MARKET ALERT: ZIKA Virus Update



Welcome to the first issue of Guy Carpenter's Healthcare & Life Specialty Practice's Market Alert. This regular briefing will continue to focus on important issues impacting our industry. In this inaugural issue we explore the Zika Virus and potential implications.

The Zika virus has become a global health issue with the World Health Organization predicting up to 4 million Zika cases in the Americas alone over the next year. In fact, the World Bank has projected that the shortterm economic impact from the virus for 2016 in Latin America and the Caribbean will be about \$3.5 billion. In the United States alone, there have been 258 travel related cases reported and an additional 259 in Puerto Rico, with a projected 1 in 5 to be infected on the island by year end. With these staggering growth estimations, the World Bank dedicated \$150MM to help fight the Zika virus.

The implications for the healthcare industry are significant. In this Alert you will find updated information on: History of the virus

· Number of infected by region

(Source: World Health Organization)

- · Associated medical issues, and
- Potential short and long-term risks to the insurance We hope that you find the below analysis useful.

transmitted virus is making headlines due to severe potential health concerns relating to birth defects. The actual virus, when contracted can often go unnoticed. In fact 80% of those infected often have no symptoms and those who are aware they have the virus often experience only mild symptoms. But the virus has spread rapidly in recent years and is being blamed as a cause of much more serious conditions including microcephaly and Guillian-Barre syndrome. It is these related risks that concern many insurers and health professionals.

Not a day goes by without a mention in the media about the serious implications of the Zika virus. The mosquito

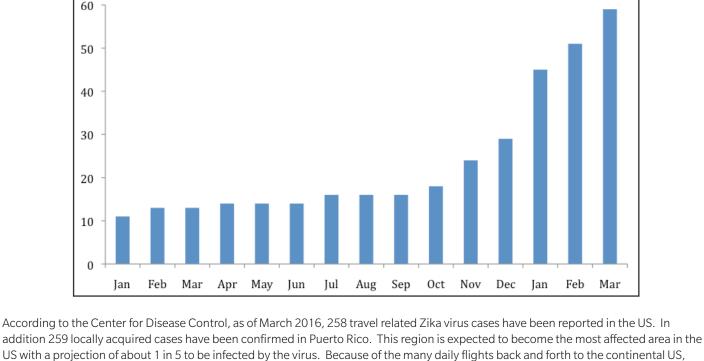
WHAT IS THE ZIKA VIRUS?



dengue and chikungunya viruses. Symptoms tend to be mild and can include fever, rash, joint pain and conjunctivitis, and are often confused with those of the flu. Besides through mosquitoes, the Zika virus can be transmitted from human to human through sexual contact; and also through blood transfusions which puts the blood supply at risk. There is no specific treatment or vaccine at this time but the World Health Organization is pushing for more research and development for a vaccine and better diagnosis. Very few cases were documented before 2007, but by 2013 the Zika virus had spread to French Polynesia, and by 2015 to the Americas.

Originally discovered in 1947 in Uganda, the Zika virus is mainly spread by the Aedes species mosquito, the same mosquito that spreads

In a March 2016 report, the World Health Organization (WHO) documented that 59 countries and territories have reported local transmission of the virus between January 1, 2007 and March 16, 2016. Figure 1 illustrates the recent rapid spread. The virus has most impacted the Americas with thirty plus countries having reported incidences. Brazil has especially been impacted. With modern day ease of global travel, health officials are concerned the virus will spread much more rapidly than viruses of the past. Many visitors to infected regions have recently brought the virus to other parts of the world and the WHO has published that France, Italy and the US have recently reported cases due to possible sexual transmission. (See Figure 2 for updated map of impacted areas) Figure 1: Cumulative Number of Countries / Territories with Reported Cases of Zika Virus Transmission 2015-2016



the threat of transmission is of concern especially in the South due to its climate and pockets of poverty.

but that is not true in other parts of the world.

THE RISK



Much is still unknown about the Zika virus. In addition to microcephaly, Zika is potentially being linked to Guillian-Barre syndrome, a disorder where the body's immune system attacks the nervous system. Other neurological effects are possible. In response, the FDA is issuing guidelines with regards to risks to the blood supply. Since symptoms can be mild and confused with other illnesses, a donor may not realize they are donating blood that has been infected. Fortunately there have not been reports of a tainted blood supply in the US,

As a result of the serious nature of global risk, the WHO has declared the microcephaly cases associated with the Zika virus a Public Health Emergency of International Concern (PHEIC). With no vaccine or cure the virus and its risks are expected to continue to spread. The WHO is predicting up to 4 million Zika cases in the Americas over the next year and the World Bank is projecting the short-term economic impact for 2016, in Latin America and the Caribbean to be about \$3.5 Billion or 0.06% GDP. Mexico, Cuba, Dominican Republic, Brazil, Argentina, Belize and Jamaica are all projected to experience negative impacts and countries that rely heavily on tourism could suffer much lost income. In response the World Bank is providing \$150MM to help fight Zika virus.

In the US companies have begun issuing travel advisories to employees regarding the risk of travel to infected countries. Florida issued a health emergency in several counties after at least 9 cases (in Feb) were detected all were believed to be contracted while traveling. The upcoming summer Olympics in Brazil is a big concern. The US Olympic Committee have given athletes the option to skip the event

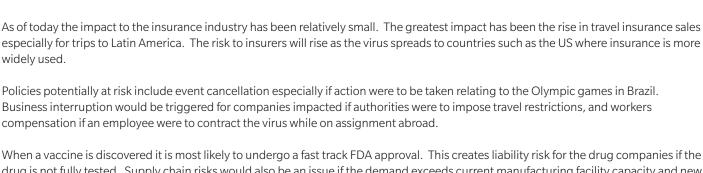
and the International Olympic Committee and Brazil have even been asked by some to consider canceling the summer games.

especially for trips to Latin America. The risk to insurers will rise as the virus spreads to countries such as the US where insurance is more widely used. Policies potentially at risk include event cancellation especially if action were to be taken relating to the Olympic games in Brazil.

(Note: Zika Virus can be present in other countries)

POTENTIAL IMPACT TO THE

INSURANCE INDUSTRY



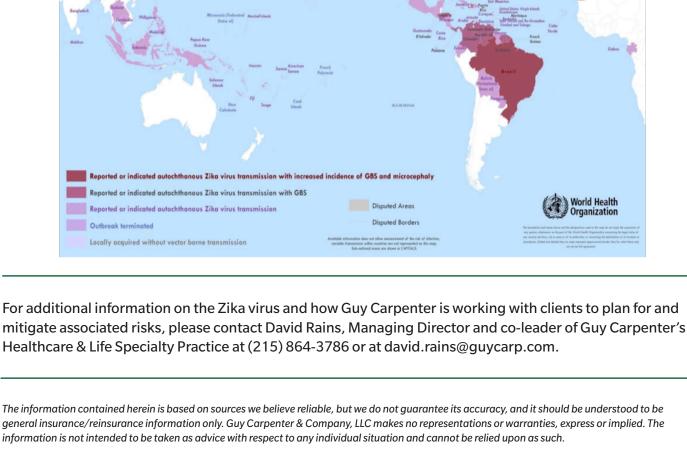
drug is not fully tested. Supply chain risks would also be an issue if the demand exceeds current manufacturing facility capacity and new plants or manufacturing channels were to be used, additional issues for insurers to consider. But the most concerning impact to the industry could lie with health insurers and the potentially high unknown long-term costs caring

for babies born with microcephaly and possibly for those who develop Gillian-Barre and other yet-to-be determined health conditions.

With the risk of spread at the upcoming Olympics and the warm weather mosquito rich summer months coming in the US, the increase of spread is inevitable. Insurers need to begin to consider the implications now and prepare for impact.

Figure 2: Countries, territories and areas reporting Zika virus, microcephaly and Guillian-Barre syndrome, 2007-2016

Health insurers should consider potential losses if the virus were to cause permanent and life threatening damage.



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