EFFECTS OF AIR POLLUTION ON COVID-19

ASIAN PACIFIC ISLANDER FORWARD MOVEMENT

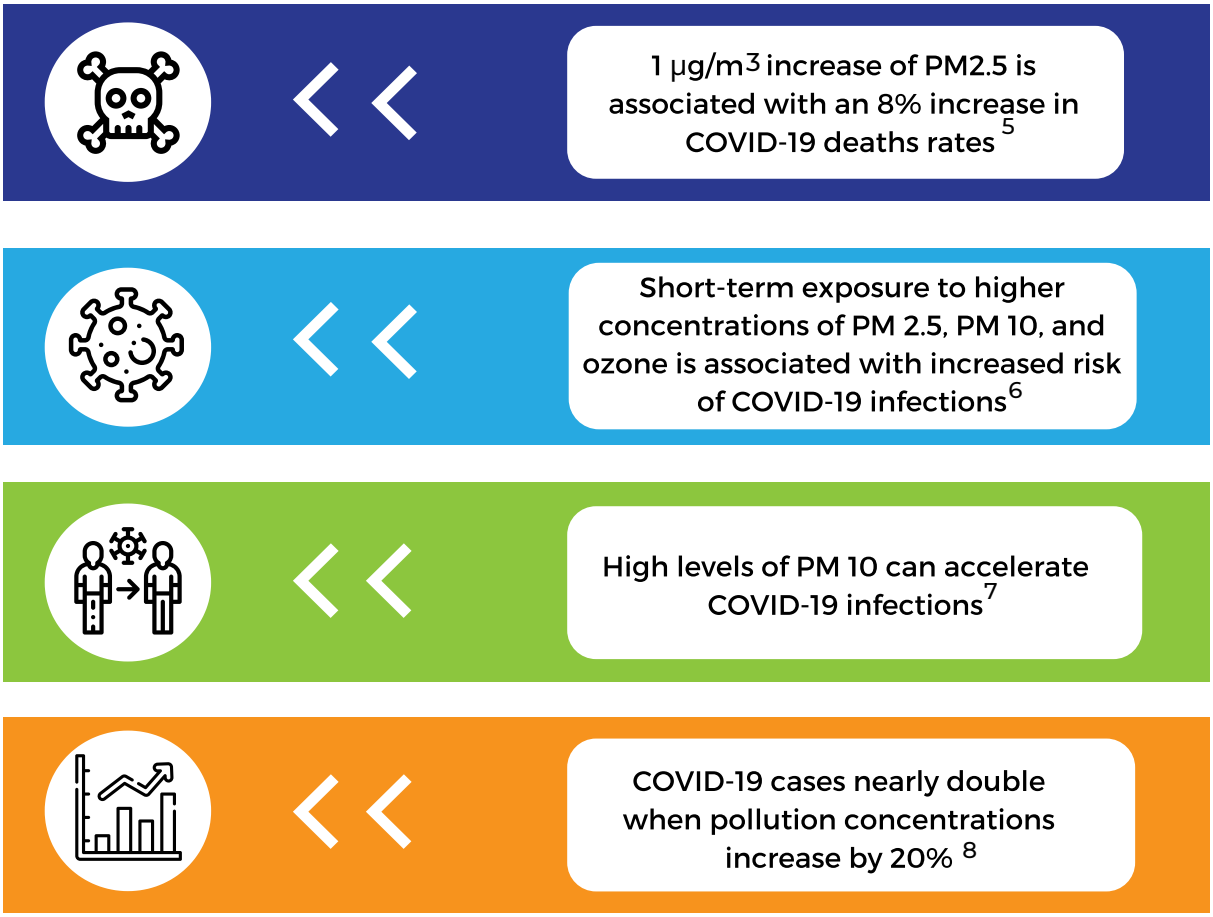
BACKGROUND

Studies have found that air pollutants exacerbate COVID-19 mortality[1] and transmission rates.[2] COVID-19 and air pollution both affect the respiratory system which leads to deadly consequences in regions heavily polluted by air toxins. With residents living in one of the most polluted areas of the nation, COVID-19 disproportionately affects those who live in the Los Angeles Metropolitan area.

DISPROPROPORTIONATE IMPACTS

According to the American Lung Association, the Los Angeles Metropolitan area has some of the worst air quality in the nation. It was ranked 4th for annual PM 2.5 exposure and 6th in 24-hour PM 2.5 exposure.[3] Also, it remains the worst ozone polluted city for the past couple of decades.[4] High levels of air pollution can extend the distance and residency of COVID-19 particles in the air, increasing the spread of the disease and exacerbating the mortality rate of COVID-19.

HOW PARTICULATE MATTER AFFECTS COVID-19



1. Wu, X., Nethery, R., Sabath, B., Braun, D., & Dominici, F. (2020, January 01). Exposure to air pollution and COVID-19 mortality in the United States: A nationwide cross-sectional study (https://www.medrxiv.org/content/10.1101/2020.04.05.20054502v1) *Article has not been peer-reviewed
2. Zhu, Y., Xie, J., Huang, F., & Cao, L. (2020, July 20). Association between short-term exposure to air pollution and COVID-19 infection: Evidence from China. (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7159846/) *Peer-Reviewed
3. State of the Air, 2020. American Lung Association, pg. 5. (http://www.stateoftheair.org/assets/SOTA-2020.pdf)
4. Ibid.
5. Wu, X., Nethery, R., Sabath, B., Braun, D., & Dominici, F. (2020, January 01). Exposure to air pollution and COVID-19 mortality in the United States: A nationwide cross-sectional study (https://www.medrxiv.org/content/10.1101/2020.04.05.20054502v1) *Article has not been peer-reviewed
6. Zhu, Y., Xie, J., Huang, F., & Cao, L. (2020, July 20). Association between short-term exposure to air pollution and COVID-19 infection: Evidence from China. (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7159846/) *Peer-Reviewed
7. Setti, L., De Gennaro, G., Barbieri, P., Perrone Grazia, M., Piazzalunga, A., Borelli, M., Di Gilio, A., Piscitelli, P., Miami, A. (2020, April 17). The Potential Role of Particulate Matter in the Spreading of COVID-19 in Northern Italy: First Evidence-based Research Hypotheses (https://www.medrxiv.org/content/10.1101/2020.04.11.20061713v1.full.pdf) *Article has not been peer-reviewed
8. Andrée, Bo Pieter. (2020, May 03). Incidence of COVID-19 and Connections with Air Pollution Exposure: Evidence from the Netherlands (https://www.medrxiv.org/content/medrxiv/early/2020/05/03/2020.04.27.20081562.full.pdf) *Article has not been peer-reviewed