US federal health agencies questioned over Ebola response

A congressional inquiry into the handling of Ebola in the USA has sparked new guidance to protect health-care workers. Susan Jaffe, The Lancet’s Washington correspondent, reports.

As US President Barack Obama ramped up the country’s response to the Ebola crisis domestically and abroad (panel), his top health officials attempted, during a tense congressional hearing last week, to address potential solutions to the epidemic ravaging west Africa, which has now reached the USA, confronting emergency medical providers at a well regarded hospital in Dallas, Texas.

But the Republican-controlled House of Representatives’ Committee on Energy and Commerce, which undertook the inquiry, did not seem particularly interested in discussing additional long-term investments in medical research—there is currently no cure for the disease—or the need to shore up, if not create, health-care infrastructure in the west African countries where more than 4500 people have died of the disease.

“To protect the USA, we have to stop it at the source”, said Tom Frieden, director of the US Centers for Disease Control and Prevention (CDC), at the hearing. “There is a lot of fear of Ebola, and...one of the things I fear about Ebola is that it could spread more widely in Africa. If this were to happen, it could become a threat to our health system... for a long time to come.”

The Republican committee members had other suggestions. “You’re right, it needs to be solved in Africa”, replied Michigan Republican Fred Upton, who supports a travel ban on visitors from Liberia, Guinea, and Sierra Leone, which have been hit hardest by Ebola. “But until it is, we should not be allowing these folks in, period.”

As The Lancet went to press, President Obama has so far resisted demands for the ban, claiming that travellers from west Africa could still find a way into the USA, and then the government would not be able to monitor them for fever, an early potential Ebola symptom, and to isolate them if they are sick.

Frieden also fielded a barrage of questions about why CDC safety guidelines, which the Texas hospital says it followed, failed to protect health-care providers Nina Pham and Amber Vinson, two registered nurses who contracted the disease. Democrats and Republicans on the committee seemed equally infuriated by the agency’s many missteps, including its surprising clearance for Vinson—which she sought—that she could visit family in Cleveland, OH, to make wedding preparations even though she was still in Ebola’s 21-day incubation period. Her Ebola diagnosis was confirmed shortly after her return to Dallas.

Health-care worker protection

The fact that Pham and Vinson contracted the virus while treating the first US patient with Ebola, Liberian Thomas Eric Duncan, who later died, prompted nurses’ organisations as well as Congress and others to call for better infection protection for health-care providers. During at least the first few days the nurses cared for Duncan, they were not wearing shoe covers and their protective clothing left their forehead and neck areas exposed. The CDC has been investigating how the nurses got the Ebola virus.

“We are at the most risk for exposure, so shouldn’t we have the highest level of protection?” said DeAnn McEwen, nursing practice specialist and chief of infection control for National Nurses United, which represents more than 185,000 nurses.

Just 4 days after his congressional testimony, Frieden responded to the criticism by announcing new stricter guidance recommending that health-care providers treating patients with suspected or confirmed Ebola wear full-body protective gear, including respirators and full-face, single-use shields, so that no skin is exposed.

The changes are based on recent experience treating patients with Ebola at Emory University Hospital, Nebraska Medical Center, the National Institutes of Health (NIH), and from Médecins Sans Frontières, who are treating patients in west Africa. “This results in a consensus that allows an extra margin of safety”, Frieden said.

But he cautioned that US health-care providers face a higher risk of infection than caregivers in Africa because there is “more hands-on nursing care and more high-risk procedures such as intubation”. And Frieden re-emphasised the importance of promptly screening and isolating potential patients with Ebola, so that health-care workers know when protective clothing is necessary.

Last week, officials at the US Centers for Medicare and Medicaid Services (CMS), which oversees health-care providers that treat Medicare patients,
Panel: The US Ebola response so far

As The Lancet went to press, President Barack Obama had announced several actions to assure Americans “there is nothing to fear”, and that his administration can effectively manage to contain the Ebola threat. These measures include:

- tightening infection protection recommendations for health-care workers;
- appointing Ron Klain, a lawyer who was Vice President Joe Biden’s chief of staff, as an “Ebola Czar” to coordinate the activities of several government agencies working on Ebola;
- creating “a rapid-response team, a SWAT team, essentially” that Obama said will arrive within 24 hours after any hospital confirms an Ebola case, “so that they are taking the local hospital step by step through exactly what needs to be done and making sure that all of the protocols are properly observed...”;  
- committing as many as 3000 troops to Liberia to train health-care workers and construct 17 treatment facilities with 1700 beds;  
- issuing an executive order authorising the Department of Defense to activate a small number of National Guard or reserve troops if necessary to help control Ebola in west Africa.

Last week, the US Customs and Border Patrol began requiring visitors arriving from west Africa at five international airports to complete an Ebola-related questionnaire, taking their temperatures using infrared thermometers, and isolating those with temperatures above 100·4°F, a potential symptom of the disease.

All these steps might also help to get another problem under control—the political damage the Ebola crisis may inflict on Obama and his fellow Democrats before the Nov 4 congressional election just weeks away.

“strongly” urged hospitals to adopt CDC-recommended screening procedures for assessment of patients for possible Ebola virus disease. However, although CMS inspects hospitals for compliance with its requirements for participating in the Medicare programme, the agency does not mandate that hospitals follow CDC infection control guidelines for health-care workers, a Medicare official told The Lancet. “In an area of rapidly changing guidelines, we can only recommend that hospitals adhere to CDC guidance”, he said.

Frieden said that the federal Occupational Safety and Health Administration, which enforces regulations for safe workplaces, would also oversee implementation of the new recommendations.

But, according to the American Hospital Association, hospitals are required to develop infectious disease prevention plans and update them according to the latest guidelines. Spokeswoman Jennifer Schleman told The Lancet: “Standards on infection prevention and control are established by a variety of governmental, regulatory, and accrediting bodies, including the Joint Commission.

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[a private hospital accreditation organisation], the Medicare programme, and the Occupational Safety and Health Administration.”

However, some nurses’ groups are still not reassured. “We’re calling on the President to use his executive authority to mandate uniform national standards and protocols that all hospitals must follow to safely protect nurses, patients, all health-care workers, and the public”, said McEwen.

Funding for medical research

Following Frieden’s testimony, Anthony Fauci, director of the National Institute of Allergy and Infectious Diseases (NIAID) at NIH, testified about the development of diagnostic tests, therapies, and vaccines that might someday control the spread of Ebola.

And he concluded with a surprise announcement, that the NIH has admitted Nina Pham, one of the Texas nurses who contracted Ebola, to the Special Clinical Studies Unit at NIH in Bethesda, MD, for “state-of-the-art care in our high-level containment facilities”. Vinson, the other nurse, was transferred from the Dallas hospital for treatment at Emory Hospital in Atlanta, one of only four US medical facilities, including NIH, equipped with biocontainment units.

The NIH hospital has a dual mission, Fauci later told reporters: “It is the largest research hospital in the world devoted exclusively to research and patient care”.

H Clifford Lane, NIAID’s clinical director, added, “We anticipate doing a fairly extensive series of studies examining her immune response to the virus and ways in which the virus may be affecting both the inflammatory and coagulation pathways, all of which are very important in the pathogenesis of this disease”.

The Ebola threat underscores the need for increased funding for NIH research, Florida Republican Kathy Castor, said at the hearing. “This is a wake-up call for America that we cannot allow NIH funding to stagnate any longer”, she said. Legislation she proposed in May would have ensured mandatory funding for NIH as well as annual increases, but Republicans defeated it.

The agency has been “whipsawed by sequestration, government shutdowns, and year-after-year budgets that have been inconsistent at best”, she told The Lancet. “It is affecting America’s ability to be innovative and find the cures of the future.”

With WHO predicting the Ebola outbreak will get worse before it gets better—with 10 000 new cases a week by December—the future had better come soon.

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