Film Screenings
Forgetting to Remember – Lessons from a Vaccine Lost
Frequently Asked Questions (FAQ)

Have any diseases beyond adenovirus significantly impacted the U.S. military?
The living conditions within which many military personnel live and work are ideal for diseases to spread due to the large populations living in barracks as well as coming into contact with other groups of people. In every era, the military has faced disease threats. Some examples include: smallpox during the Revolutionary War; Yellow Fever during the Spanish American War; influenza (also called "Spanish Flu") during WWI; and Japanese Encephalitis during WWII. Likewise, military personnel are often deployed to areas of the world where their risk is greater for exposure to diseases not common at home.

What are epithelial cells and why does it matter that they grew in the lab?
Epithelial cells are a type of cell that often lines surfaces of our body, including the surfaces of our mucosal and gastrointestinal (GI) tracts. As such, many viruses infect these cells. In the case of adenovirus, Dr. Hilleman needed a type of cell in which the virus would grow, so that is why he was seeking to grow epithelial cells.

Why is measles considered so dangerous if the most severe symptoms are relatively rare?
When many people are infected, the likelihood of some people experiencing severe disease and complications increases. One of the most horrible complications of measles is called subacute sclerosing panencephalitis (SSPE), a complication that does not cause symptoms until years after the initial infection. SSPE is always fatal. Likewise, measles damages immunologic memory, so people may lose protection against other diseases and it can take years for a person's immunologic memory to be restored.

Why is the adenovirus vaccine not available for the general public and only used by the military?
Anyone can get adenovirus; most children have had exposures in the first few years of life. The military uses this vaccine because it is cost effective. Recruits are living in close quarters and when they are ill, the government not only covers their treatment but also has fewer recruits available. Before the vaccine, often so many recruits would fall ill that large groups would need to restart basic training. Outbreaks also occur in settings like daycares and colleges, but to date, this vaccine is not recommended for members of the general population.

Why is the adenovirus vaccine a pill instead of an injection?
Although adenovirus is a respiratory infection, it can also infect the GI tract, and often adults do not have symptoms when their infection is in the GI tract. The first adenovirus vaccine was given as a shot, but the vaccines used by the military were given orally in the form of tablets, inducing an immune response without causing the person to develop symptoms of infection. Because immune cells monitor the whole body, a vaccinated person was still protected against a respiratory exposure.

Is there a risk that we could lose other vaccines the way the adenovirus vaccine was lost?
While many vaccines are made by more than one company, not all are, and if people do not use a vaccine or if the government requires changes to vaccines that are already licensed, other vaccines could suffer the fate of the adenovirus vaccine. One example is a Lyme disease vaccine. Limited recommended use and unfounded vaccine safety concerns led the company to stop making it. Similarly, a dengue vaccine was approved in 2019, but its limited use caused the manufacturer to decide to remove it from availability in the U.S. Unfortunately, people in certain regions of the U.S. get dengue each year, but they will not be able to protect themselves via vaccination.

FIND MORE INFORMATION

Check out our offerings and find screening-related resources: **hillemanfilm.com/screening-resources**

the vaccine makers project

Children's Hospital of Philadelphia® Vaccine Education Center