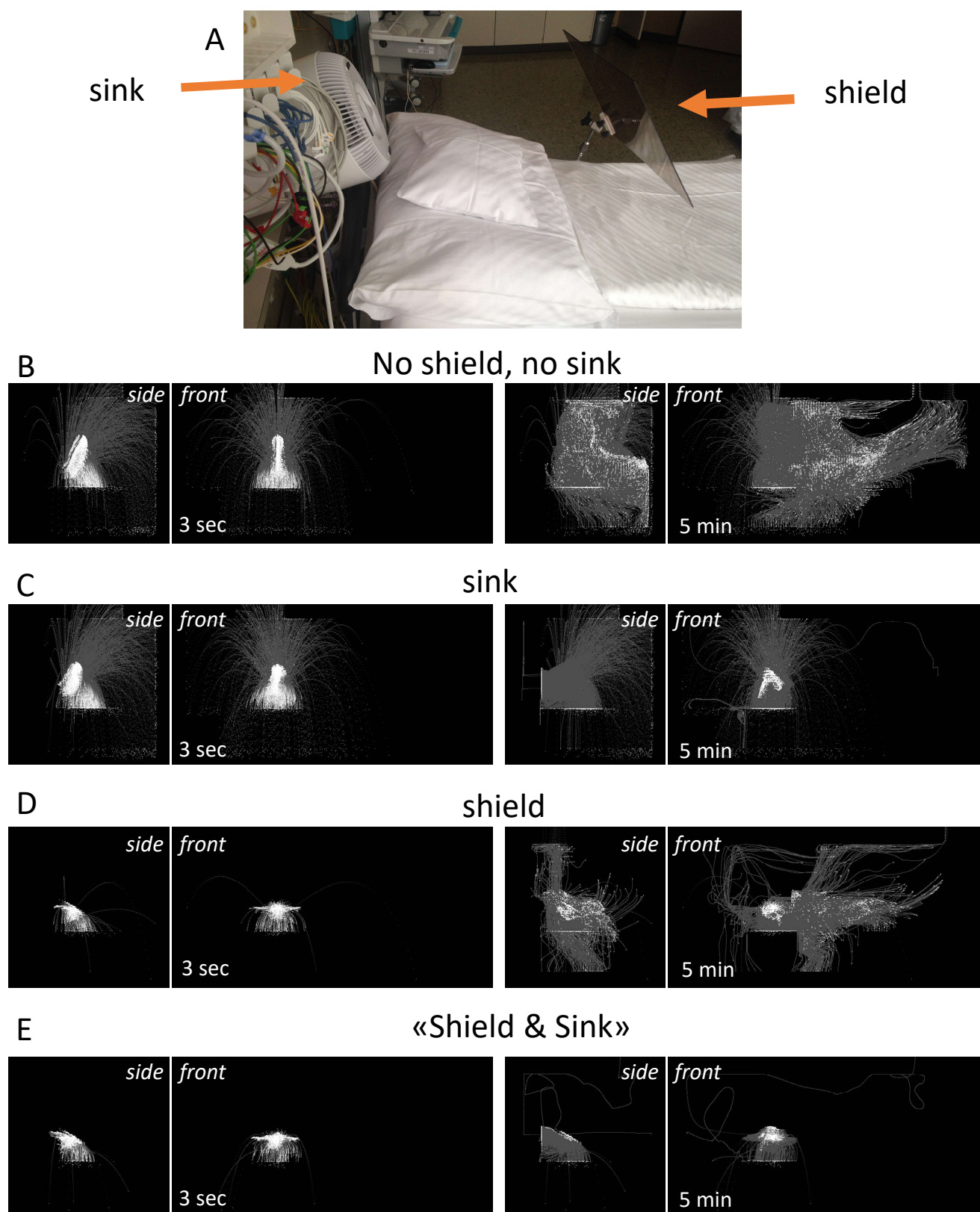


Supplement : “shield and sink”- differential effects on early droplet spray and subsequent aerosol distribution.



Supplemental figure: “Shield and Sink”- differential effects on early droplet spray and subsequent aerosol distribution.

A) An air sink and a cough shield mounted on an ICU patient bed.

B) unprotected cough, rapidly spraying the environment with ballistic droplet and dispersing jet riders and aerosols across the room. C): Installing an air purifying «sink» captures aerosols but is incapable to stop ballistic droplet spray. D) shielding the patient’s face stops ballistic droplets but disperses jet riders and droplets in multiple directions. E) Only a «Shield and Sink» strategy is able to quantitatively eliminate respiratory secretions from being transferred to the environment.