

2017

Guam : Mumps

Taylor Covert

Augustana College, Rock Island Illinois

Follow this and additional works at: <http://digitalcommons.augustana.edu/pubh100global>



Part of the [Diseases Commons](#), [Other Public Health Commons](#), and the [Public Health Education and Promotion Commons](#)

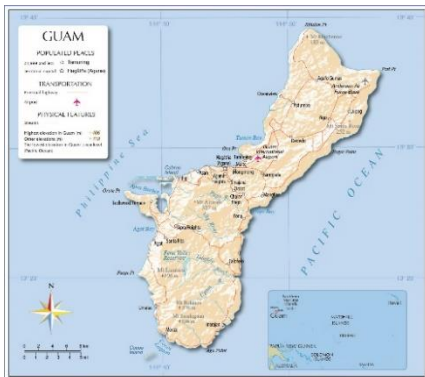
Augustana Digital Commons Citation

Covert, Taylor. "Guam : Mumps" (2017). *Global Public Health*.
<http://digitalcommons.augustana.edu/pubh100global/7>

This Report is brought to you for free and open access by the Public Health 100: Global Public Health Brief at Augustana Digital Commons. It has been accepted for inclusion in Global Public Health by an authorized administrator of Augustana Digital Commons. For more information, please contact digitalcommons@augustana.edu.

Low Vaccination Levels in Guam

Name: Guam



http://www.nationsonline.org/maps/Guam_map.jpg

Location: Near the Philippine Islands

Population: There are 162,896 people in Guam. 85% of them practice the religion of Roman Catholic while 15% practice another form. 37% of the population are Chamorros, 29% are Filipino, and 7% are white (“GUAM,” 2017).

Political Structure: Democratic

Major Challenges: Some major challenges in Guam include the lack of proper vaccinations of children ages 19 to 35 months, widespread Diabetes Mellitus, mumps outbreak, and a variety of invasive species including the Rhino Beetle (Paco, 2016).

Challenge Descriptions: Between 2009 and 2010, there was a large amount of previously vaccinated citizens that even though they had taken the proper preventative measures, still were diagnosed with mumps.

Epidemiology: It was later revealed that citizens that lived in a more crowded household and high student contact at schools were the main cause of the spreading of mumps. The recommended dose number throughout the population was at least 2. However, those that had received the 3-dose vaccine that accounted for mumps, measles, and rubella had a lower rate of contracting mumps than those who got the recommended doses. Between 2009 and 2010,

505 cases were reported. School children were the most at risk in the population (Nelson et al., 2013).

Identification: Mumps is characterized by high fevers and parotitis, or swelling of the parotid glands. Some cases are asymptomatic, and some can be severe, resulting in inflammation of the brain and deafness. When one case was identified, the government stepped in to add a third dose of the MMR vaccine in order to help stop the disease from spreading any further. Guam was put under surveillance and disease numbers were monitored. Though the government intervened as much as they could, some cases were not accounted for and therefore classified as non-cases, potentially altering the data and remaining a carrier of the disease.



https://access.tarrantcounty.com/content/main/en/public-health/disease-control---prevention/mumps/_jcr_content/par/heroimage_0.img.jpg/1481146617780.jpg

Personal Suggestions: I think an important step towards preventing another disease outbreak in Guam is to have a general public that is fully educated on the disease protocols and procedures. If citizens are aware of the correct dosage amounts recommended and the vaccinations they should be getting, then there would be no need to worry about the spreading of a potentially dangerous disease. It is also crucial to make vaccinations accessible to everyone who needs them. There is no point in having a preventative measure if not everyone is able to receive it.

References

- Cornelius, M. (2011). Guam Hospital Info. Retrieved September 14, 2017, from <http://www.ushospital.info/Guam.htm>
- Mahamud, A., Fiebelkorn, A. P., Nelson, G., Aguon, A., McKenna, J., & Villaruel, G., ... Gallagher, K. (October 2012). Economic impact of the 2009–2010 Guam mumps outbreak on the public health sector and affected families. *Vaccine*,*30*(45), 6444-6448.
- Nelson, G. E., MD, Aguon, A., Valencia, E., Olivia, R., Guerrero, M. L., Reyes, R., ... Fiebelkorn, A. P. (April 2013). Epidemiology of a Mumps Outbreak in a Highly Vaccinated Island Population and Use of a Third Dose of Measles–Mumps–Rubella Vaccine for Outbreak Control—Guam 2009 to 2010. *The Pediatric Infectious Disease Journal*,*32*(4), 374-380.
- Paco, K. (2016, February 21). Coconut rhino beetles eating their way through Guam Coconut rhino beetles eating their way through Guam. Retrieved September 28, 2017, from <http://www.kuam.com/story/31276171/2016/02/Sunday/coconut-rhino-beetles-eating-their-way-through-guam>
- The World Factbook: GUAM. (2017, October 07). Retrieved October 19, 2017, from <https://www.cia.gov/library/publications/the-world-factbook/geos/gq.html>