into its appraisal processes.

The Department must exhibit flexibility and innovation in its approach to protecting national security assets if we are to achieve reasonable protection goals at affordable costs. HSS will continue to play a leading role in this effort through these and other initiatives aimed at improved policy, increased coordination with and assistance to program offices and the field, and more efficient oversight processes. For additional information regarding these initiatives or HSS's plans for the future, call the Office of Security Policy (HS-70) at 301-903-4642 or the Office of Independent Oversight (HS-60) at 301-903-5781.

#### **Solicitation of Comments, Questions, and Suggestions**

HSS welcomes your thoughts about our newsletter. Please send or phone comments, questions, or suggestions to:



This newsletter can be found on the HSS website at http://www.hss.doe.gov

