

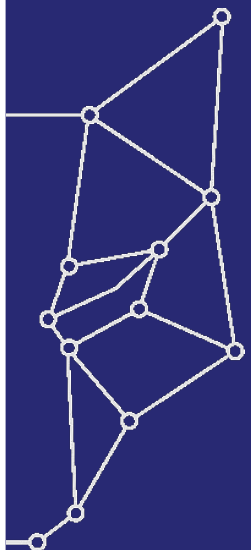
THE PATHOGENS

COVID-19

The virus is inhaled or absorbed through mucus membranes and attaches itself to the angiotensin-converting enzyme 2 (ACE2) receptor on cell membranes

- The virus injects its code through the membrane, duplicates itself, and causes coughing, expelling itself through the air to find other victims to infect
- **In a few months, spread to every continent on Earth**

WannaCry



- The malware circulates on the Internet, attaches itself to an open SMB port on a Windows system
- The malware injects its code through a vulnerability in Windows, duplicates itself, scans for other open SMB ports on the network, and attacks those victim hosts, as well
- **Spread to over 230,000 computers in 150 counties *in a single day***

THE PREVENTION

- Avoid unnecessary travel – stay only around immediate family members
- If sick, immediately isolate yourself
- Avoid unnecessary contact (shaking hands, etc.)
- Wear masks in public to reduce spray of mucus/water containing virus
- When available, get vaccinated

- Limit unnecessary internet traffic - restrict connections to only trusted devices *
- If a device becomes infected, immediately remove it from the network *
- Block unneeded network protocols *
- Filter incoming and outgoing network traffic *
- Patch and use malware removal tools

* These are difficult to do at scale with traditional “flat” networks