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The issue of Zika Virus in El Salvador

El Salvador the country.

El Salvador is the smallest country in Central America. Having one of its boarders being the Pacific Ocean. The population sits at just above 6 million (World Fact Book, 2018) people. The majority of the country is mountainous; despite this, the country is about 75% agriculture (World Fact Book, 2018). While the country was one of the most densely populated countries, over the years the population has aged. The population at the moment is at a replacement rate (World Fact Book, 2018) far from the average of 6 women that it was at in 2008 (World Fact Book, 2018). This means that the amount of children being born is only replacing the population to sustain the country is declining. There for the population is not growing. Like many of the countries of Central America, drugs trafficking is a huge issue in the country, mainly cocaine (World Fact Book, 2018). Even with El Salvador's small size it has the four largest economy of Central America (World Fact Book, 2018). El Salvador is a country much like the first world countries that we know, the population is majority catholic at 50% (World Fact Book,

2018). The country's government is much like our own, a presidential republic (World Fact Book, 2018).

What is Zika virus?

Zika virus is a virus that is spread mostly by mosquito bites (Zika Virus, 2017). While the outbreak of Zika virus was first seen in 2007 in Asian and African countries, it was not until 2015 that it made its way to Central America (Demir & Kilic, 2016). When the virus enters the body the patient usually describes themselves as being under the weather and may have a rash (Demir & Kilic, 2016). Why the disease is so important to track is because of the ability for the virus to be transmitted from mother to unborn child (Centers for Disease Control and Prevention, 2018). The third most common way that the virus is transmitted is through sexual contact (Centers. For Disease Control and Prevention, 2108). The symptoms seen in the clinical setting tend to be mild, which is one of the reasons why the virus is difficult to diagnose right away. For reasons that are uncertain



Cropped from CDC world map of Areas with Risk of Zika virus. <u>https://wwwnc.cdc.gov/travel/page/world-map-areas-with-zika</u>

Zika virus is especially detrimental to pregnant women. In the unborn fetus, it causes microcephaly or death (De Fátima, Aragão, Holanda, Araújo, & Valença, M. M., 2017). The virus itself has not claimed many lives other than those of unborn fetuses (Demir & Kilic, 2016). As far as the virus itself. There is not much known about how it affects the human body. Researchers do know that the virus is self-limiting (Demir & Kilic, 2016). Meaning that the virus is stopped from spreading by its own ability to reproduce.

The issue with Zika virus in El Salvador.

With the decline of reproduction in recent years Zika virus poses a special threat to El Salvador. The increased risk of death and microcephaly for an unborn fetus and with transmission being so easy to happen without the patients' knowledge. Zika virus could potentially cause a declining population to continue down at an even more alarming rate. Due to the ability for Zika virus to also spread through sex



Cropped from the Virginia Department of Health. <u>http://www.vdh.virginia.gov/zika/</u>

(World Fact Book, 2018) and the everchanging modes of transmission (Rodriguez-Morales, Bandeira, Franco-Paredes, 2016), it can be very difficult to track where the starting point of the virus occurred. The other true difficulty with Zika virus is that the only true way to diagnose the virus is with an antibody test. This test requires the virus to be separated in order to positively say that a patient has Zika virus (De Fátima, Aragão, Holanda, Araújo, & Valença, M. M., 2017). The other issue with Zika virus clinically is that

true diagnosis is too expensive to make it worth it for most health care facilities (Younger, 2016). This makes having a true positive clinic diagnosis very hard. This makes tracking the disease difficult.

What is our answer?

To prevent the continual spread of Zika virus in El Salvador there needs to be several interventions. Education to start with. The number one defense for preventing Zika virus is using bug spray (World Fact Book, 2018). With increased education about how to fend off Zika virus hopefully, the spread of the virus will slow. The education spans past the population. Education of health providers in the area of the clinical symptoms of Zika virus (World Fact Book, 2018), this will allow quicker diagnosis of the virus and contain outbreaks. Other than education of the population things such as taking control of the mosquito population. Things like making sure that there is no standing water (Centers for Disease Control and Prevention, 2018). Also making sure the population uses bug spray in order to cut down on mosquito bites (Centers for Disease Control and Prevention, 2018). Supporting things like personal protection during sexual activity will also help decrease the spread of Zika virus (Centers for Disease Control and Prevention, 2018)

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