Confronting COVID

Nilesh Kalyanaraman, MD, FACP
Health Officer
Anne Arundel County Department of Health

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Principles

- Suppress spread of virus to:
  - Keep people healthy by preventing illness and death
  - Allow school to open in person
  - Keep businesses open
  - Promote mental and social well being

- These goals shouldn’t be in tension, when we control the spread, school and business do much better

- Investment
- Prevention
COVID-19 Overview

- SARS-CoV-2 virus is a new virus to humans
- First discovered in China in December 2019
- First case in Anne Arundel County March 11
- As of November 19, there have been
  - 14,931 cases
  - 276 deaths
COVID-19 Symptoms

Symptoms occur approximately 2-14 days after exposure with an average of 5 days. Symptoms can be mild to severe:

- Fever or chills
- Cough
- Shortness of breath or difficulty breathing
- Fatigue
- Muscle or body aches
- Headache
- New loss of taste or smell
- Sore throat
- Congestion or runny nose
- Nausea or vomiting
- Diarrhea

If you have symptoms...

- Don’t dismiss them
- Get tested immediately
- Quarantine while you wait for results
- If you’re positive the Health Department will contact you
- If you’re negative continue to quarantine
- Regardless of the cause of your symptoms, seek medical help if you need it
Progression of Covid

- Recovery - Most people infected with COVID-19 have mild to moderate symptoms and fully recover within 2 weeks
- About 10-15% of cases progress to severe disease requiring hospitalization
- 5% become critically ill
Long Term Health Effects of COVID-19

• Most people who require hospitalization have long lasting symptoms
• Common symptoms
  • Fatigue
  • Shortness of breath
  • Cough
  • Joint Pain
  • Chest pain
• Less common symptoms
  • Cognitive Impairment
  • Depression
  • Muscle aches
  • Headache
  • Fever
  • Palpitations
Leading Cause of Death

- 4th leading cause of death in Anne Arundel
- 3rd leading cause of death in the U.S.

*Deaths as of 10.19.2020
New Cases per 100,000 per day
Anne Arundel County

New Cases per 100,000 per Day, Anne Arundel County

[Graph showing daily new cases per 100,000 over a period from April 1 to December 31, with data points for each day.]
Hospitalizations - Anne Arundel

COVID-19 Patients by Day

- Acute Care Census
- 3-Day Moving Average Acute Care
- ICU Census
- 3-Day Moving Average ICU
- Total Census
- 3-Day Moving Average Total Census
Hospitalization - State

ICU and Acute Hospital Beds for COVID-19, Currently in Use

- ICU Beds
- Acute Beds
- Total Beds

Hospitalizations, Current
Percent Positive

Daily Percent Positive, Past 4 Weeks

[Graph showing the percent positive over time with a 7-day moving average line]
Deaths

Deaths By Week
High Risk Locations

**High Risk Locations**

- Work Outside the Home
- Indoor Retail/Shopping
- Indoor/Outdoor Dining
- Outdoor Recreation

Number of Responses

- 9/20
- 10/4
- 10/18
- 11/1
Recovery Dashboard

- Case rate: Steady increase for 3 months with steep increase in last 3 weeks
- Acute Hospitalizations: 4 week increase
- ICU: flat
- Deaths: Increased rate over last 6 weeks
- Percent positivity: 6.5%
- Infection rate at 1.22
- Contact Tracing Data:
  - Indoor and outdoor dining increasing as disproportionate location for cases
  - Work outside the home
  - Family gatherings
Key Principles

- Hospitalizations are increasing rapidly and at this pace will exceed the number of beds in the state in early 2021 (projections are based on current state)

- 2+ week delay between each step: Cases --> Hospitalization --> ICU --> Death

- The effectiveness of our actions multiply over time - acting sooner will save many more lives
Hospitalization Projections: 3 wk
Hospitalization Projections: 6 mo

The pathway most consistent with current hospitalization data is one that leads to peak hospitalization levels of around 15,000 assuming no further modifications of behavior.

Note that the worst case outcomes of needing more than 30,000 beds is the path where we continue to go up at the rate we are going, slowing things now makes it less likely we reach those heights.

*This includes the fact that they actually closed schools for several weeks and implemented other social distancing measures in the fall during the worst of the outbreak [https://www.influenzaarchive.org/cities/city-baltimore.html](https://www.influenzaarchive.org/cities/city-baltimore.html)*
Recommendations: Individual Actions

- Wear a mask when around others not in your household
- Avoid gathering in indoor spaces with others outside your household
- Limit activity and travel
- Get tested if you have symptoms or are concerned about exposure
- Thanksgiving celebration with your household only
Recommendations: Public Health Actions

- Establish system to provide Covid vaccines when available
- Address concerns about vaccine safety
- Increase use of rapid testing
- Focus on equity by providing targeted interventions to disproportionately affected groups
Recommendations: Targeted Actions

- Closing venues that lead to high numbers of contacts such as restaurants, bars, movie theaters, religious services, etc.
- Limiting gathering size to 10 people indoors
- Increased enforcement
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