

## In the War Against COVID-19: Is it time for Universal Masking in Healthcare?

**Background:** As the COVID-19 crisis escalates and widespread community transmission increases, some hospitals have supplemented preexisting infection prevention measures such as visitor restrictions and employee screening with universal masking of healthcare personnel (HCP). In this FAQ, we will examine the potential benefits and downsides of universal masking.

What is a universal masking policy? Universal masking policies requires all HCP (clinical and non-clinical) to wear some sort of facemask while on hospital premises. Such policies still require HCPs continue to use surgical masks or N95 respirators when caring for patients with respiratory illness.

**The theoretical rationale for universal masking policies:** In areas where community transmission of COVID-19 is widespread, employee furlough policies requiring home quarantine after a known exposure to a case of COVID-19 or travel to a high-risk country are now clearly inadequate. In such areas, atypical presentations and asymptomatic transmission of COVID-19 leads to frequent exposures of HCP, which in turn increases the risk of transmission of COVID-19 in the workplace.<sup>1,2,3</sup>

Thus, the rationale for universal masking policies is to limit transmission of COVID-19

- From patients to HCPs
- From HCPs to patients
- From HCPs to HCPs

# Institutions that have employed Universal Masking in Healthcare settings:

- Partners Healthcare (Harvard and affiliated Hospitals)
- University of Chicago Medical Center
- University of California San Francisco
- University of Minnesota Medical Center
- Yale New Haven Hospital

# Potential Advantages:

- May reduce the risk of transmission by asymptomatic or minimally symptomatic persons
- Reduces instances of transmission by HCP touching their face
- May reduce the burden of furloughed asymptomatic HCP who discover after the fact that they have had an unprotected exposure to a patient or co-worker with COVID-19

# Potential Disadvantages:

- Increased cost and depletion of the supply of masks
- The ongoing risk of inadvertent self-contamination of masks during a long work shift could theoretically increase the risk of acquisition of COVID-19



- A false sense of security could lead to unintended consequences such as poor hand hygiene or adherence to other measures such as social distancing (when feasible)
- The need for monitoring compliance with wearing masks
- Supply chain and logistical issues could lead to unanticipated shortages of masks at time when the risk of both community and healthcare-associated spread of COVID-19 has increased

## Important considerations when implementing universal masking policies:

<u>Supply</u>: An adequate supply of masks is an obvious prerequisite for implementing a universal masking policy. Hospitals without an adequate supply of masks should continue to focus on measures such as extended use and reuse of their existing supply of masks.

<u>Visitor restrictions and employee screening</u>: A universal masking policy should always be considered an adjunct to concurrent policies such as visitor restrictions and employee screening for fever and other symptoms of a respiratory illness at their point of entry into the hospital. Similar screening of visitors who are given special exemptions to visit pediatric, obstetrical or hospice patients should also occur daily as they enter the hospital. HCP and exempted visitors who "pass" their daily symptom and signs screen should be given <u>one</u> surgical mask to wear during their entire shift or visit.

**Previous evidence around universal masking:** In a prospective single-center study, a universal masking policy for all individuals in direct contact with stem cell transplant patients led to a significant reduction in all respiratory viral illnesses.<sup>4</sup> Similar masking policies have been previously implemented by some institutions for employees who opted out of mandatory influenza vaccination.<sup>5</sup>

**Conclusion:** Universal masking when implemented together with strict visitor restrictions and employee screening, may incrementally reduce the risk of healthcare-associated transmission of COVID-19. However, a universal masking policy may not be reasonable or even appropriate for all hospitals as successful implementation of this policy requires an adequate supply of facemasks. Furthermore, the effectiveness of a universal masking policy is unknown, at present, and it is unknown if the benefits of such a policy outweigh the disadvantages discussed above.

# **References:**

- 1. Yuen KS, Ye ZW, Fung SY, Chan CP, Jin DY. SARS-CoV-2 and COVID-19: The most important research questions. Cell Biosci. 2020;10:40. Published 2020 Mar 16. doi:10.1186/s13578-020-00404-4
- Cai J, Sun W, Huang J, Gamber M, Wu J, He G. Indirect virus transmission in cluster of COVID-19 cases, Wenzhou, China, 2020. Emerg Infect Dis. 2020 Jun [date cited]. <u>https://doi.org/10.3201/eid2606.200412</u>
- 3. Bai Y, Yao L, Wei T, et al. Presumed Asymptomatic Carrier Transmission of COVID-19. JAMA. Published online February 21, 2020. doi:10.1001/jama.2020.2565
- 4. Sung AD, Sung JAM, Thomas S, et al. Universal Mask Usage for Reduction of Respiratory Viral Infections After Stem Cell Transplant: A Prospective Trial. Clin Infect Dis. 2016;63(8):999–1006. doi:10.1093/cid/ciw451 Ksienski DS.
- Mandatory seasonal influenza vaccination or masking of British Columbia health care workers: Year 1. Can J Public Health. 2014;105(4):e312–e316. Published 2014 Jul 11. doi:10.17269/cjph.105.4346