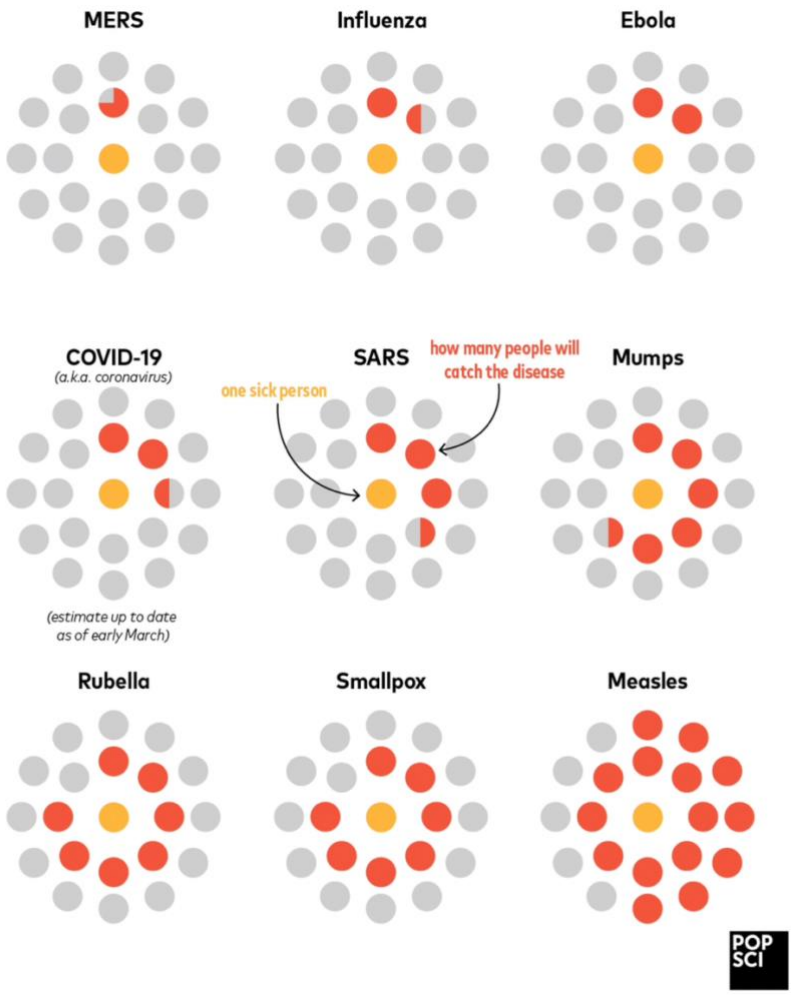
How infectious is COVID-19?

One quantity scientists use to measure how a disease spreads through a population is the "basic reproduction number," otherwise known as R0 (pronounced "R naught," or, if you hate pirates, "arr not"). This number tells us how many people, on average, each infected person will in turn infect. While it doesn't tell us how deadly an epidemic is, R0 is a measure of how infectious a new disease is, and helps guide epidemic control strategies implemented by governments and health organizations.



Coronavirus is on par with SARS in terms of infectiousness. *Infographic by Sara Chodosh*

If R0 is less than 1, the disease will typically die out: Each infected person has a low chance of passing the infection along to even one additional individual. An R0 larger than 1 means each sick person infects at least one other person on average, who then could infect others, until the disease spreads through the population. For instance, a typical seasonal flu strain has an R0 of around 1.2, which means for every five infected people, the disease will spread to six new people on average, who pass it along to others.

Because the disease is fairly new to medicine, researchers are still tabulating the data required to calculate R0 more or less in real time.

More Information

Source: Francis, Matthew R. “Just How Contagious Is COVID-19? This Chart Puts It in Perspective.” *Popular Science*, Popular Science, 20 Feb. 2020, www.popsci.com/story/health/how-diseases-spread/.