Update for Week of August 24, 2020 to the Joint Statement on COVID-19 From Lung Cancer Advocacy Groups

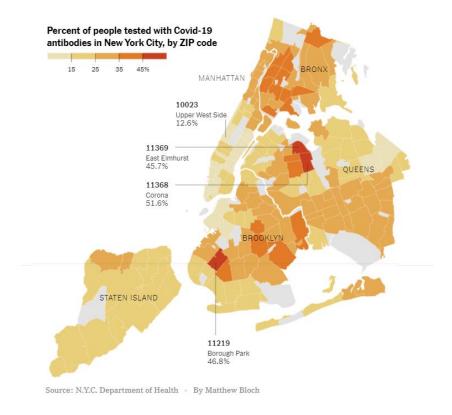
It has been more than 6 months since the first cases of COVID-19 hit the United States. We issued our first update on March 3, a week before the World Health Organization declared a global pandemic on March 11. As of August 24, 2020, cases in the United States continue to rise unabated, with over 5.6 million total cases and 175,000 deaths. Countries in Western Europe that had seen a decrease in case load have recently seen small outbreaks, indicating that community spread continues to be a high possibility.

So we are left to wonder: when can we resume normal activities in our lives?

The straightforward answer to that question is when we have achieved a reasonable level of herd (or community) immunity, which occurs when a high percentage of the community is immune to a disease through vaccination and/or prior illness (natural infection). Herd immunity is critical because it not only prevents the spread of infection but also protects people who may not be able to receive a vaccine (for example, the elderly or the severely immunocompromised in whom the immune system is unable to mount a protective response against the virus).

Epidemiologists are hard at work figuring out what levels of herd immunity will protect us from SARS-CoV-2. Initial models suggested that the percentage of people who need to be immune to the virus to achieve herd immunity was <u>around 70%</u>. However, recent research suggests a lower threshold, on the order of <u>only 40%</u>. It is extremely important to keep in mind that no matter the threshold of immunity required, these estimates are based on mathematical models and not true population-based studies.

Our current level of *potential* immunity to SARS-CoV-2 (the virus that causes COVID-19) is measured using an antibody assay that detects past exposure to the virus whether or not a person had symptoms of COVID-19. Herd immunity through natural infection may depend on location. For example, levels of herd immunity may be lower in rural areas where people are more spread out than in cities, which are more crowded. Also, older people may be more susceptible to the virus and succumb to the disease, whereas younger people may recover from infections and add to the "pool" of herd immunity. Recent research from a COVID-19 hotspot, New York City, looking at the percentage of people who are "antibody-positive" shows a huge variation within the five boroughs of the city. It is therefore possible that the harder hit areas, such as parts of Brooklyn and Queens, may be close to achieving a herd immunity threshold whereas other parts of the city may not (assuming that the antibody tests are accurate and antibodies are long-lasting). This is especially important to keep in mind because it clearly demonstrates that achieving a high percentage of immune individuals through natural infection is not an easy task and comes with a price (please refer to our past update on seropositivity from July 13, 2020).



We are interested in knowing what topics we should cover in future updates. Please share your thoughts with us by taking this short (1-2 minute) anonymous survey.

https://www.surveymonkey.com/r/LungAdvocacy COVID19 needs

Resources and websites

- 1. IASLC's Guide to COVID-19 and Lung Cancer
- 2. The National Cancer Institute has a special website for COVID-19 and emergency preparedness. <u>COVID-19</u>: What People with Cancer Should Know
- 3. We are following updates provided by the <u>World Health Organization (WHO)</u> and the US <u>Centers for Disease Control and Prevention (CDC)</u>
- 4. Johns Hopkins COVID-19 Resource Center
- 5. Interactive map of US COVID-19 cases by state
- 6. <u>The One-Two Punch: Cancer And COVID-19</u> (an important perspective for cancer patients)
- 7. You can find information specific to your state or city or town on your health department's website.
 - Directory of state department of health <u>websites</u>
 - Directory of local health department websites
- 8. American Medical Association <u>resources</u> for healthcare providers.











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