History of Pandemics

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From Joshua Lederberg quoting that “the single biggest threat to men continued dominance on the planet is the virus” to Dwight Schrute in Season 3 Episode 15 of The Office saying “we need a new plague”. As we humans evolved, so did our viruses.

But first things first what is a pandemic? According to the Merriam Webster dictionary, the definition of a pandemic is “occurring over a wide geographic area and affecting an exceptionally high proportion of the population”. Communicable diseases existed during humankind’s hunter-gatherer days, but the shift to agrarian life 10,000 years ago created communities that made epidemics more possible. Malaria, tuberculosis, leprosy, influenza, smallpox, and others first appeared during this period. As, civilizations advanced towards globalization and industrialization, building cities forging trade routes and waging wars gave way to new impending pandemics. Here we will trace how pandemics evolved in the last hundred years.

1918: The Spanish Flu 1918

The avian-borne flu that resulted in 50 million deaths worldwide, 1918 flu was first observed in Europe, the United States, and parts of Asia before swiftly spreading around the world. At the time, there were no effective drugs or vaccines to treat this killer flu strain. Wire service reports of a flu outbreak in Madrid in the spring of 1918 led to the pandemic being called the “Spanish flu” By October, hundreds of thousands of Americans died and body storage scarcity hit crisis level. But the flu threat disappeared in the summer of 1919 when most of the infected had either developed immunities or died.

1957: Asian flu

Starting in Hong Kong and spreading throughout China and then into the United States, the Asian flu became widespread in England where, over six months, 14,000 people died. A second wave followed in early 1958, causing an estimated total of about 1.1 million deaths globally, with 116,000 deaths in the United States alone. A vaccine was developed, effectively containing the pandemic.

1981: HIV/AIDS

First identified in 1981, AIDS destroys a person’s immune system, resulting in eventual death by diseases that the body would usually fight off. Those infected by the HIV virus encounter fever, headache, and enlarged lymph nodes upon infection. When symptoms subside, carriers become highly infectious through blood and genital fluid, and the disease destroys t-cells. AIDS was first observed in American gay communities but is believed to have developed from a chimpanzee virus from West Africa in the 1920s. The disease, which spreads through certain body fluids, moved to Haiti in the 1960s, and then New York and San Francisco in the 1970s. Treatments have been developed to slow the progress of the disease, but 35 million people worldwide have died of AIDS since its discovery, and a cure is yet to be found.

2003: SARS

First identified in 2003 after several months of cases, Severe Acute Respiratory Syndrome is believed to have possibly started with bats, spread to cats, and then to humans in China, followed by 26 other countries, infecting 8,096 people, with 774 deaths. SARS is characterized by respiratory problems, dry cough, fever, and head and body aches and is spread through respiratory droplets from coughs and sneezes. Quarantine efforts proved effective and by July, the virus was contained and hasn’t reappeared since. China was criticized for trying to suppress information about the virus at the beginning of the outbreak. SARS was seen by global health professionals as a wake-up call to improve outbreak responses, and lessons from the pandemic were used to keep diseases like H1N1, Ebola, and Zika under control.

2019: COVID-19

On March 11, 2020, the World Health Organization announced that the COVID-19 virus was officially a pandemic after barreling through 114 countries in three months and infecting over 118,000 people. And the spread wasn’t anywhere near finished. COVID-19 is caused by a novel coronavirus—a new coronavirus strain that has not been previously found in people. Symptoms include respiratory problems, fever, and cough, and can lead to pneumonia and death. Like SARS, it’s spread through droplets from sneezes. The first reported case in China appeared November 17, 2019, in the Hubei Province, but went unrecognized. Eight more cases appeared in December with researchers pointing to an unknown virus.