The current Ebola outbreak is centered in the West African countries of Guinea, Liberia and Sierra Leone. Nigeria and Senegal were declared free of Ebola in October by the World Health Organization (WHO), but many new infections continue to occur in Guinea, Liberia and Sierra Leone. More than 7,000 people have contracted Ebola since March, and nearly 5,000 people have died, according to WHO. The CDC is surging resources by sending staff to the area to help bring the outbreak under control, and it has implemented enhanced entry screening at five U.S. airports that receive more than 94 percent of travelers from Guinea, Liberia and Sierra Leone.

In the U.S., two health care workers who cared for an Ebola patient at Texas Presbyterian Hospital tested positive for Ebola in October. Both health care workers have recovered. On Oct. 24, a physician in New York City tested positive for Ebola after returning from Guinea, where he cared for Ebola patients. This is the only current case in the U.S.

What is Ebola?
Ebola Virus Disease (EVD) is caused by the Ebola virus. Symptoms can include: fever, headache, joint and muscle aches, weakness, diarrhea, vomiting, stomach pain, lack of appetite, and abnormal bleeding. Severity of illness ranges from very mild disease to severe hemorrhagic fever. Symptoms may appear anywhere from two to 21 days after exposure to Ebola virus although eight to 10 days is most common. During outbreaks of Ebola, those at highest risk include family and friends and healthcare workers who have had physical contact with an infected individual.

How is Ebola transmitted?
Ebola is transmitted through direct physical contact with the blood or body fluids of an infected symptomatic person or objects that have been contaminated with infected blood or body fluids. The virus that causes Ebola is often spread through families and friends because they come in close contact with blood or body fluids when caring for ill persons or while handling the bodies of people who have died from Ebola during funeral or burial rituals.

Exposure to Ebola can occur in health care settings if hospital staff are not wearing appropriate personal protective equipment, such as gloves, gowns and masks or when protective equipment isn’t carefully donned or removed. Careful cleaning of patients’ rooms and equipment and careful disposal of instruments, such as needles and syringes, is also important. Without adequate cleaning, people who have contact with virus remaining on room surfaces or equipment can become infected.

Can Ebola be transmitted through the air?
No. Ebola is not a respiratory disease like the flu, so it is not transmitted through the air. As with a number of other infections, special airborne precautions must be used while patients are undergoing certain types of medical procedures that can generate aerosols (i.e., “aerosol-generating procedures”). Some examples include performing a bronchoscopy procedure, placing an endotracheal tube, and using positive pressure ventilation.

Can I get Ebola from contaminated food or water?
No. Ebola is not a food-borne illness. It is not a water-borne illness.

Can I get Ebola from a person who is infected but doesn’t have any symptoms?
No. Individuals who are not symptomatic are not contagious. In order for the virus to be transmitted, an individual would have to have direct contact with an individual who is experiencing symptoms.

**Are there any cases of individuals contracting Ebola in the U.S.??**
The CDC confirmed the first-laboratory confirmed case of Ebola to be diagnosed in the U.S. in a man who traveled from Liberia (where he provided care for an Ebola patient) to Dallas, Texas. The man passed away Oct. 8. Since then, two nurses who provided care for that patient at Texas Presbyterian Hospital tested positive for Ebola on Oct. 10 and 15. Both nurses have since recovered and were discharged from the hospital. On Oct. 24, a physician in New York City tested positive for Ebola after returning from Guinea, where he cared for Ebola patients. For the latest information about cases in the U.S., visit the CDC website.

**What is being done to prevent ill passengers in West Africa from getting on a plane?**
The CDC is assisting with active screening and education efforts on the ground in West Africa to prevent sick travelers from getting on planes. The CDC has implemented enhanced entry screening at five U.S. airports. Kennedy International in New York, Newark Liberty International, Washington Dulles International, O’Hare International in Chicago, and Hartsfield-Jackson International in Atlanta already account for 94 percent of all arrivals from the affected countries — Liberia, Sierra Leone and Guinea. In addition, airports in West Africa are screening all outbound passengers for contact with patients with Ebola and for Ebola symptoms, including fever, and passengers are required to respond to a healthcare questionnaire. CDC is also surging support in the region by deploying 50 additional workers to help build capacity on the ground.

**What is CDC doing in the U.S.?**
CDC is working with airlines to address crew and airline staff concerns while ensuring the ability of humanitarian and public health organizations to transport assistance into the affected countries. CDC is also working with airlines, airports, and ministries of health to provide technical assistance for developing entry and exit screening and travel restrictions in the affected areas, and is working closely with Customs and Border Protection (CBP) and other partners at ports of entry (primarily international airports) to use routine processes to identify travelers who show signs of infectious disease. If a sick traveler is identified during or after a flight, CDC will conduct an investigation of exposed travelers and work with the airline, federal partners, and state and local health departments to notify them and take any necessary public health action. The federal agency is also working with U.S. healthcare facilities about how to safely manage a patient with suspected Ebola virus disease.

**What about ill Americans with Ebola who are being brought to the U.S. for treatment? How is CDC protecting the American public?**
CDC has very well-established protocols in place to ensure the safe transport and care of patients with infectious diseases back to the United States. These procedures cover the entire process – from patients leaving their bedside in a foreign country to their transport to an airport and boarding a non-commercial airplane equipped with a special transport isolation unit, to their arrival at a medical facility in the United States that is appropriately equipped and staffed to handle such cases. CDC’s role is to ensure that travel and hospitalization is conducted in a manner that minimizes risk of spread of infection and to ensure that the American public is protected. Patients were evacuated in similar ways during SARS.

**What is the United States doing to help in West Africa?**
President Obama announced on Sept. 16 an expansion of military and medical resources to combat the outbreak. He said that the United States would help Liberia in the construction of as many as 17 Ebola treatment centers in the region, with about 1,700 beds, and will also open a joint command operation to coordinate the international effort to combat the disease. The American response includes the deployment of some 3,000 American military personnel, including doctors, to West Africa.

What are Brigham and Women’s Hospital and Brigham and Women’s Faulkner Hospital doing to protect patients, visitors and staff?
BWHC has put in place an Incident Management Team to enable us to quickly pull together leadership from all areas, coordinate ongoing trainings and drills, address staff concerns and pool necessary resources. BWHC is training a dedicated specialized team of staff who would care for an Ebola patient, should we receive one. In addition, training and drills are underway at every location where a patient may present, such as our emergency departments, ambulatory clinics and procedural areas. BWH is currently training staff on using the appropriate personal protective equipment (PPE).

Our focus hospital-wide is to “identify, isolate and call”: identify a suspected Ebola patient early; isolate them quickly; and call our trained team to respond immediately. We are also building an isolation unit in the hospital where we could safely care for Ebola patients. Staff are receiving information about the latest plans and response efforts through a series of emails, Town Hall meetings and via the Ebola Virus Disease page on PikeNotes.

If a patient with Ebola symptoms comes to the hospital, can I refuse to take care of them?
While none of us can simply refuse to care for a particular patient, we reassure you that no one will be asked to care for a suspected patient without the proper training. Training is not observation; it involves drills and demonstrating competencies to ensure that any employee who may be involved in the care of an Ebola patient is prepared. At this time, our focus is on training specialized teams of employees to care for a patient with Ebola symptoms.

What are BWH and BWFH doing to monitor the international response?
Global Health and Infectious Disease leaders at BWH and BWFH and Partners HealthCare have been monitoring the situation in Africa carefully, and are working closely with our governmental and non-governmental partners regarding the response issues that are evolving.

What does the CDC’s Travel Alert Level 3 mean to U.S. travelers?
The CDC elevated their warning to U.S. citizens encouraging them to defer unnecessary travel to Guinea, Liberia, and Sierra Leone over concerns that travelers may not have access to health care facilities and personnel should they need them in country.

Where can I find the most current guidance?
Much of this information will continue to evolve as more data becomes available and as public health guidance evolves. The most current guidance from the BWH and BWFH, CDC, Massachusetts Department of Public Health, and Boston Public Health Commission are available at the links below:

- BWH Infection Control and BWFH 411
- Centers for Disease Control and Prevention Ebola Homepage:
- Massachusetts Department of Public Health Biological Threats: 24/7 MA DPH phone number 617-983-6800
- Boston Public Health Commission:
  24/7 BPHC phone number 617-719-5415
For BWHC staff: BWH Infection Control and BWFH 411

What if I have a question?
Please direct urgent questions to your manager. A hotline and email address have been set up for employees to submit non-urgent questions about Ebola preparedness: 1-800-343-7036; BWHCEbolaResponse@partners.org

Sources:
Centers for Disease Control and Prevention
World Health Organization
Brigham and Women’s Health Care