Statement of Senator Susan M. Collins, Ranking Member Homeland Security and Governmental Affairs Committee

Biological Security: The Risk of Dual-Use Research April 26, 2012

It has been almost a century since the 1918 Spanish influenza virus infected one fifth of the world's population, killing more than 50 million people and claiming some 600,000 American lives. Yet virulent strains of influenza are still a major threat.

The H1N1 strain, more commonly known as the swine flu, claimed over 18,000 lives during the 2009 outbreak, and exposed gaps in our preparedness capabilities for response to a global pandemic, especially the development, production, and distribution of life-saving vaccines.

In 2008, this Committee held a hearing on the report by the Commission on the Prevention of Weapons of Mass Destruction, which examined the security of biological pathogens on the Select Agent List. The testimony by Commission chairmen, former Senators Bob Graham and Jim Talent, helped raise awareness on the issue of biosecurity and the need to ensure that deadly pathogens, and the research carried out on them, are contained in secure lab facilities.

The Committee has also held numerous hearings on the nation's efforts to prevent, prepare for, and mitigate the impact of a pandemic influenza outbreak. In 2009, the Administration's failure to ensure the government was prepared to rapidly distribute vaccines was, and remains, a cause for great concern.

Preparedness requires investing in critical life sciences research to expand the knowledge base and technologies to help us respond to the next potential global pandemic. Such a pandemic could be even more communicable than the 1918 influenza virus, or as virulent as the Avian Flu Virus.

The World Health Organization has documented 576 human cases of Avian Flu infection worldwide since 2003. 339 of these cases resulted in death. Recently, research funded by the National Institutes of Health and conducted in Wisconsin and the Netherlands resulted in genetic changes to a strain of Avian Flu that allowed its airborne transmission.

The NIH-funded researchers planned to publish their full findings in two academic journals. Publication, peer review, and replication of findings are important steps in a vigorous scientific process. But others have expressed concern that the publication of the methodology and some of the data could help create a roadmap for terrorists and others seeking to further modify the virus into a weapon. That's why a government advisory board -- the National Science Advisory Board for Biosecurity -- recommended in late December that partial information be withheld from publication.

Late last month, however, the Board -- with some dissenters -- reversed course, and is now advocating for the full publication of the Wisconsin research paper as revised, and the publication of a revised paper on the research performed in the Netherlands.

The decision and its reversal have been part of a larger debate within the scientific and national security communities, and there are important arguments being made on both sides.

When the American people pay for scientific research intended for the common good, they have a right to expect that their money will not be used to facilitate terrorism.

These are not hypothetical threats. Before he was killed, Anwar al-Awlaki reportedly sought poisons to attack the U.S. Adding to concerns, the new leader of al Qaeda has a medical background; therefore he may have an even greater interest in pursuing chemical and biological terrorism.

At the same time, there is legitimate concern about government censorship that could chill academic freedom and scientific inquiry – or even limit the sharing of information necessary to save lives or improve public health.

Recently, NIH released a new policy for the oversight of "dual-use research of concern." This policy is intended to improve our awareness of current and proposed dual-use research of concern, and provide some guidelines for mitigating the associated risks.

This new policy, however, is only the beginning of what must be a straight-forward dialogue among science, health, national security, and government experts and leaders in order to promote scientific research while protecting the safety of Americans and others around the world.

I look forward to reviewing the testimony of our witnesses about these challenging issues.