



## Current status of COVID-19 and risks to health care personnel (Updated on 3/24/20):

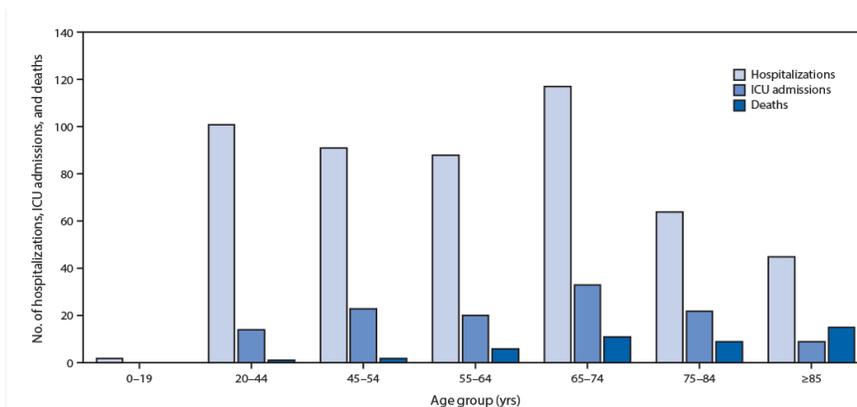
- COVID-19 cases reported mild symptoms to severe illness and death. Symptoms include fever, cough, shortness of breath, persistent pain or pressure in the chest, new confusion or inability to arouse, and bluish lips or face. Note that this list is not all inclusive.
- As of March 24, 2020, the CDC reported that a total of 44,183 cases have been detected in the U.S. in 50 states, Guam, Puerto Rico, the U.S. Virgin Islands, and D.C and 544 have died from COVID-19.
- The early release of *Morbidity and Mortality Weekly Report* for the description of outcomes among COVID-19 patients in the US indicates that fatality was highest in persons aged  $\geq 85$ , ranging from 10% to 27%, followed by 3% to 11% among persons aged 65–84 years, 1% to 3% among persons aged 55-64 years, <1% among persons aged 20–54 years, and no fatalities among persons aged  $\leq 19$  years (Table 1 and Figure 1).<sup>[1]</sup>

*Table 1. Hospitalization, intensive care unit (ICU) admission, and case-fatality percentages for reported COVID-19 cases, by age group- United States, February 12- March 16, 2020 (Modified from Morbidity and Mortality Weekly Report for the description of outcomes among COVID-19 patients in the US<sup>[1]</sup>)*

Age group, years (no. of cases)	%		
	Hospitalization	ICU admission	Case-fatality*
0–19 (123)	1.6–2.5	0	0
20–44 (705)	14.3–20.8	2.0–4.2	0.1–0.2
45–54 (429)	21.2–28.3	5.4–10.4	0.5–0.8
55–64 (429)	20.5–30.1	4.7–11.2	1.4–2.6
65–74 (409)	28.6–43.5	8.1–18.8	2.7–4.9
75–84 (210)	30.5–58.7	10.5–31.0	4.3–10.5
$\geq 85$ (144)	31.3–70.3	6.3–29.0	10.4–27.3
Total (2,449)	20.7-31.4	4.9-11.5	1.8-3.4

\* Case fatality is based on known cases, which may underrepresent the case load due to unknown mild and asymptomatic cases. Lower bound of range = number of persons hospitalized, admitted to ICU, or who died among total in age group; upper bound of range = number of persons hospitalized, admitted to ICU, or who died among total in age group with known hospitalization status, ICU admission status, or death.

*Figure 1. COVID-19 hospitalization, intensive care unit (ICU) admission, and death, by age group- United States, February 12- March 16, 2020 (from CDC MMWR; based on 4,226 COVID-19 cases as of March 16; hospitalization status, ICU status, illness outcomes or death were missing or unknown for 1,514 cases, 2,253 cases, and 2,001 cases, respectively)<sup>[1]</sup>*



## What to do if exposed:

- Follow the CDC’s updated interim guidance on the risk stratification for potential HCP COVID-19 exposures in the health care workplace (Table 2) to assess the risk of exposure to determine the level of monitoring and work restrictions.
- Because of close contact with vulnerable individuals in the health care setting, the CDC suggests using more conservative approaches among health care personnel (HCP) to quickly identify early symptoms and prevent transmission to patients and other HCPs. The CDC provides a broader list of signs and symptoms to look for HCPs than general public. These include fever, cough, shortness of breath, and sore throat.<sup>[2]</sup>

*Table 2. Epidemiologic Risk Classification<sup>1</sup> for Asymptomatic Health care Personnel Following Exposure to Patients with 2019 Novel Coronavirus (2019-nCoV) Infection or their Secretions/Excretions in a Health care Setting, and their Associated Monitoring and Work Restriction Recommendations <sup>[2]</sup>*

Epidemiologic risk factors	Exposure category	Recommended Monitoring (until 14 days after last potential exposure)	Work Restrictions for Asymptomatic HCP
<b>Prolonged close contact with a COVID-19 patient who was wearing a facemask (i.e., source control)</b>			
HCP PPE: None	Medium	Active	Exclude from work for 14 days after last exposure
HCP PPE: Not wearing a facemask or respirator	Medium	Active	Exclude from work for 14 days after last exposure
HCP PPE: Not wearing eye protection	Low	Self with delegated supervision	None
HCP PPE: Not wearing gown or gloves <sup>a</sup>	Low	Self with delegated supervision	None
HCP PPE: Wearing all recommended PPE (except wearing a facemask instead of a respirator)	Low	Self with delegated supervision	None
<b>Prolonged close contact with a COVID-19 patient who was not wearing a facemask (i.e., no source control)</b>			
HCP PPE: None	High	Active	Exclude from work for 14 days after last exposure
HCP PPE: Not wearing a facemask or respirator	High	Active	Exclude from work for 14 days after last exposure
HCP PPE: Not wearing eye protection <sup>b</sup>	Medium	Active	Exclude from work for 14 days after last exposure

HCP PPE: Not wearing gown or gloves <sup>a,b</sup>	Low	Self with delegated supervision	None
HCP PPE: Wearing all recommended PPE (except wearing a facemask instead of a respirator) <sup>b</sup>	Low	Self with delegated supervision	None
<ul style="list-style-type: none"> <li>○ <u>Active monitoring</u>: the state or local public health authority assumes responsibility for establishing regular communication with potentially exposed people to assess for the presence of fever or respiratory symptoms (e.g., cough, shortness of breath, sore throat). For HCP with high- or medium-risk exposures, CDC recommends this communication occurs at least once each day. The mode of communication can be determined by the state or local public health authority and may include telephone calls or any electronic or internet-based means of communication.</li> <li>○ <u>Self monitoring with delegated supervision</u>: HCP performs self-monitoring with oversight by their health care facility's occupational health or infection control program in coordination with the health department of jurisdiction, if both the health department and the facility are in agreement. On days HCP are scheduled to work, health care facilities could consider measuring temperature and assessing symptoms prior to starting work. Alternatively, a facility may consider having HCP report temperature and absence of symptoms to occupational health prior to starting work. Modes of communication may include telephone calls or any electronic or internet-based means of communication.</li> </ul>			

<sup>a</sup> The risk category for these rows would be elevated by one level if HCP had extensive body contact with the patients (e.g., rolling the patient).

<sup>b</sup> The risk category for these rows would be elevated by one level if HCP performed or were present for a procedure likely to generate higher concentrations of respiratory secretions or aerosols (e.g., cardiopulmonary resuscitation, intubation, extubation, bronchoscopy, nebulizer therapy, sputum induction). For example, HCP who were wearing a gown, gloves, eye protection and a facemask (instead of a respirator) during an aerosol-generating procedure would be considered to have a medium-risk exposure.

HCP: health care personnel; PPE: personal protective equipment. From: <https://www.cdc.gov/coronavirus/2019-ncov/hcp/guidance-risk-assesment-hcp.html>

## Reference

[1] Severe Outcomes Among Patients with Coronavirus Disease 2019 (COVID-19) — United States, February 12–March 16, 2020. MMWR Morb Mortal Wkly Rep. ePub: 18 March 2020. DOI:

<http://dx.doi.org/10.15585/mmwr.mm6912e2>

[2] The Centers for Disease Control and Prevention. Interim US Guidance for Healthcare Personnel with Potential Exposure to COVID-19. Available from: <https://www.cdc.gov/coronavirus/2019-ncov/hcp/guidance-risk-assesment-hcp.html>