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Underwriting News - Ebola

somewhat different

Outbreak of Ebola virus

Ebola virus is a hemorrhagic fever that was first discovered in 1976. It resides in animals, although the exact host is unclear (most likely fruit bats or primates) and can be transmitted to humans in the index case. Thereafter transmission occurs only by direct contact with blood or bodily fluids from actively ill patients. Transmission does not occur during the incubation period which lasts from 2 to 21 days after exposure. The infection has a high case fatality rate and there is no vaccine or effective antiviral therapy at present. The treatment is absolute isolation of the patient and supportive care.

The current outbreak is the largest ever recorded and has occurred in West Africa, largely in three countries, Guinea, Liberia and Sierra Leone where, as of this writing, over 14,000 cases with over 5,100 deaths have occurred. Only 29 cases have been diagnosed outside of this area with 13 deaths. These cases have occurred in travelers from the primary infection zone and their contacts. To date 4 cases have been recorded in the United States, 2 in travelers from the endemic areas and 2 in health care workers who had contact with one index patient.

The primary symptoms are fever, severe headache, muscle pain, weakness, vomiting, diarrhea, abdominal pain and unexplained hemorrhage. Supportive care, especially with IV fluids, is critical for survival. Part of the reason for the high case fatality rate in Africa is the lack of availability of this type of supportive care, which is much more readily obtainable in developed countries.

Because the infection is only transmitted by close contact with the body fluids of people that are actively ill, control of the disease is amenable to strict epidemiologic measures i.e. rapid identification and isolation of patients and their contacts and strict use of barrier means for protection of care givers (gloves, masks, suits, boots), despite the lack of a vaccine or anti-viral therapy.

Because of their level of fluid exposure, health care workers are at especially high risk. Household contacts and brief direct encounters such as shaking hands are considered low risk exposures.

Ebola is a real problem in the local areas of Africa where it is active because they do not have the infrastructure and health systems to aggressively isolate infected individuals. In addition, cultural issues promote contact with diseased and deceased individuals promoting spread of the disease.

Most countries with active disease are screening those exiting the country for evidence of infection by monitoring for fever. In addition, health departments in countries receiving travelers from those areas, including the US, are actively looking for potential cases which would then be put in isolation. Although there have been some gaps, the United States has an excellent system for aggressively isolating individuals who are potentially infectious so the chances of a major outbreak here are extremely low. The only recorded transmissions here have been in healthcare workers, not casual contacts.

Since the virus is not spread by respiratory means and transmission does not occur in the incubation period it is highly unlikely that Ebola could cause a pandemic that will substantially affect the insurance industry. To have a substantial effect on insured lives mortality, one needs a rapidly spreading virus like influenza that is also virulent with a high case fatality rate. In the case of Ebola there is a high virulence but not the transmissibility.

If someone were to apply for insurance that had been in one of the index countries they should not be at risk if they are beyond the incubation period of up to 21 days. If they are regularly traveling in and out of the region or working as a caregiver with recurrent exposure in that area it would be prudent to consider them at ongoing risk and to postpone consideration until the exposure ended.

For more information contact:

Cliff Titcomb, Jr., MD
Vice President - Chief Medical Director
Hannover Life Reassurance Company of America

Tel. (720) 279-5245
cliff.titcomb@hlramerica.com