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Impact of Childhood Vaccinations Suspended Due to COVID-19

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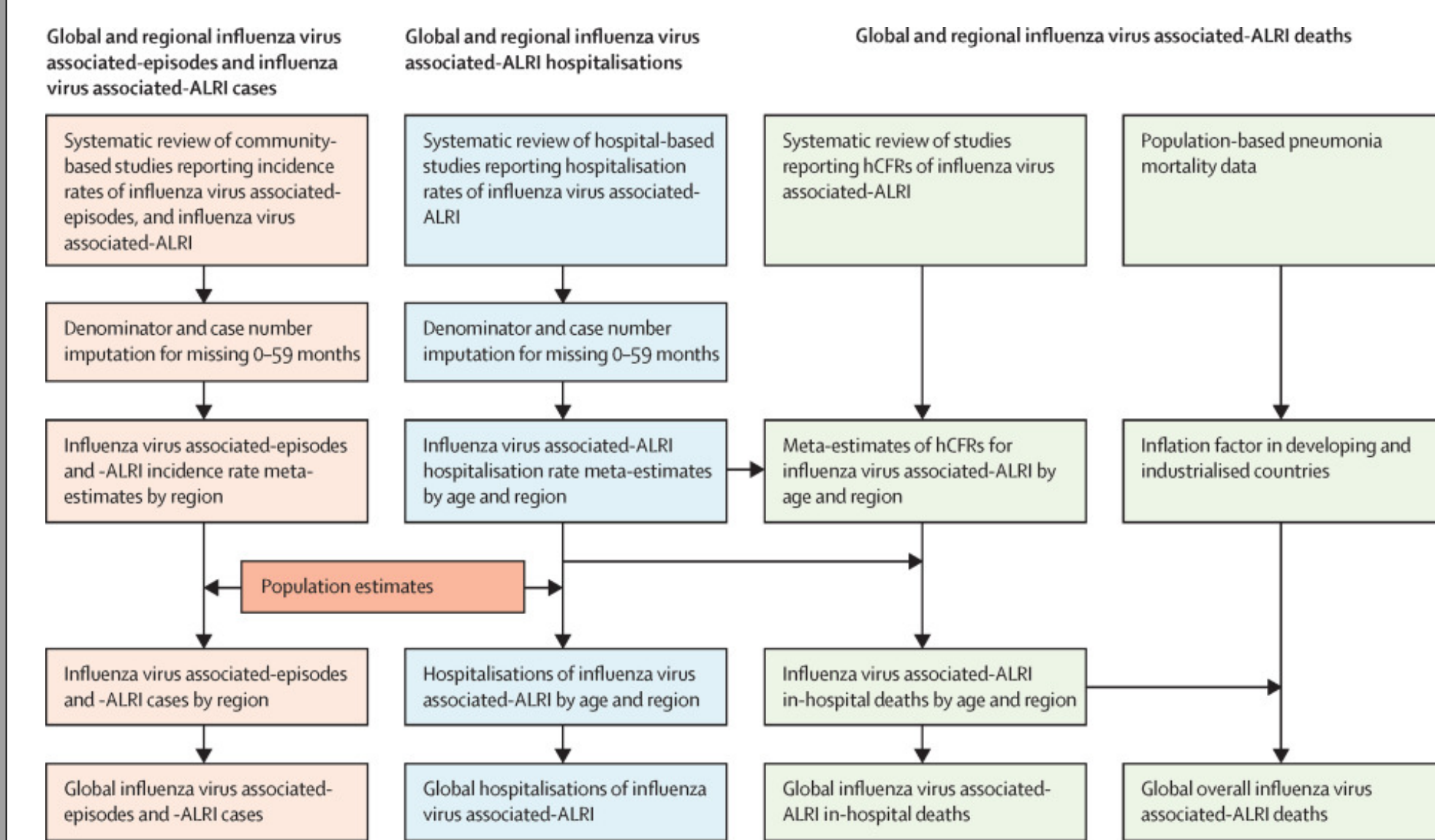
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Impact of Childhood Vaccinations Suspended Due to COVID-19

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Past Epidemics

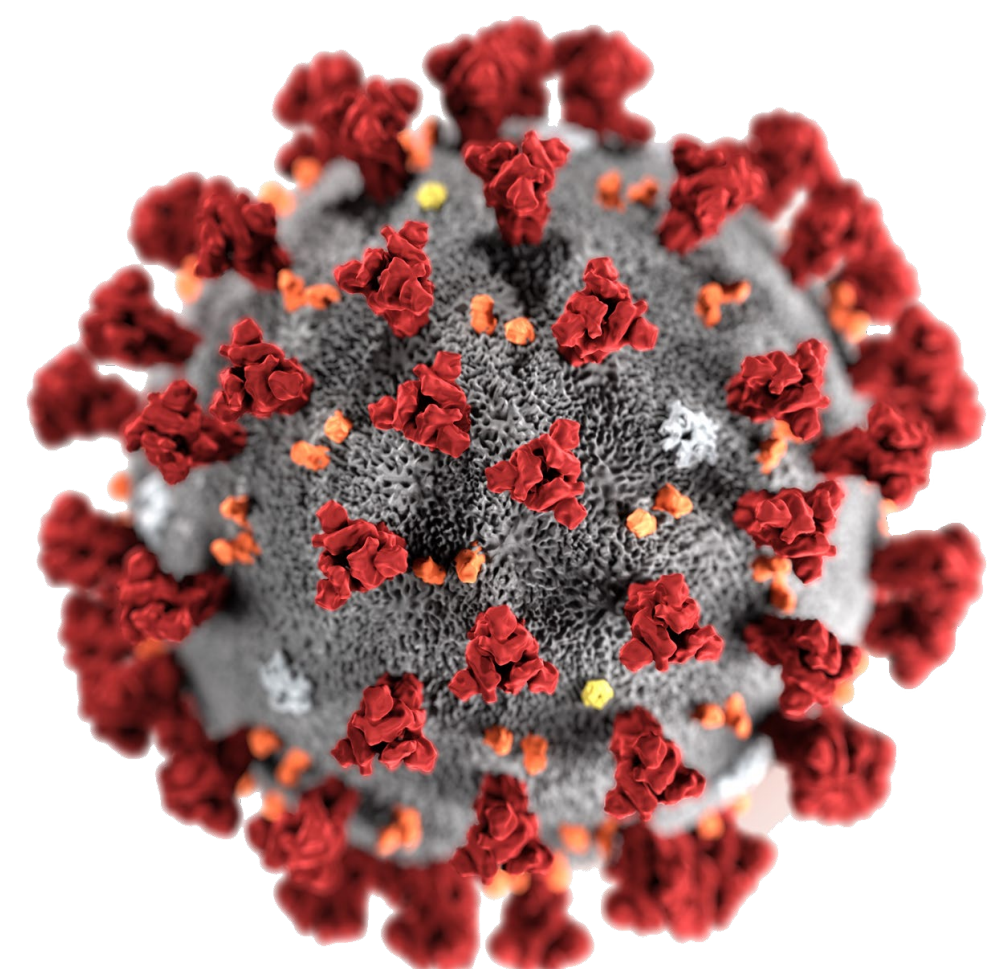
Seasonal Influenza is a contagious virus that affects the respiratory system or acute lower respiratory infection (ALRI) among children and adults. Some children who are ill with the virus can have a more serious case which can lead to pneumonia or even death. In the year 2008, a study showed that 20 million ALRI-associated influenza viruses and 1 million ALRI-associated extreme influenza viruses have developed worldwide in children under 5 years of age. In the year 2015, there was an estimated 138 million ALRI cases of children, and 22 million were severe ALRI with 0.9 million ALRI deaths globally.



Ebola virus disease (EVD) is a severe fatal illness affecting humans. The virus was first discovered in 1976, in the Democratic Republic of Congo. In 2014, West Africa was exposed to an outbreak of the Ebola virus which posed a major threat to the health of maternal women and children. Toward the end of 2013, Guinea has their first case of the EVD by an 18-month-old boy. The virus later spread to the neighboring countries of Liberia and Sierra Leone.

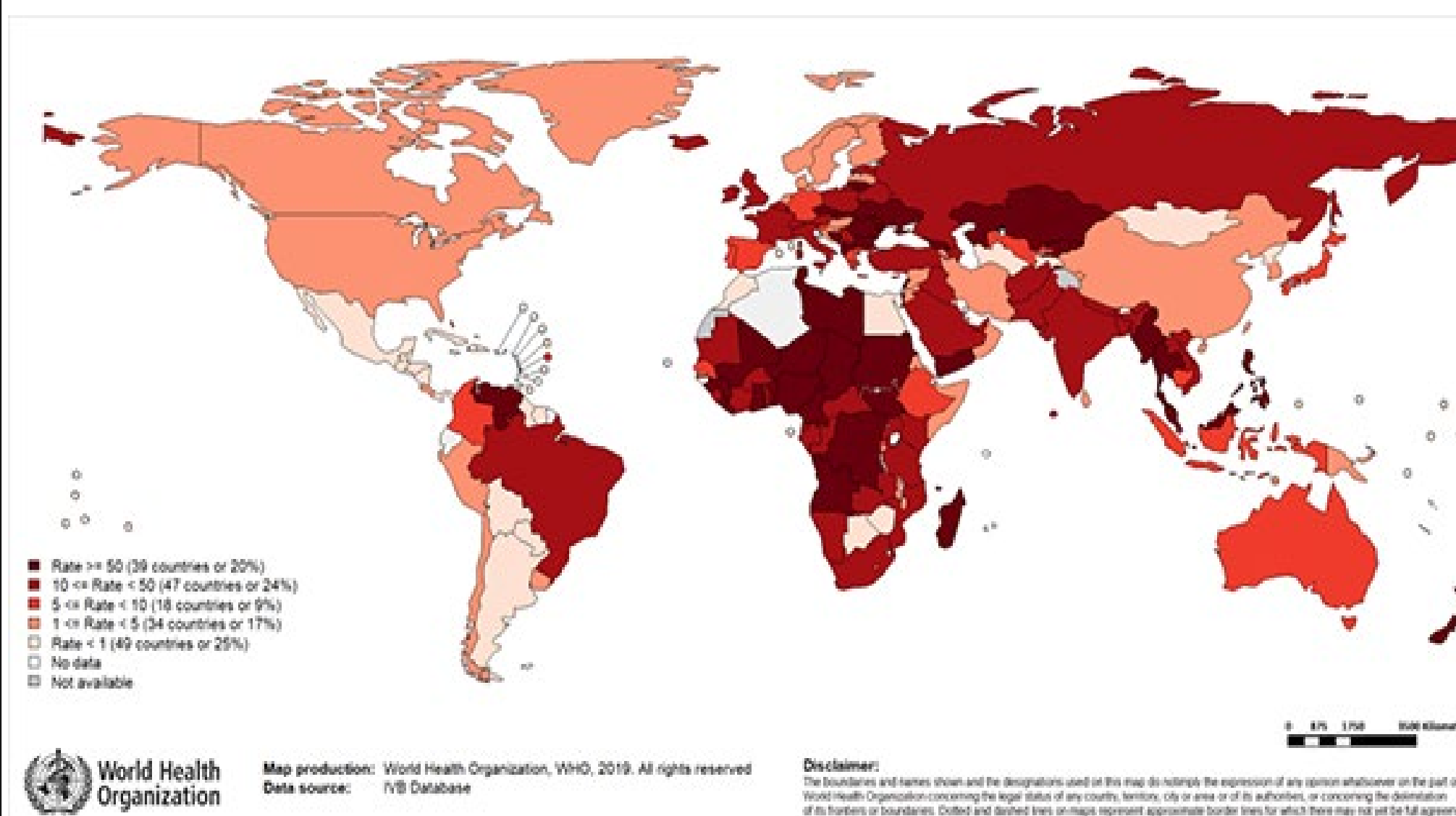
During the Ebola outbreak of 2014-2015 epidemic:

- On August 8th, 2014, the WHO declared the outbreak an international public health emergency
- On September 18th, 2014, with 5,000 reported cases and almost 2,500 deaths
- More than 21,000 cases and 84,00 deaths as of January 2015



Statistics of Child Mortality:

Measles, mumps and rubella (MMR) is a dangerous infectious disease which can cause fevers, red rash on the skin and deaths among children. Since the outbreak of the infection, it has been a global health issue for decades. In recent years, cases for measles had increase rapidly across the world. As of 2019, the WHO organization had reported that 500,000 confirmed cases were reported from 180 countries. The organization also stated Democratic Republic of the Congo, Madagascar and Ukraine have reported the highest numbers of cases as of 2019.



Since the outbreak of **MMR** during 2019, developing countries are still facing the outbreak as of 2020. As of August 12th, 2019, Angola, Cameroon, Chad, Kazakhstan, Nigeria, Philippines, South Sudan, Sudan and Thailand are still having an ongoing outbreak.

CDC: Around 9 out of 10 people who are not protected will become infected by the exposure to the measles virus. In 2017, measles caused an estimated 110,000 deaths. Possible complications include encephalitis (swelling of the brain), pneumonia, severe diarrhea and dehydration, and/or permanent disability. In developing countries, approximately 1 of every 100 children with measles will die from the disease or its complications.

Research Objectives

The purpose of this research paper is to address the concern of decreased infant and childhood vaccination rates, and the increase on mortality rates in developing countries during the COVID-19 pandemic of 2020. Due to the limitation and restriction of transportation of goods and service across the globe, there has been a reduction of shipment/visits for children in developing countries for routine vaccination. **Without these vaccines, this will affect the health of children from preventable treatment in the coming future.**

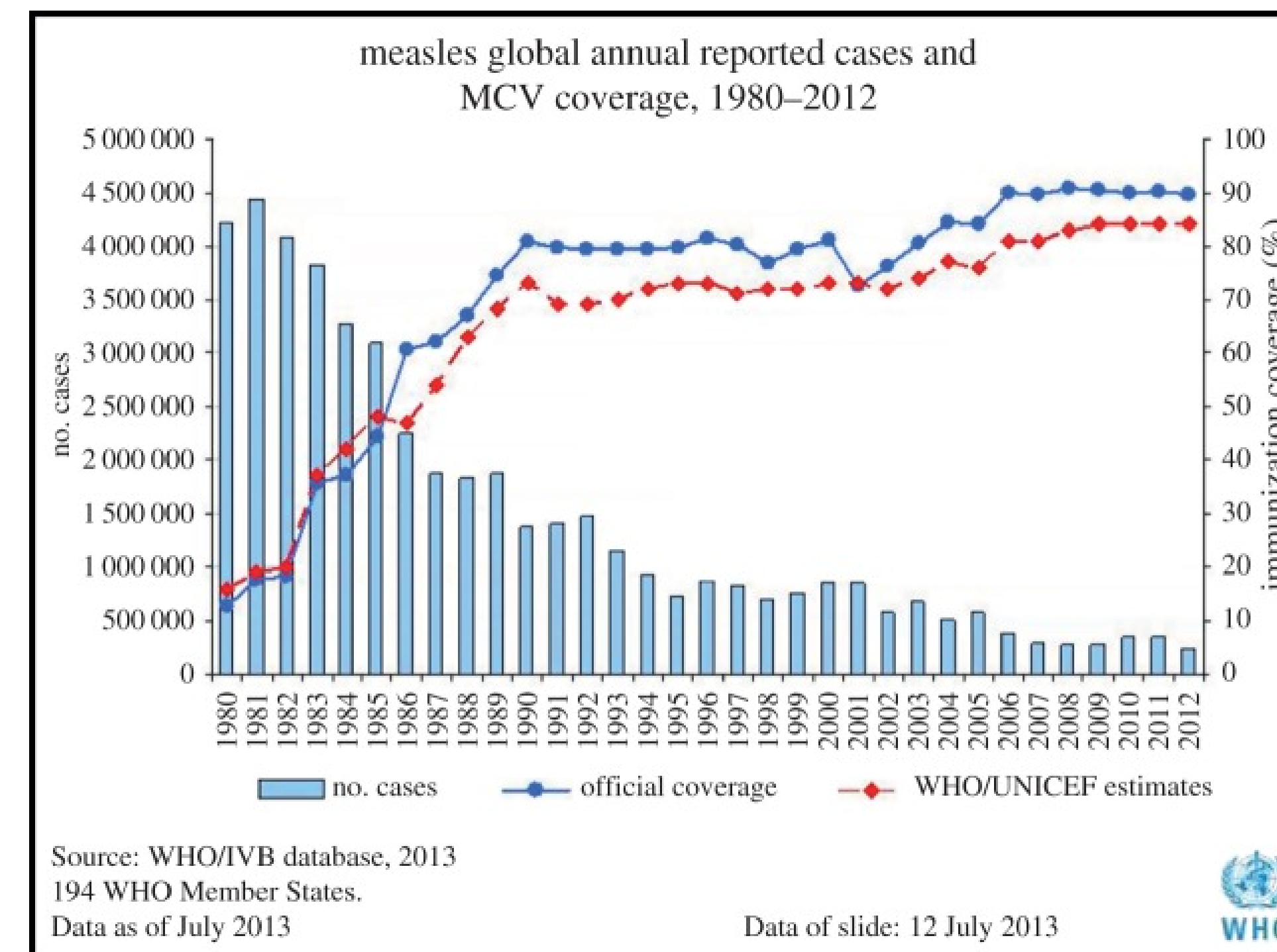
With this research, I hope to accomplish the concern to the public about the risk of limited supply of vaccination. By looking at secondary literature and literature reviews of past epidemic of outbreak across developing countries and the statistics of child mortality.

Current Status

- On March 26th, the World Health Organization (WHO) has announced that **governments must suspend preventive vaccination** programs briefly during the COVID-19 pandemic.
- The UN Children's Fund (UNICEF) spokesperson Marixie Mercado reported "a dozen countries are now at **risk of running out of supplies** including at least five countries that experienced **measles outbreaks in 2019.**"
- Due to the massive blockage in operation constraints from the COVID-19, there has been **70-80 percent reduction in vaccine shipment.**
- Over 117 million children** in 37 countries may miss out on receiving life-saving measles vaccine due to the COVID-19 outbreak.
- The Measles & Rubella Initiative (M&RI) stated that "Children younger than 12 months of age are **more likely to die from measles** complications, and if the circulation of measles virus is not stopped, their risk of exposure to measles will increase daily."

Impacts of Developing Countries

Vaccination has made a significant difference to public wellbeing over the last century. Wide awareness of vaccines against many major childhood infectious diseases has improved significantly since the development of the WHO Extended Immunization System in 1974 and the Global Alliance for Prevention and Immunization in 2000. Despite these achievements, about 6.6 million children and infants still suffer from death each year and nearly half of those deaths are due to illnesses, including pneumonia and diarrhea, which may be avoided by vaccines. While compliance of the initial kit of standard child vaccinations is almost as large in many low-and middle-income countries as in the developing world, pockets exist where that is not the case, especially in the poorest and most disadvantaged parts of the population.



Through the organization of WHO and UNICEF, developing countries had better access to packet vaccines to lower death rates among children in developing countries. As the world is faced with the COVID-19 pandemic, these organization are working together with other organization to provide information and access to proper infection control during these times.

"We could see even more outbreaks around the world than we saw last year, an even greater number of cases and even greater number of deaths," said by Dr Kate O'Brien, Director of the Immunization, Vaccines and Biologicals Programme at WHO.



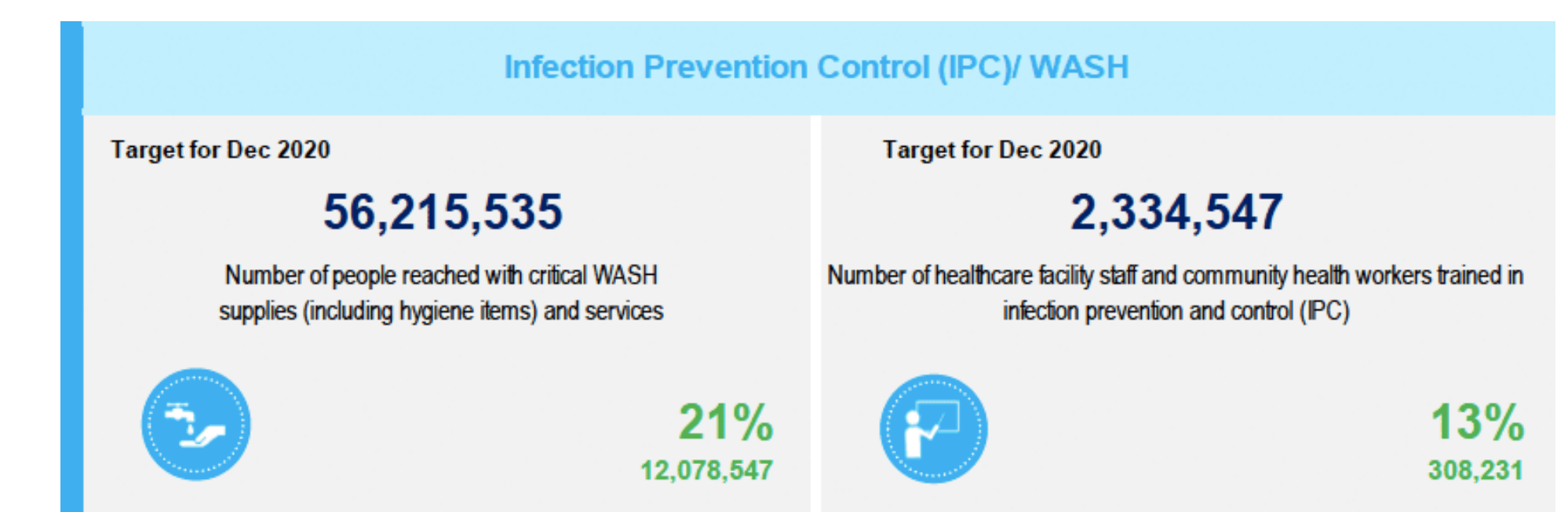
Future Implications

UNICEF will operate under the leadership of national governments and in close cooperation with WHO, humanitarian country teams, UN country teams and civil society partners to shield children and their families from exposure to COVID-19 and reduce mortality. The organization's current goal is ensuring that implementation members, including local civil society and national and international non-governmental organizations (NGOs), have the capacity to respond to and continue their valuable work on COVID-19.

- UNICEF response to COVID-19 reflects on the following national priority areas:
Strategic priority 1: Public health response to reduce novel coronavirus transmission and mortality
- Strengthening risk communication and community engagement (RCCE)
 - Improve IPC and provide critical medical and WASH supplies
 - Data collection social science research for public health decision-making

Strategic priority 2: Continuity of health, HIV, nutrition, education, WASH, child protection, gender-based violence, social protection and other social services; assessing and responding to the immediate socio-economic impacts of the COVID-19 response

- Supporting continued access to essential health, HIV and nutrition services for women, children and vulnerable communities, including case management
- Supporting access to continuous education, social protection, child protection, mental health and psychosocial support and gender-based violence services



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