SOURCES:

CORONAVIRUS/COVID-19 FACT SHEET
March 13, 2020

- **CONTAGIOUSNESS**
  - Everyone can contract the disease, young and old. No one is immune. However, there is some evidence that different age groups might be more or less susceptible (i.e., younger people seem to make up a fewer number of the identified cases).
  - Each infected person is likely to infect at least 2.5 others (for comparison, those with the seasonal flu infect about 1.3 other people)
  - People are most contagious when they're exhibiting symptoms
    - Nonetheless, it can also spread when people are asymptomatic; however, this form of transmission may be less common
    - It can also be contracted by touching contaminated surfaces/objects and then touching one's face; though, this form of transmission may be less common
  - The virus is transmitted through two primary ways:
    - Person-to-person contact (i.e., within 6 feet of each other)
    - Through respiratory droplets (i.e., when people sneeze or cough) – This means that the tiny droplets remaining in the air for up to 3 hours *after* the infected person leaves that space can still infect people
- **SIGNS OF SICKNESS**
  - Symptoms emerge 2-14 days after exposure
  - Primary symptoms typically include: a fever, cough, shortness of breath
    - Other symptoms: sluggishness, chills, a sore throat, and/or an achy body
    - If you feel a persistent pain or pressure in your chest or have difficulty breathing, you should seek emergency medical help immediately
- **THREAT TO PERSONAL HEALTH**
  - About 80% of infections are mild or asymptomatic, 15% are severe infection (requiring oxygen), and 5% are critical infections (requiring ventilation)
    - In the severe conditions, the virus causes fluids to build up in the small air sacs of the lungs, which restrict how much air the lungs can take in. Consequently, this can reduce the oxygen supply to vital organs, which can cause death (i.e., acute respiratory distress syndrome; ARDS)
  - Currently, the morality rate of this disease is between .7-3.4% (estimates are hard to determine in the early stages of an outbreak).
    - Based on current projections, it's expected that the coronavirus may kill between 200,000 and 1.7 million U.S. Americans – depending on the measures people and the U.S. government take to quell the outbreak
    - Relatedly, even for those it doesn't kill, it's possible that between 2.4 million and 21 million U.S. Americans would require hospitalization – when the US only has 925K staffed hospital beds.
  - People over the age of 60 are particularly susceptible to the more severe outcomes:
    - Older people are twice as likely to have a serious illness result from infection
    - Former FDA leader: "Everyone over 60 should become a hermit for a month"
    - Current U.S. CDC: "older people should stay at home as much as possible"

    - People with chronic illnesses are also more susceptible. For a breakdown, here are some of the fatality rates for those with other health conditions (this is based off a study conducted in China):
        - 10.5% for those with cardiovascular disease
        - 7.3% for those with diabetes
        - 6.3% for people with chronic respiratory diseases such as COPD
        - 6.0% for people with hypertension
        - 5.6% for those with cancer
- **THREAT TO NATIONAL HEALTH**
    - Experts anticipate anywhere from 20-50% of the US population will be infected
    - Unlike other diseases – where that infection rate is spread out over time – we're experiencing a pandemic, where the virus is spreading so fast that everyone is getting sick near simultaneously
    - Although the fatality rate is somewhat "low," this is because we are able to treat patients with more severe forms of the illness. Left untreated, death rates will climb
    - For 10-20% of all infected, they will need hospitalization
        - The U.S. has about 45,000 ICU beds. In a "moderate" outbreak (which is about the best we can ask for now), about 200K Americans would need one
        - This very issue of over-taxed hospitals is happening in Italy right now. Their infection rate is so high that doctors are literally deciding who lives and who dies; they simply don't have enough equipment or personnel to treat the sick
- **WHAT CAN YOU DO?**
    - First, we CAN make a difference. What is important now is not to stop the pandemic – the virus is going to spread on its own – but we can SLOW IT
        - The concern right now is about not having enough resources to treat the massive influx of sick people. Thus, if we can slow the spread of the disease, we can make sure the maximal number of people get treatment while gaining time to come up with a vaccine
        - South Korea and Japan have done an exemplar job at this already and have been estimated to save thousands of lives by their extreme measures to reduce the speed at which the disease spreads
    - If you think you might be sick, first CALL the hospital and explain your symptoms. Only go in if they recommend that should you come in
    - Socially distance yourself from others – this is probably the most proven tactic
        - In general, try to avoid public activities such as traveling by airplane, going to movie theaters, attending family events, shopping at crowded malls, and going to religious services
        - Try to maintain 6 feet from others when out in public
        - If you have to do a socially congested activity (e.g., shop), try to do it late at night or early in the morning when fewer people are around
    - Wash your hands regularly – this really does help slow the spread of disease!
    - Wipe down objects or surfaces touched regularly
    - Avoid touching your face
    - Cough/sneeze into a tissue – and throw it away after that. Use your elbow otherwise

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