Viral Infections

Infections can be caused by bacteria, virus, parasites, fungus, and a few other organisms. Most infections, from whatever cause, are postponed in underwriting until full recovery or resolution. There are a few exceptions (such as chronic viral hepatitis or localized herpes). See prior Rx for Success on Hepatitis C and Hepatitis B.

There are thousands of viruses; and they infect plants, animals and humans. Viruses often mutate; that is, they alter their genetic make-up. An example is when an animal virus mutates into one that can infect human cells.

A virus is a bit of genetic material inside a protein coat. Viruses are not living organisms. To reproduce and spread, they enter living cells where they replicate until the host cell dies, releasing the newly made viral particles. The new particles go on to infect another cell. Viruses spread by droplets (like sneezes and coughs), by contamination of inanimate objects (like telephones and tissues), by contamination of food or water supplies, by fecal waste, and by blood or bodily fluid contact. Some viral infections last days (such as the common cold). Some last months (such as mononucleosis). Some last years or even permanently (such as viral hepatitis).

For a few viruses, medication can suppress replication to an undetectable level (example, viral hepatitis). But there is no certainty that any medications available today can rid the body completely of a viral infection. The most effective way to handle viral diseases is through vaccination—although it takes years (if at all) to develop a useful vaccine for a newly discovered virus. The body provides its own best treatment and chance for cure if it can successfully produce infection-fighting antibodies to the virus. But for some infections, this may not happen (as is often the case in hepatitis C virus).

The Severe Acute Respiratory Syndrome (SARS) was an example of a newly emerging viral infection. Through advances (developed in the 1990s) in genetic research, it took only weeks to identify the virus. It is a corona virus that recently mutated from an animal virus to one that can infect humans. The first case was in China in November 2002. While most cases are in China and Hong Kong, it has spread to many other countries via infected travelers. It is spread by droplets and contamination similar to the common cold. After exposure, the incubation period is 2-7 days, followed by fever and then by respiratory symptoms. Symptoms may be mild, but can become severe enough in some cases to require artificial ventilation. The death rate has been 6-10%, but may be much higher in the elderly.

Groups like the World Health Organization (WHO) and the Centers for Disease Control (CDC) monitor the emergence and spread of epidemics such as SARS and make recommendations about travel to affected countries. In underwriting, this may be reflected as a postponement for imminent travel. It is an unfortunate consequence of modernity that other infections like SARS are likely to appear again and again. Factors that lead to the emergence of new infections include close contact between animal and human populations and an encroachment of humanity into the wild areas of Earth. Rapid transit hurries spread of infections before they can be recognized and easily contained.