



Statement

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March 7, 2008

Statement on Avian Influenza Research at Los Alamos

Los Alamos National Laboratory has pursued a robust experimental program in the biosciences for decades, and a major focus of its bioscience research in the past decade is in the area of biosecurity and public health. This research is both theoretical and computational, and it also involves direct laboratory experimental work with viable pathogens.

The pathogen work done at Los Alamos is currently at the Biosafety Level 2 (BSL-2) level, and includes work with biological agents on the Centers for Disease Control (CDC) and U.S. Department of Agriculture (USDA) Select Agent and Toxin list. Although the site has a BSL-3 laboratory building, it is not yet operational and is still undergoing the environmental impact analysis under the National Environmental Policy Act (NEPA) process.

Highly pathogenic avian influenza strains are USDA Select Agents, and require a BSL-3 laboratory. Other non-contemporary influenza strains also require BSL-3 labs. However, most influenza strains can be worked with in BSL-2 labs. Los Alamos obtains influenza strains from commercial sources, or from collaborators who are interested in our technology.

- Los Alamos research in influenza concerns development of innovative detection methods (bead-based flow cytometry) and devices (handheld dipstick method); focused principally on public health issues associated with seasonal influenza and the potential for pandemic outbreaks.

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- LANL is also developing new methods for extracting influenza virus from environmental samples.
- LANL is sequencing strains of influenza for submission to the influenza sequence databases (the original flu sequence database originated at Los Alamos, and is still maintained here).
- LANL has a project, in collaboration with UCLA focused on establishing an influenza sequencing network to enable global surveillance of influenza.
- LANL also studies the host response to influenza (animal and human) in an aim to understand host susceptibility and immune-response mechanisms involved in early response, which researchers hope will lead to the discovery of new markers for influenza infection. In pursuit of this work extracted RNA (dead material) samples from avian influenza strains, including H5N1, are obtained from authorized collaborators. To date these samples have not included material from Indonesia.

About Los Alamos National Laboratory (www.lanl.gov)

Los Alamos National Laboratory, a multidisciplinary research institution engaged in strategic science on behalf of national security, is operated by Los Alamos National Security, LLC, a team composed of Bechtel National, the University of California, The Babcock & Wilcox Company, and Washington Group International for the Department of Energy's National Nuclear Security Administration.

Los Alamos enhances national security by ensuring the safety and reliability of the U.S. nuclear stockpile, developing technologies to reduce threats from weapons of mass destruction, and solving problems related to energy, environment, infrastructure, health, and global security concerns.