

Maurice Hilleman: Why You Survived Childhood

Microbiologist Maurice Hilleman likely saved your life. He certainly saved the lives of millions of other people. Noted AIDS researcher Robert Gallo called him “the most successful vaccinologist in history.”

Hilleman’s story begins in his home town of Miles City, Montana. His mother and twin sister died at the time of his birth in 1919, and he ended up being raised by his uncle and aunt on the family’s farm. He credited the family chickens for contributing to his later success; chicken eggs have been long used to grow viruses for vaccines.

It was the depths of the Depression, and Hilleman didn’t believe he would be able to attend college. With the help of an older brother and scholarships he was able to attend Montana State University, graduating first in his class in 1941. He received a fellowship to attend the University of Chicago, and earned a doctorate in microbiology.

His first success was in developing a vaccine that worked against a strain of encephalitis that endangered American troops in World War II’s Pacific operations. He then discovered the “shift and drift” mutations of the influenza virus. He recognized that an outbreak in Hong Kong was a new strain that could kill millions. He and a colleague developed a vaccine against it, and 40 million doses helped prevent massive numbers of deaths in the United States; 69,000 Americans who did not get the vaccine died.

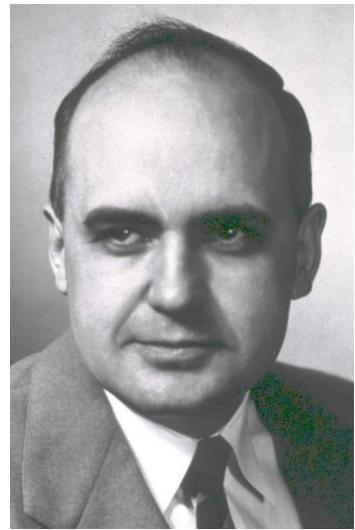
One vaccine started very close to home. In 1963, his daughter Jeryl Lynn caught the mumps. Hilleman cultivated the virus from his little girl, and used it to develop a mumps vaccine. He also developed it further into the current MMR (measles, mumps, rubella) vaccine, which was the first approved vaccine using multiple virus strains.

His work on a hepatitis B vaccine was licensed in 1981. Over 150 countries now use it, and the occurrence of the disease has been reduced by 95% in the United States.

There are fourteen vaccines used in routine vaccination schedules these days. Hilleman developed eight of them. In all, Hilleman is credited with developing forty experimental and licensed vaccines for humans and animals. Millions of people continue to owe him their lives, or at least he prevented them from being left with permanent disabilities such as deafness and blindness.

Sources:

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Dr. Maurice Hilleman

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