



Chronology – Nebraska Biocontainment Unit

September 11, 2001

Terrorist attacks on World Trade Center, Pentagon and Flight 93 kill more than 2,900.

October 2001

Envelopes containing anthrax and unknown white powders are received in the mail at congressional offices and State Department in Washington, D.C.

UNMC personnel deployed to Washington, D.C. to coordinate identifying and handling white powder threats passing through the U.S. Postal Service.

December 2002

Federal government announced smallpox vaccination program due to potential bioterrorist use of smallpox.

February-June 2003

SARS outbreak in Canada. An estimated 5,000 were quarantined in Canada. Many of the approximately 400 cases and 44 deaths occurred in health care workers.

March 2004

The Nebraska Biocontainment Unit (NBU) plan was developed at the University of Nebraska Medical Center/Nebraska Medicine. The unit was a joint venture between the Nebraska State Health Department, UNMC and Nebraska Medicine-Nebraska Medical Center. Planning for the 10-bed unit included input from many experts, including the U.S. Army Medical Research Institute of Infectious Diseases. The unit featured state-of-the-art negative air flow with 15-20 air exchanges per hour, double doors, HEPA-filtered exit air, secured access, pass-through sterilizer, special seamless surfaces, video communications, and research-based standards of care. It is designed to provide maximal safety to care for any infectious diseases, whether spread by the contact or airborne route.

March 2005

The 10-bed Nebraska Biocontainment Unit opens at the University of Nebraska Medical Center/Nebraska Medicine. The unit was designed to treat patients with highly infectious agents such as smallpox, monkey pox, SARS and Ebola. The unit was dedicated by Dr. Julie Gerberding, head of the Centers for Disease Control and Prevention (CDC). Recruitment and training of specialized staff begins immediately.

November 2005

Nebraska Biocontainment Unit hosts national consensus conference for 35 representatives from U.S. military, civilian biocontainment units and government agencies. Results are published in 2006 in the journal *Biosecurity and Bioterrorism* and become industry standard.

2006-2015

The Nebraska Biocontainment Unit engages in active research in projects such as decontamination, mathematical modeling of air flow, and correct use of personal protective equipment for hazardous agents. NBU leadership group publishes more than 50 chapters, articles, abstracts and e-based educational modules, and gives more than 100 presentations on biocontainment, biosafety and Ebola. NBU also serves as a leader in local education for health care providers in dealing with hazardous infectious diseases.

May 2007

Phil Smith, M.D., is invited to give lecture on NBU to European Congress on Hazardous Infectious Diseases.

2009

The NBU is activated for a suspected viral hemorrhagic fever patient who turned out to have malaria.

August 1, 2014

U.S. State Department official inspects the Nebraska Biocontainment Unit.

August 2, 2014

First U.S. health worker infected with Ebola returns to the United States for treatment.

September 5, 2014

Rick Sacra, M.D., an Ebola-infected patient, arrives at the Nebraska Biocontainment Unit from Africa. Dr. Sacra contracted Ebola while working for a medical relief organization in Sierra Leone.

UNMC/Nebraska Medicine begins receiving an average of 75-100 inquiries per week from U.S. hospitals and providers seeking information about highly infectious disease safety protocols and training.

September 25, 2014

Rick Sacra, M.D., leaves the Nebraska Biocontainment Unit after being declared virus free.

October 2014

UNMC/Nebraska Medicine make available all UNMC's "HEROES" web page for protocols, training and education materials for health care providers seeking assistance.

October 2014

Two health care workers in Dallas, Texas, develop Ebola infection after caring for an Ebola case. A third health care worker in Spain also develops Ebola.

October 6, 2014

Ashoka Mukpo arrives at the Nebraska Biocontainment Unit from Africa. Mukpo contracted Ebola while working in Liberia.

October 7, 2014

Apple and UNMC collaborate to launch the "Nebraska Method" on iTunes University to provide online Ebola training and safety protocols for hospital providers and the general public to help respond to the hundreds of inquiries weekly requesting assistance.

October 19, 2014

During a "Face the Nation" news broadcast, UNMC/Nebraska Medicine is recognized as the "gold standard" in care and training for Ebola and highly infectious diseases.

October 23, 2014

Ashoka Mukpo leaves the Nebraska Biocontainment Unit after being declared virus free.

October 29, 30, 2014

UNMC Chancellor Jeffrey P. Gold, M.D., provides Ebola briefing to White House Ebola czar, secretary of defense, U.S. Department of Health and Human Services (HHS) Assistant Secretary for Preparedness and Readiness, U.S. Senate Appropriations Committee staff, and the Nebraska Congressional delegation.

November 2014

UNMC trains staff from Johns Hopkins University on patient care protocols for Ebola and other highly infectious diseases

UNMC/Nebraska Medicine launches a series of webinars on Ebola for health care providers.

November 2014

Centers for Disease Control and Prevention (CDC) initiates contract discussions with UNMC and Emory University to develop training curriculum for Ebola procedures for hospital providers.

November 12, 2015

Chancellor Jeffrey P. Gold, M.D., testifies on the subject of the U.S. government response to Ebola before the U.S. Senate Committee on Appropriations.

November 15, 2014

Thirteen days after contracting Ebola while working in a hospital in Sierra Leone, Martin Salia, M.D., arrives at the Nebraska Biocontainment Unit gravely ill with multiple organ failures. Dr. Salia dies after 36 hours of intensive medical care

November 18, 2014

UNMC Chancellor Jeffrey P. Gold, M.D., provides update briefing on Ebola to Pentagon officials, White House czar and members of Nebraska Congressional delegation.

November 18, 2014

UNMC Chancellor Jeffrey P. Gold, M.D., testifies on the subject of the U.S. public health response to Ebola before the U.S. House Committee on Energy and Commerce, Subcommittee on Oversight and Investigation

November 19, 2014

UNMC and the National Strategic Research Institute (NSRI) – in coordination with the U.S. Army Medical Research Institute of Infectious Diseases – provide briefing to U.S. STRATCOM leadership on Ebola as a threat and its potential use as a weapon.

December 8, 2015

Congress approves the Ebola Supplemental Funding Appropriations Bill.

December 2014

UNMC signs contract with CDC to conduct Ebola training sessions for 55 hospitals to be designated as Ebola Treatment Centers.

UNMC launches large scale training for U.S. hospitals in patient care protocols for Ebola and other highly infectious diseases. In addition, a specific Ebola pediatric training course was held.

Fall 2014-2015

Multiple honors are received by the NBU staff and leadership group for their preparation and response to Ebola, including resolutions of recognition by the University of Nebraska Board of Regents and the Nebraska Legislature.

December 28, 2015

Nebraska Ebola Team named 2014 Omaha World-Herald “Midlanders of the Year.”

January 2015

A patient from Africa with high-risk Ebola exposure arrives at Nebraska Biocontainment Unit, but does not test positive. Patient is released after 21 days of monitoring.

January 9, 2015

Chancellor Jeffrey P. Gold, M.D., Phil Smith, M.D., Chris Kratochvil, M.D., and Rosanna Morris, R.N., brief the Nebraska Legislature on Ebola crisis and the role of the Nebraska Biocontainment Unit.

January 21, 2015

Phil Smith, M.D., director of the Nebraska Biocontainment Unit, attends the State of the Union speech as a guest of U.S. Sen. Ben Sasse.

February 2015

A second patient with high-risk Ebola exposure in Africa arrives in Omaha. Individual is monitored in collaboration with the Douglas County Health Department and the Nebraska Department of Health and Human Services. Patient does not test positive and is released after 21 days of monitoring.

February 1, 2015

UNMC has trained 35 U.S. hospitals and more than 250 health care providers in treatment protocols for Ebola and other highly infectious diseases.

February 11, 2015

President Obama honors the Nebraska Ebola Team in remarks during a White House press event on "America's Leadership in the Ebola Fight."

February, 2015

UNMC/Nebraska Medicine receives two domestic Ebola supplement awards. One award for \$2.3 million was used by UNMC to establish a statewide infection prevention program. The second award for \$296,125 allowed UNMC to expand the laboratory.

March 2015

In collaboration with the Nebraska Department of Health, UNMC and the state applied for a \$1.9 million grant, of which UNMC would receive \$1.3 million.

March 2015

UNMC provides Ebola training to health care providers from three other nations.

March 14, 2015

Seven American aid health workers with high-risk exposure to Ebola are transported from Sierra Leone to UNMC. They do not test positive and are released after 21 days of monitoring.

March 17, 2015

Nebraska Biocontainment Unit celebrates 10th anniversary of operation. Attendees include Dr. Nicole Lurie, HHS Asst. Secretary for Preparedness & Response (ASPR), Nebraska U.S. Rep. Brad Ashford, Texas U.S. Rep. Gene Green, and Nebraska Gov. Pete Ricketts.

March 30, 2015

The Nebraska Legislature approves a resolution (LR41) urging Congress to establish a national training center in highly infectious diseases at UNMC.

April 20, 2015

In collaboration with the Nebraska State Health Department, UNMC applies for health preparedness funds to build a state readiness plan to handle future patients or other similar highly infectious Ebola like-events. UNMC/Nebraska Medicine will receive \$500,000 of the grant.

UNMC is named as a sole source lead for the Midwest region to develop a regional network for Ebola patient care. UNMC will receive \$2.25 million in the first year followed by \$250,000 for four additional years.

May 20, 2015

State of Nebraska approves \$25 million toward construction of a new Simulation Training Center at UNMC. This provides an increased opportunity for the U.S. Department of Health and Human Services to collaborate on Ebola training and facilities.

May 20, 2015

UNMC, Emory University in Atlanta, and Bellevue Hospital Center in New York City submit a joint proposal to be designated the National Ebola Training and Education Center (NETEC) by HHS.

June 2015

HHS designates UNMC/Nebraska Medicine one of nine Regional Ebola Centers. The Nebraska Regional Ebola Center will provide services to Nebraska, Iowa, Missouri and Kansas.

June 2015

UNMC/Nebraska Medicine request \$336,000 from HHS for unreimbursed costs to care for Ebola patients in 2014.

July 2015

The University of Nebraska Medical Center/Nebraska Medicine, in collaboration with Emory University in Atlanta and Bellevue Hospital Center in New York City, are awarded a \$12 million grant by the U.S. Department of Health and Human Services to establish and co-lead the nation's National Ebola Training and Education Center.