Extension and Re-Use of Isolation Equipment or PPE

Extended use of isolation gowns:
Consideration can be made to extend the use of isolation gowns (disposable or cloth) so the same gown is worn by the same HCP when interacting with more than one patient known to be infected with the same infectious disease when these patients housed in the same location (i.e., COVID-19 patients residing in an isolation cohort). This can be considered only if there are no additional co-infectious diagnoses transmitted by contact (such as C. Difficile) among patients. If the gown becomes visibly soiled, it must be removed and discarded properly.
Reference: https://www.cdc.gov/coronavirus/2019-ncov/hcp/ppe-strategy/isolation-gowns.html

Extended use of eye protection:
Shift eye protection supplies from disposable to re-usable devices (i.e., goggles and reusable face shields).

- Consider preferential use of powered air purifying respirators (PAPRs) or full-face elastomeric respirators which have built-in eye protection.
- Ensure appropriate cleaning and disinfection between users if goggles or reusable face shields are used.

Implement extended use of eye protection:
Extended use of eye protection is the practice of wearing the same eye protection for repeated close contact encounters with several different patients, without removing eye protection between patient encounters. Extended use of eye protection can be applied to disposable and reusable devices.

- Eye protection should be removed and reprocessed if it becomes visibly soiled or difficult to see through.
    - If a disposable face shield is reprocessed, it should be dedicated to one HCP and reprocessed whenever it is visibly soiled or removed (e.g., when leaving the isolation area) prior to putting it back on. See protocol for removing and reprocessing eye protection below.
- Eye protection should be discarded if damaged (e.g., face shield can no longer fasten securely to the provider, if visibility is obscured and reprocessing does not restore visibility).
- HCP should not touch their eye protection. If they touch or adjust their eye protection they must immediately perform hand hygiene.

Adhere to recommended manufacturer instructions for cleaning and disinfection:
When manufacturer instructions for cleaning and disinfection are unavailable, such as for single use disposable face shields, consider:

1. While wearing gloves, carefully wipe the inside, followed by the outside of the face shield or goggles using a clean cloth saturated with neutral detergent solution or cleaner wipe.
2. Carefully wipe the outside of the face shield or goggles using a wipe or clean cloth saturated with EPA-registered hospital disinfectant solution.
3. Wipe the outside of face shield or goggles with clean water or alcohol to remove residue.
4. Fully dry (air dry or use clean absorbent towels).
5. Remove gloves and perform hand hygiene.

Reference: https://www.cdc.gov/coronavirus/2019-ncov/hcp/ppe-strategy/eye-protection.html

Remove facemasks for visitors in public areas.
Health care facilities can consider removing all facemasks from public areas. Facemasks can be available to provide to symptomatic patients upon check in at entry points. All facemasks should be placed in a secure and monitored site which is especially important in high-traffic areas like emergency departments.

Implement extended use of facemasks.
Extended use of facemasks is the practice of wearing the same facemask for repeated close contact encounters with several different patients, without removing the facemask between patient encounters.

- The facemask should be removed and discarded if soiled, damaged or hard to breathe through.

- HCP must not touch their facemask. If they touch or adjust their facemask, they must immediately perform hand hygiene.
- HCP should leave the patient care area if they need to remove the facemask.

Restrict facemasks to use by HCP, rather than patients for source control.
Have patients with symptoms of respiratory infection use tissues or other barriers to cover their mouth and nose.

Implement limited re-use of facemasks.
Limited re-use of facemasks is the practice of using the same facemask by one HCP for multiple encounters with different patients but removing it after each encounter. As it is unknown what the potential contribution of contact transmission is for SARS-CoV-2, care should be taken to ensure that HCP do not touch outer surfaces of the mask during care, and that mask removal and replacement be done in a careful and deliberate manner.

- The facemask should be removed and discarded if soiled, damaged or hard to breathe through.
- Not all facemasks can be re-used.
    - Facemasks that fasten to the provider via ties may not be able to be undone without tearing and should be considered only for extended use, rather than re-use.
    - Facemasks with elastic ear hooks may be more suitable for re-use.
- HCP should leave patient care area if they need to remove the facemask. Facemasks should be carefully folded so that the outer surface is held inward and against itself to reduce contact with the outer surface during storage. The folded mask can be stored between uses in a clean sealable paper bag or breathable container.

Reference: https://www.cdc.gov/coronavirus/2019-ncov/hcp/ppe-strategy/face-masks.html#contingency-capacity

Extended use and re-use of N95 respirators:
Extended use refers to the practice of wearing the same N95 respirator for repeated close contact encounters with several different patients, without removing the respirator between patient encounters. Extended use is well suited to situations wherein multiple patients with the same infectious disease diagnosis, whose care requires use of a respirator, are cohorted (e.g., housed on the same hospital unit). When practicing extended use of N95 respirators, the maximum recommended extended use period is 8-12 hours. Respirators should not be worn for multiple work shifts and should not be reused after extended use. N95 respirators should be removed (doffed) and discarded before activities such as meals and restroom breaks.

Re-use refers to the practice of using the same N95 respirator by one HCP for multiple encounters with different patients but removing it (doffing) after each encounter. This practice is often referred to as "limited reuse" because restrictions are in place to limit the number of times the same respirator is reused. It is important to consult with the respirator manufacturer regarding the maximum number of donnings or uses they recommend for the N95 respirator model. If no manufacturer guidance is available, data suggest limiting the number of reuses to no more than five uses per device to ensure an adequate safety margin.[1] N95 and other disposable respirators should not be shared by multiple HCP. CDC has recommended guidance on implementation of limited re-use of N95 respirators in healthcare settings. Respirators grossly contaminated with blood, respiratory or nasal secretions, or other bodily fluids from patients should be discarded.

One effective strategy to mitigate the contact transfer of pathogens from the respirator to the wearer could be to issue each HCP who may be exposed to COVID-19 patients a minimum of five respirators. Each respirator will be used on a particular day and stored in a breathable paper bag until the next week. This will result in each worker requiring a minimum of five N95 respirators if they put on, take off, care for them, and store them properly each day. The amount of time in between uses should exceed the 72 hour expected survival time for SARS-CoV2 (the virus that caused COVID-19).[3] HCP should still treat the respirator as though it is still contaminated and follow the precautions outlined in CDC's re-use recommendations.

Reference: https://www.cdc.gov/coronavirus/2019-ncov/hcp/respirators-strategy/index.html#contingency