Islam MS, Rahman KM, Sun Y, et al. Current knowledge of COVID-19 and infection prevention and control strategies in healthcare settings: A global analysis [published online ahead of print, 2020 May 15]. *Infect Control Hosp Epidemiol*. 2020;1-11. doi:10.1017/ice.2020.237

Conclusion: IPC strategies should consider all the possible routes of transmission and should target all patient care activities involving risk of person-to-person transmission. This review may assist international health agencies in updating their guidelines.

Lasry A, Kidder D, Hast M, et al. Timing of Community Mitigation and Changes in Reported COVID-19 and Community Mobility - Four U.S. Metropolitan Areas, February 26-April 1, 2020. *MMWR Morb Mortal Wkly Rep*. 2020;69(15):451-457. Published 2020 Apr 17. doi:10.15585/mmwr.mm6915e2

Community mitigation activities (also referred to as nonpharmaceutical interventions) are actions that persons and communities can take to slow the spread of infectious diseases. Mitigation strategies include personal protective measures (e.g., handwashing, cough etiquette, and face coverings) that persons can use at home or while in community settings; social distancing (e.g., maintaining physical distance between persons in community settings and staying at home); and environmental surface cleaning at home and in community settings, such as schools or workplaces. Actions such as social distancing are especially critical when medical countermeasures such as vaccines or therapeutics are not available. Although voluntary adoption of social distancing by the public and community organizations is possible, public policy can enhance implementation. The CDC Community Mitigation Framework (1) recommends a phased approach to implementation at the community level, as evidence of community spread of disease increases or begins to decrease and according to severity. This report presents initial data from the metropolitan areas of San Francisco, California; Seattle, Washington; New Orleans, Louisiana; and New York City, New York* to describe the relationship between timing of public policy measures, community mobility (a proxy measure for social distancing), and temporal trends in reported coronavirus disease 2019 (COVID-19) cases. Community mobility in all four locations declined from February 26, 2020 to April 1, 2020, decreasing with each policy issued and as case counts increased. This report suggests that public policy measures are an important tool to support social distancing and provides some very early indications that these measures might help slow the spread of COVID-19.

Setti L, Passarini F, De Gennaro G, et al. Airborne Transmission Route of COVID-19: Why 2 Meters/6 Feet of Inter-Personal Distance Could Not Be Enough. *Int J Environ Res Public Health*. 2020;17(8):2932. Published 2020 Apr 23. doi:10.3390/ijerph17082932

The COVID-19 pandemic caused the shutdown of entire nations all over the world. In addition to mobility restrictions of people, the World Health Organization and the

Governments have prescribed maintaining an inter-personal distance of 1.5 or 2 m (about 6 feet) from each other in order to minimize the risk of contagion through the droplets that we usually disseminate around us from nose and mouth. However, recently published studies support the hypothesis of virus transmission over a distance of 2 m from an infected person. Researchers have proved the higher aerosol and surface stability of SARS-COV-2 as compared with SARS-COV-1 (with the virus remaining viable and infectious in aerosol for hours) and that airborne transmission of SARS-CoV can occur besides close-distance contacts. Indeed, there is reasonable evidence about the possibility of SARS-COV-2 airborne transmission due to its persistence into aerosol droplets in a viable and infectious form. Based on the available knowledge and epidemiological observations, it is plausible that small particles containing the virus may diffuse in indoor environments covering distances up to 10 m from the emission sources, thus representing a kind of aerosol transmission. On-field studies carried out inside Wuhan Hospitals showed the presence of SARS-COV-2 RNA in air samples collected in the hospitals and also in the surroundings, leading to the conclusion that the airborne route has to be considered an important pathway for viral diffusion. Similar findings are reported in analyses concerning air samples collected at the Nebraska University Hospital. On March 16th, we have released a Position Paper emphasizing the airborne route as a possible additional factor for interpreting the anomalous COVID-19 outbreaks in northern Italy, ranked as one of the most polluted areas in Europe and characterized by high particulate matter (PM) concentrations. The available information on the SARS-COV-2 spreading supports the hypothesis of airborne diffusion of infected droplets from person to person at a distance greater than two meters (6 feet). The inter-personal distance of 2 m can be reasonably considered as an effective protection only if everybody wears face masks in daily life activities.

Chu DK, Akl EA, Duda S, et al. Physical distancing, face masks, and eye protection to prevent person-to-person transmission of SARS-CoV-2 and COVID-19: a systematic review and meta-analysis [published online ahead of print, 2020 Jun 1]. *Lancet*. 2020;395(10242):1973-1987. doi:10.1016/S0140-6736(20)31142-9

Interpretation: The findings of this systematic review and meta-analysis support physical distancing of 1 m or more and provide quantitative estimates for models and contact tracing to inform policy. Optimum use of face masks, respirators, and eye protection in public and health-care settings should be informed by these findings and contextual factors. Robust randomised trials are needed to better inform the evidence for these interventions, but this systematic appraisal of currently best available evidence might inform interim guidance.

Cowling BJ, Aiello AE. Public Health Measures to Slow Community Spread of Coronavirus Disease 2019. *J Infect Dis*. 2020;221(11):1749-1751. doi:10.1093/infdis/jiaa123

Given the evolving picture of the COVID-19 pandemic, the application of layered, multifaceted, location- and population-specific NPIs will need to be considered and initiated quickly to curb widespread transmission. When NPIs are “reactive” to widespread transmission, instead of “proactive” to the potential for transmission, they often fail to reduce rates of illness. The types of proactive measures we describe here were successful in mitigating the 1918/1919 influenza pandemic and may be just as valuable almost a century later.

Rodriguez-Palacios A, Cominelli F, Basson AR, Pizarro TT, Ilic S. Textile Masks and Surface Covers-A Spray Simulation Method and a "Universal Droplet Reduction Model" Against Respiratory Pandemics. *Front Med (Lausanne)*. 2020;7:260. Published 2020 May 27. doi:10.3389/fmed.2020.00260

The synchronized implementation of EDBs as a "community droplet reduction solution" (i.e., face covers/scarfs/masks and surface covers) will reduce COVID-19 EnvDC and thus the risk of transmitting/acquiring COVID-19.

Eikenberry SE, Mancuso M, Iboi E, et al. To mask or not to mask: Modeling the potential for face mask use by the general public to curtail the COVID-19 pandemic. *Infect Dis Model*. 2020;5:293-308. Published 2020 Apr 21. doi:10.1016/j.idm.2020.04.001

The community-wide benefits are likely to be greatest when face masks are used in conjunction with other non-pharmaceutical practices (such as social-distancing), and when adoption is nearly universal (nation-wide) and compliance is high.