 definitions

epi-demic or epidi-mical
(epi-demik) (epi-demi’kl)
adj. Spreading rapidly and extensively by infection and affecting many individuals in an area or population at the same time, as of a disease or illness.
n. An outbreak or unusually high occurrence for a disease or illness in a population or area.

pan-demic
(pan-dem’ik)
n. Denoting a disease affecting or attacking the population of an extensive region, country, continent, global; extensively epidemic.

differences

• Pandemics span a wider geographical area and infect more people than epidemics.
• An epidemic is specific to one region while a pandemic reaches across multiple borders.
• Pandemics are generally caused by a new virus strain or subtype; humans may have little or no immunity to it.
• Pandemics generally cause higher numbers of deaths than epidemics.
• When infections take place in several regions simultaneously, it may turn into a pandemic.
2014 Ebola Epidemic

A major outbreak of the Ebola Haemorrhagic Fever virus spread through the West African nations of Guinea, Liberia, and Sierra Leone in October 2014. Smaller known outbreaks occurred in Nigeria and Senegal, but were promptly contained by the isolation of those infected and the quarantine of those who had come in contact with them. Unlike many other infections that have recently caused worldwide alarm, such as bird flu, swine flu, and SARS, which were previously unknown, Ebola virus has been studied by medical researchers since it was first recognized in 1976, when an outbreak occurred near the Ebola River in Zaire, now known as the Democratic Republic of the Congo (DRC). There are five species of Ebola virus (Zaire, Sudan, Reston, Bundibugyo, and Tai Forest), which have differing DNA, but cause similar illnesses. Over the years, outbreaks involving hundreds of people have occurred periodically in the DRC, Sudan, Gabon, Uganda and the Republic of Congo. The outbreak from 2014, affecting thousands of people, is by far the largest Ebola outbreak on record.

Ebola Contagion

- The virus is transmitted through close and direct contact with bodily fluids of infected animals or humans: blood, saliva, sweat, urine, semen, and feces.
- The virus is not known to be contagious by aerosol means.
- Infected patients are not known to be contagious unless they are symptomatic (i.e., they are not contagious during the incubation period).

Who is Most at Risk for Ebola?

- Health care workers caring for infected individuals.
- Family members or others in close contact with infected individuals.
- Mourners or others who have direct contact with the bodies of the deceased as part of burial ceremonies.
- Bush hunters who come in contact with dead animals in the rain forest.

Treatment for Ebola

- No specific treatment or vaccine is yet available for Ebola HF.
- Supportive care is provided and the body’s immune system is allowed to combat the virus.
- ICU care is often required as well as IV fluids and electrolyte replacement.
- New drug therapies have shown promising results in laboratory studies and are currently being tested.

Ebola Signs and Symptoms

- Sudden onset of fever
- Intense weakness
- Joint and muscle pains
- Headache
- Sore throat
- Diarrhea
- Vomiting
- Stomach pain
- Symptoms appear anywhere from 2 to 21 days after exposure to the Ebola virus, though 8 to 10 days is common.
- These symptoms may be similar to other viral or bacterial illnesses (i.e., malaria).
Prevention Tips for Ebola

- Avoid traveling to areas of known outbreaks. Before traveling, check the CDC website on current epidemics.
- Wash your hands frequently. Use soap and water, or use alcohol-based hand rubs with at least 60 percent alcohol when soap and water aren’t available. Avoid close contact with strangers, even hand shaking.
- Avoid bush meat. In developing countries, wild animals, including nonhuman primates, are sold in local markets. Avoid buying or eating any of these types of meat.
- Decontamination of surfaces: Commercially available disinfectants (Lysol) are effective against Ebola virus; dilute bleach solution: 1 part household bleach to 9 parts water.
- Avoid contact with infected people.
- Do not visit symptomatic patients in the hospital.
- Patients with Ebola are the most contagious in the later, more severe stages of the disease process.
- Follow infection-control procedures. If you are a healthcare provider, wear protective clothing such as gloves, mask, gown, eye protection and hazmat suits.
- Keep infected people isolated from others.
- For more information and a list of preventative measures for Ebola Hemorrhagic Fever, please visit the CDC website at [www.cdc.gov](http://www.cdc.gov).

Prepare for Ebola

- Have a plan in place should someone exhibit symptoms of viral infection:
  - Have an isolation room.
  - Have access to protective clothing and equipment.
  - Have a disinfection plan / materials.
  - Know how to contact local health authorities.
  - Know the location of local health facilities that are capable of assessing, testing and treating the disease.
  - Consider monitoring body temperature of all individuals entering your work area.

Handling of Deceased from Ebola

- Cremation is preferred (and in fact is mandatory in some areas).
- Burial is discouraged as it requires close contact and handling of the body and increases the risk of infection.
- Burial of infected remains will not cause contamination of local groundwater.

As a worldwide leader in travel insurance solutions and global assistance, AIG Travel continuously updates clients traveling to West Africa on the 2014 outbreak of Ebola Haemorrhagic Fever in this region. We have been closely monitoring the situation and updating our clients traveling and working in these endemic areas. You can find more detailed information about the Ebola outbreak on our website [www.aig.com/travel/ebola](http://www.aig.com/travel/ebola).
Current Pandemic Risk

Except for the HIV pandemic, which started more than 30 years ago and does not pose a risk to most travelers, there are no present known pandemics. However, health authorities such as the World Health Organization (WHO) and the Centers for Disease Control (CDC) are constantly on the alert for local outbreaks (epidemics) that have the potential to become pandemics.

The worst pandemic in history was the Black Death, which killed hundreds of millions of people from 1348 to 1350 and cut the population of Europe almost in half. A series of cholera epidemics in the 19th century, involving almost every part of the globe, also caused the death of tens of millions of people.

The most famous pandemic in recent times, and the model for most of our thinking about this problem, was the Spanish flu outbreak in 1918, which killed millions of people worldwide. A smaller influenza pandemic occurred in 1957. In the spring of 2009, there was a pandemic caused by a novel H1N1 influenza virus that appeared at first to have the potential to cause mass mortality, but turned out to be much less aggressive than initially feared.

At the present time, there are three such outbreaks being closely monitored:

1. **Avian influenza H5N1 ("bird flu")** began on poultry farms in Southeast Asia in December 2003 and has since become entrenched among poultry in that region, especially Indonesia and Vietnam, as well as in Egypt and certain other countries. More than 600 known human cases have been identified so far, more than half of which have been fatal. Almost all known cases have occurred in people who had direct contact with infected poultry. Although a small number of known cases have resulted from contact with infected humans, it appears to be extremely difficult for this virus to spread person-to-person. Fears that the virus would mutate and become more transmissible have not been realized. Travelers to Egypt and Southeast Asia should avoid poultry farms and live poultry markets and should not eat poultry products unless thoroughly cooked. However, the risk to travelers appears to be extremely low. To date, no known cases of H5N1 influenza have been reported in travelers. Signs and symptoms of H5N1 range from conjunctivitis to flu-like symptoms (e.g., fever, cough, sore throat, muscle aches) to severe respiratory illness (e.g., shortness of breath, difficulty breathing, pneumonia, acute respiratory distress, viral pneumonia, respiratory failure).

2. **Avian influenza H7N9**, another type of bird flu, was first identified in China in March 2013. As for H5N1 bird flu, almost all known cases have resulted from direct contact with infected poultry. So far, the outbreak has not spread to other countries and no known cases have occurred in travelers. Symptoms start with high fever and cough, though many progress to very serious illness, including severe pneumonia, acute respiratory distress syndrome (ARDS), septic shock and multi-organ failure leading to death. The travel precautions are the same as for the H5N1 virus, outlined above. There are many other types of avian influenza, but none of the others appear to have the potential for causing human outbreaks.

3. **The Middle East respiratory syndrome coronavirus (MERS-CoV)** is related to the virus that causes the common cold, but carries a much higher mortality. More than 100 known cases have been reported worldwide since the outbreak began in the spring of 2012. Almost half of these have been fatal. Most of the known cases have occurred in Saudi Arabia, with cases also occurring in Jordan, Qatar and the United Arab Emirates. The source of the virus has not yet been identified. A small number of infections have been reported from Western Europe among people who had recently traveled to the Middle East and, in some of these cases, they passed the virus on to family members and other close contacts. However, in all instances so far, these local outbreaks in Western Europe have been small and self-limited, which implies that, although the virus may be transmitted from person-to-person, this does not readily occur. No known cases have been reported from Israel. Travelers to the Middle East should protect themselves by washing their hands often with soap and water or with an alcohol-based hand sanitizer, and by avoiding close contact with sick people. Anyone who develops fever, cough, or shortness of breath within 14 days of travel to the Arabian Peninsula or neighboring countries should seek immediate medical attention.
In general, you will hear about pandemics when they occur, because they are major news events that are widely covered in the media. In an age when electronic rumors spread faster than even the most contagious disease, the most important thing is to get accurate information. Your doctor will be the best source of information, followed by trustworthy websites, such as Travel Guard’s Assistance website and the CDC.

The most important precaution is to see your primary care physician or a travel health specialist one to two months before going abroad. If you have to travel on short notice, it’s still advisable to consult a physician, even if it may be too late for some of the recommended vaccinations.

Besides alerting you to any recent outbreaks that might be relevant to your trip, the doctor will provide you with all necessary vaccinations and medications. He or she will also advise you about other ways of staying healthy while abroad, including the use of insect repellents and hand sanitizers and the proper choice of food and beverages. You should ask the doctor how to get in touch with him or her in case of emergency, although the assistance a doctor can offer long-distance may be limited. While abroad, it may be easier to contact someone by email than by phone.

A few days before departure you should review the Travel Guard Assistance website or a website such as the CDC (http://wwwnc.cdc.gov/travel/) to ensure there haven’t been any new outbreaks involving your destinations. If you hear rumors of an outbreak while you’re traveling, you should check one of these websites or the website of a major news organization. Local media in many countries can be unreliable.

Before departure, for each place you will be visiting, you should identify at least one medical facility where you can obtain care if needed. Many of the U.S. embassy websites now include a list of doctors, clinics and hospitals, although the quality of care may not be equal to what you would find at home. On Travel Guard’s Assistance website, you can also find a guide to local health facilities under “Medical Provider Tool.”

Consult your insurance policy details for more information on travel and medical assistance services. A new outbreak of an infectious disease may occur at any time. In most cases, if you develop a serious illness while abroad, it is suggested you contact your insurance and assistance provider and/or employer to coordinate medical assistance.

References
- Centers for Disease Control and Prevention, CDC
- World Health Organization, WHO

About AIG Travel and Travel Guard®
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