

COVID-19: PROTECTING HEALTH CARE WORKERS' (HCW) FAMILIES AT HOME



A Rapid Guidance Summary from the Penn Medicine Center for Evidence-based Practice
 Last updated December 24, 2020. All links rechecked December 15 unless otherwise noted.

This Rapid Guidance Summary is a description of existing guidance and evidence reviews from a variety of sources that was in effect at the time of publication. It should not be used or interpreted as a clinical practice guideline, but instead can be used in development of local recommendations and policies.

Key questions answered in this summary

- What steps might health care workers (HCW) caring for COVID-19 patients take to protect their family members and housemates from risk of transmission?

Summary of major recommendations

- HCW should sanitize all items carried during their shift (e.g. cell phone, ID badge, keys, etc.) before leaving the hospital and upon returning home.
- HCW may consider changing their clothes after a shift, either at the hospital or immediately upon arriving home. Clothing should be washed in hot water immediately or set aside for washing later, separate from other family members' clothing. HCW may also consider having dedicated shoes for COVID-19 care that do not enter the home.
- Upon arriving home, HCW may consider showering or bathing immediately.
- HCW should reduce physical contact with family/housemates and use separate utensils, plates, etc., but **not** fully separate unless ill with COVID-19 or protecting vulnerable family/housemates, due to concerns about HCW's mental health.
- During the early months of the pandemic, some medical centers provided alternate housing arrangements for HCWs, including those with family members in high-risk groups and those working at a great distance from home.

Public health agency and professional society guidelines

Source	Recommendations
ACP Dec. 23	<p>Wear simple, washable clothing, and dedicated work shoes. Wear washable scrubs if possible. If possible, remove patient care work clothing, place them in a washable bag, wipe down shoes, and shower before changing into clean clothing and shoes before going home. Leave street shoes at the door or in a dedicated location, if possible. Launder at work if possible, or wash on highest heat setting if required to personally launder clothing.</p> <p>Do not bring items to work such as nonessential watches, jewelry, or hair items.</p> <p>Disinfect all essential items (glasses, phone, ID badge etc) regularly during work. Leave what you can at work. For items that must go home with you, disinfect again prior to leaving work and upon arrival home. Apple has changed phone cleaning advice to support use of 70% isopropyl alcohol wipes, gently wiping exterior phone surfaces.</p>
ANZICS Oct 20	<p>To ensure a sustainable workforce, we recommend accommodation for staff who are unable to return home e.g. because of vulnerable family members.</p> <p>We recommend that hospitals have the following available for all staff in intensive care:</p> <ul style="list-style-type: none"> • Clean scrubs available to change into before each shift • Access to change areas and showering facilities • Rest breaks and rest areas compliant with social distancing guidelines • Provision of meals and drinks for frontline staff to boost morale and minimize staff leaving the hospital for meals.

<p>ANZICS Oct 20</p>	<p>At home: The following actions should precede any interactions with the people you live with:</p> <ul style="list-style-type: none"> • Avoid bringing any items into the home that had previously been at work. • Remove and wash clothing (with hot water). Immediately shower and change into clean clothes. • Clean frequently touched surfaces in your car, including steering wheel, door handles, mirrors, screens and shift. • Family members or household contacts of HCW involved in the care of suspected or confirmed COVID-19 patients should consider sleeping in a separate room and using a separate bathroom, if they belong to a high risk group. • All members of the household should practice meticulous hand hygiene and wash hands and commonly used surfaces regularly.
<p>ECDC Oct 6</p>	<ul style="list-style-type: none"> • Healthcare workers who have contact with patients should wear scrubs for the duration of their work. Clean scrubs should be provided daily; • When returning home, healthcare workers who have managed COVID-19 patients should practice physical distancing to minimize the risk of transmission to other household members.
<p>ACEP Sep 3</p>	<ul style="list-style-type: none"> • Prepare a “home decontamination space” <p><u>Before leaving hospital:</u></p> <ul style="list-style-type: none"> • Sanitize items carried during shift: phone, identification badge, pens, etc. • Change into clean scrubs/clothes. If soiled clothes must come home, store in an easily washed tote bag • During commute, minimize touched surfaces and physically distance from other people <p><u>After arriving home:</u></p> <ul style="list-style-type: none"> • Immediately go to decontamination space • Sanitize items brought home from the hospital: phone, identification badge, keys, etc. • Remove shoes and clothes. Keep them away from others. Launder immediately or set aside for separate laundering. • Shower or bathe, taking shortest pathway and touching minimal surfaces en route (lights, doorknobs, etc.)
<p>AHA May 14</p>	<p>Actions hospitals are taking to address housing needs include:</p> <ul style="list-style-type: none"> • Explore temporary housing options for staff who are not comfortable returning home for fear of exposing their families to COVID-19. Hospitals are partnering with local hotels, universities, rental properties or Airbnb to develop contingency plans in the event that there is a need for temporary housing for health care workers. • Offer shower facilities for use by all staff so that they have the option to clean and sanitize themselves prior to returning home. This option allows staff to feel safer when they go home to their families.
<p>IDSA April 30</p>	<p>No specific guidance regarding protecting families of HCW.</p>
<p>AMA April 8</p>	<ul style="list-style-type: none"> • Thoroughly wash hands immediately after arriving home • Consider changing clothes and showering immediately after arriving home • Use a separate set of utensils, kitchenware, toothbrush, etc., than family/housemates. • Unless the health care worker has a confirmed case, do not completely separate from family/housemates; social and emotional support are important for maintaining health care workers’ mental health. <p><i>CEP NOTE: AMA also has a list of resources for caring for caregivers.</i></p>
<p>Alberta Health Services April 3</p>	<p>Avoid contamination of clothing during care and contact with suspected or confirmed COVID-19 patients by following infection prevention and control measures. Washable uniforms and clothing is preferred.</p> <p>Follow IPC Healthcare Attire recommendations guidance for wearing and laundering of uniforms. IPC measures are adequate to prevent contamination; however, if uniforms or clothing are soiled, staff should change out of them before leaving their place of work.</p> <p>If you change at work or upon reaching home, it is reasonable to transport the clothes you have changed out of in either a disposable plastic bag or washable cloth bag which can be laundered with the clothing.</p> <p>Clean and disinfect medical and personal accessories with ready-to-use disinfectant wipes.</p> <p>Staff showering and bathing practices are not considered important IPC measures for COVID-19, and staff are advised to follow their usual personal hygiene practices.</p> <p><i>CEP NOTE: Guidance included an evidence review.</i></p>

ACS April 1	<ul style="list-style-type: none"> • Consider changing clothes and showering immediately after arriving home • Sanitize cell phone before/during/after patient contact and/or keep in plastic bag during hospital service • Keep hand sanitizer and disposable gloves for contact with public surfaces, e.g. ATM, vending machines • Consider reducing physical contact with family members • Consider hotel accommodations for time-limited hospital service
CDC	No guidance relating to protecting families of health care workers.

Evidence reviews on protection of family members at home

Source	Recommendations
CEBM April 20	<ul style="list-style-type: none"> • “We found no evidence regarding self-isolation of asymptomatic healthcare workers from their household. • “In a high-quality review that included social distancing and respiratory viruses in various settings and using various methods, it was concluded that ‘The handful of studies (mostly conducted during the SARS epidemic) do not allow us to reach any firm conclusions regarding social distancing.’” • “There may be some healthcare workers who might consider self-isolation if they work in a particularly high-risk setting or whose family are considered by the NHS to be at ‘increased risk’ or ‘extremely vulnerable’. Of course, heed must be paid to the possible harms of such an approach, such as the potential impact on mental wellbeing, as well as the fact this may not be practically possible depending on individual circumstances.” • “The comparatively low rates of transmission to household members that were reported in previous coronavirus outbreaks should also provide some reassurance.” • “Current evidence does support hand hygiene, facemasks (both at home and work) and adequate PPE as well as potentially efforts to reduce the number and spread of patient contacts at work to end the risk of onward COVID-19 transmission.”

Medical center guidance on protection of family members at home

Source	Recommendations
Penn Medicine Not dated	<ul style="list-style-type: none"> • Be selective about the number of items brought to work; only bring home disposable or easy-to-clean items • Consider avoiding wearing ties, long sleeves, watches, jewelry, and items not often washed • Consider carrying essential cards, IDs, etc., in a plastic bag, rather than in a wallet/purse • Minimize touched surfaces on commute and regularly disinfect surfaces, e.g. steering wheel • Upon arriving home, consider cleaning or disposing of all items before entering home or directly after; for example, undress outside home, place clothing in washable bag, and immediately place bag in washer • Consider establishing “zones” in the home to place work items that family/housemates avoid <p><i>CEP NOTE: Penn Medicine also offers a planning guide and infographics for staff education.</i></p>
Mt. Sinai March 29	<ul style="list-style-type: none"> • Only workers involved in procedures (i.e. with bodily fluids) should change clothes before leaving the hospital • If asymptomatic, the health care worker may interact normally with family/housemates and pets • Encourage family/housemates to engage in regular hand hygiene and cover nose/mouth when sneezing
MGH March 24	<ul style="list-style-type: none"> • There is no evidence of transmission via clothing when wearing proper PPE or via shoes • Changing clothes before/after shifts is not necessary for infection control
Cornell March 22 (video)	<ul style="list-style-type: none"> • Work with family/housemates to reduce their facial touching; consider encouraging them to wear masks to “train” them to reduce facial touching (not for transmission prevention) • Vigilantly monitor symptoms; treat simple colds as if infected with COVID-19 and self-isolate, if possible
Nebraska March 21	<ul style="list-style-type: none"> • Scrubs are not required or specially indicated for COVID-19 care • Shoe coverings and head coverings are not recommended PPE • Contaminated clothing should be specially laundered by hospital; if at home, use warm water

Medical center guidance relating to temporary support housing

CEP NOTE: While a number of medical centers reported that they were providing housing alternatives for healthcare workers during the early months of the pandemic, the status of those programs is uncertain, so they have been removed from the table. Please see the April 22 edition of this report for descriptions of these policies.

Source	Current recommendations
Penn Medicine	For front-line staff who do not have COVID-19: <ul style="list-style-type: none"> • Discounted housing at nearby hotels • Discounted housing at nearby extended-stay hotel or apartment (physicians/nurses only)
Intermountain Not dated	Hotel accommodations may be provided in these situations: <ul style="list-style-type: none"> When a caregiver is redeployed to a work location that is more than 75 miles from their home. When a caregiver works back-to-back or shifts that are less than eight hours apart. When a caregiver has a family member who is COVID-19 positive or is immuno-compromised and at risk for disease. Caregivers in this scenario are not COVID-19 positive but need isolation from their family. (Employee Health recommendation/approval required.)

Guidance sources

ACEP—American College of Emergency Physicians
 ACP—American College of Physicians
 ACS—American College of Surgeons
 AMA—American Medical Association
 ANZICS—Australia-New Zealand Intensive Care Society
 CEBM—Centre for Evidence-Based Medicine, University of Oxford
 ECDC—European Centers for Disease Control
 IDSA—Infectious Disease Society of America

Update history (key additions and changes only)

December 24: New guidelines from ANZICS, ACP, Alberta Health Services. Updated guideline from ECDC. Removed medical center policies that were no longer current.

April 22: Initial report.

About this report

A Rapid Guidance Summary is a focused synopsis of recommendations from selected guideline issuers and health care systems, intended to provide guidance to Penn Medicine providers and administrators during times when latest guidance is urgently needed. It is not based on a complete systematic review of the evidence. Please see the CEP web site (<http://www.uphs.upenn.edu/cep>) for further details on the methods for developing these reports.

Lead analysts: Matthew D. Mitchell, PhD (CEP);

Nolan M. Kavanagh, MPH (PSOM)

Reviewers: Nikhil K. Mull, MD (CEP)

Judith G. McKenzie, MD, MPH, FACP, FACOEM (Occupational & Environmental Medicine)

Naasha J. Talati, MD, MSCR (Epidemiology)



©2020 Trustees of the University of Pennsylvania. All rights reserved. No part of this publication may be reproduced without permission in writing from the Trustees of the University of Pennsylvania