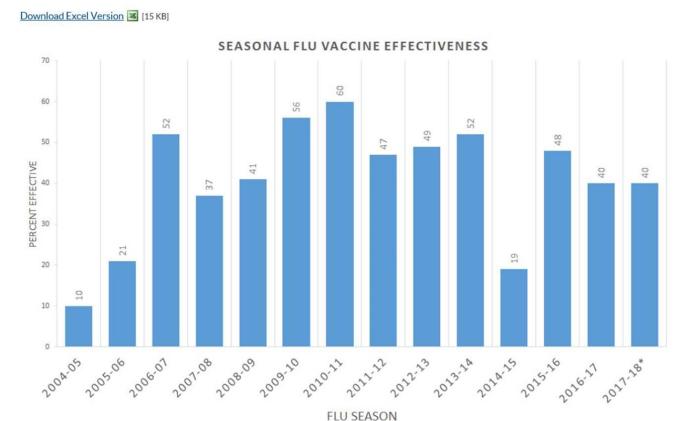
1. What is the success rate of the influenza vaccine in preventing the flu?

CDC has a group of five study sites across the United States, called the U.S Flu Vaccine Effectiveness Network, that measure the flu vaccine's effectiveness at preventing outpatient medical visits due to laboratory-confirmed influenza. Currently, this group provides our best estimate of how well the flu vaccine prevents flu. They started measuring this during the 2003-2004 flu season. I will include a figure from the CDC website that shows the estimates since the 2004-2005 season.

Figure. Effectiveness of Seasonal Flu Vaccines from the 2004-2018 Flu Seasons



Available at: <a href="https://www.cdc.gov/flu/professionals/vaccination/effectiveness-studies.htm">https://www.cdc.gov/flu/professionals/vaccination/effectiveness-studies.htm</a>. Accessed 10/10/2018.

2. Do you know which country had the highest death rate as a result of the 1918 influenza pandemic?

Because much of the world does not have reliable mortality data from 1918-1919, an accurate comparison of mortality rates is impossible. Some investigators have tried to estimate mortality rates in a few countries where there did appear to be more reliable mortality data. One such study by Ansart et al. compared the excess mortality due to the 1918-1919 pandemic in 14 European countries. They found that Italy had the highest excess mortality, at +172%, while Finland had the lowest, at +33%. I think that more broad comparisons of 1918 pandemic mortality rates from around the world would be severely limited by their heavy reliance on anecdotal data.

Source: Ansart *et al.* Mortality burden of the 1918-1919 influenza pandemic in Europe. Influenza and Other Respiratory Viruses 3(3), 99-106.