

COVID-19 Airborne Transmission

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PROJECT WORKSAFE – VERMONT DEPARTMENT OF LABOR

OSHA ON-SITE CONSULTATION

What we know about the hazard

COVID-19 most commonly spreads through close contacts.

- 15 minutes or more
- less than 6 feet

COVID-19 spreads less commonly through contact with contaminated surfaces.

Airborne transmission of SARS-CoV-2 can occur under special circumstances.

- **Enclosed spaces.**
- **Prolonged exposure to respiratory particles.**
- **Inadequate ventilation and air-handling**

Airborne Transmission

The smaller the particle

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The longer the particle has the potential to remain suspended in air

Particles Setting in Still Air
Time to settle from 5 feet by unit density spheres

0.5 μm – 41 hours



1 μm – 12 hours



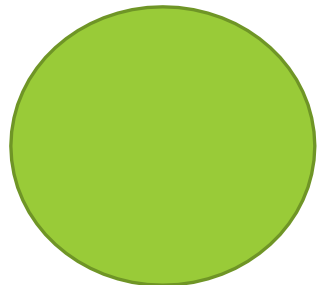
3 μm – 1.5 hours



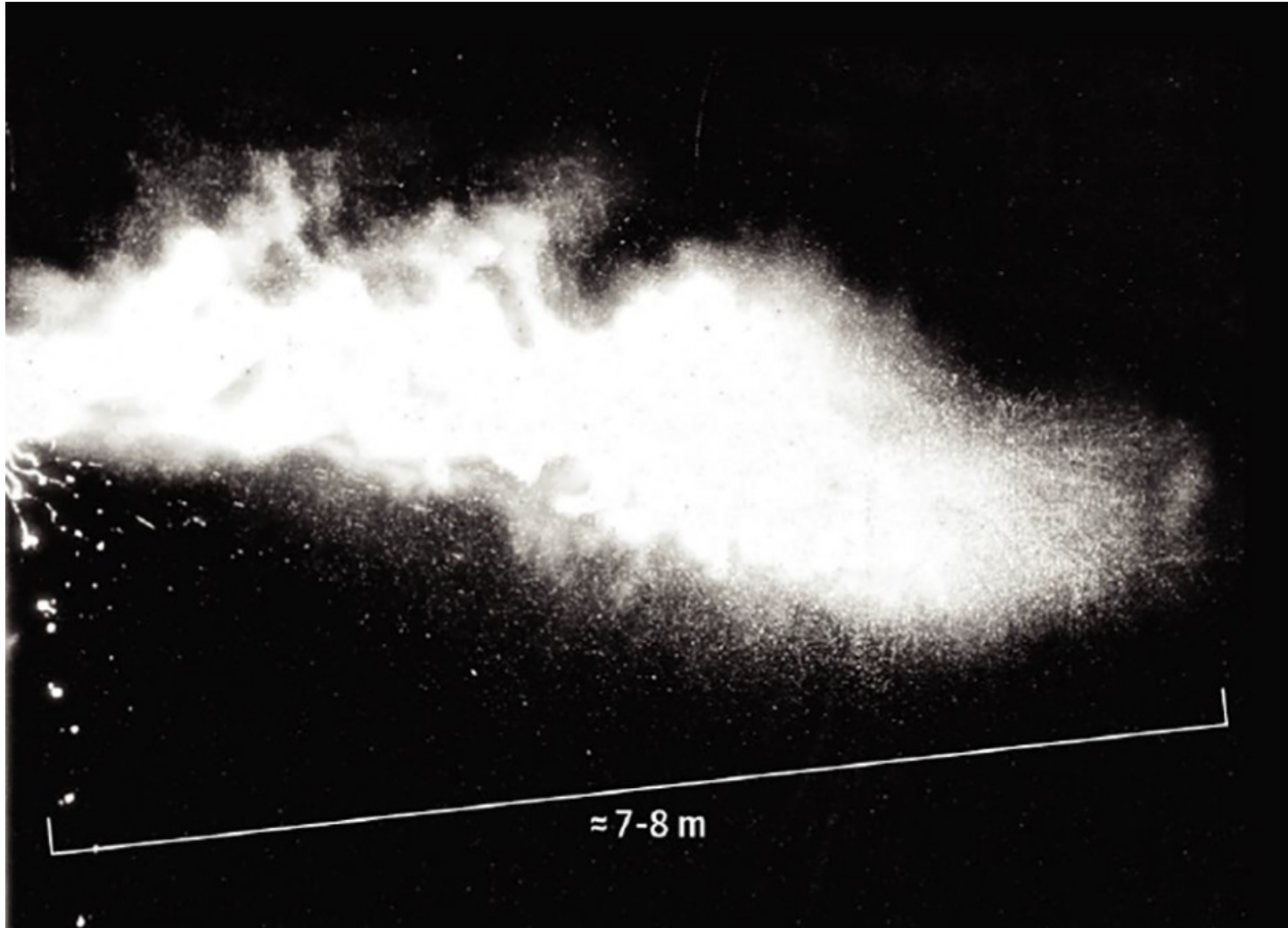
10 μm – 8.2 minutes



100 μm – 5.8 seconds



Aerosols
Droplets



Bourouiba, 2020

Visualizing
droplet and
aerosol
trajectory
