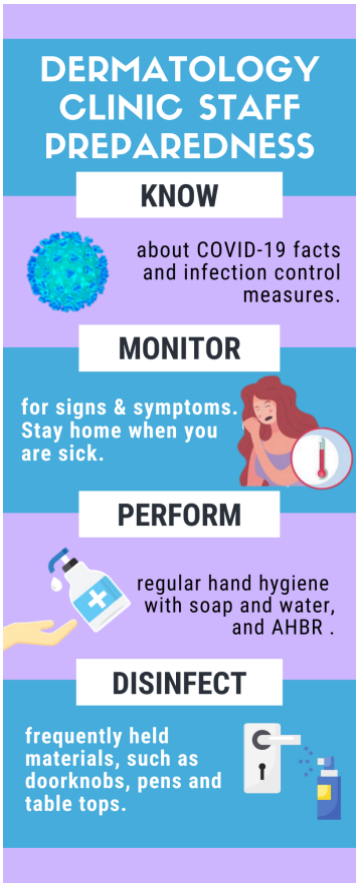
DERMATOLOGY CLINIC PREPAREDNESS

A. GENERAL CONSIDERATIONS

1. Teledermatology should be optimized even after the enhanced community quarantine has been lifted.
2. Re-opening your clinic for both urgent care and elective cases may be contemplated on if your clinic is located in a low-risk area.[1,2]
3. Clinic operation resumption should be done in stages.



B. CLINIC STAFF[1,3-6]

1. Educate your staff regarding the following:
   1.1. Basic information about COVID-19 (i.e., mode of transmission, risk factors, clinical manifestations, course, and complications).
   1.2. Basic infection prevention measures (See Appendix III.).
   1.3. Proper use, storage, donning and doffing of personal protective equipment.
2. Limit the number of clinic staff that go on duty (1-2 personnel).
3. Divide clinical staff into rotational shifts to avoid putting entire staff at risk in case of inadvertent exposure to a COVID-19 infected patient.
4. Ensure administrative control measures are implemented.
   4.1. Encourage employees to self-monitor for signs and symptoms. Sick workers should stay at home.
   4.2. Employees should be subjected to temperature check prior to entering the clinic. They should wear their face masks at all times, except when eating, while inside the clinic.
   4.3. Ensure adequate supply and proper fitting of personal protective equipment (PPE).
   4.4. Do not share frequently touched objects such as pens.
   4.5. Clean medical equipment/instruments such as stethoscopes, and dermatoscopes before and after these are used on a patient.
5. All clinic staff should:
   5.1. Keep their hair swept back, and long hair must be tied neatly.
   5.2. Wear long pants, avoid wearing skirts.
   5.3. Wear tops that expose the entire forearm up to the elbow.
   5.4. Not wear jewelry.
   5.5. Wear closed shoes with good traction.

C. PHYSICAL SET-UP

1. **General Recommendations**
   1.1. Limit points of entry for all patients, regardless of symptoms.[7]
   1.2. Post visual alerts (infographics/posters) at the entrance and other strategic places, about preventive measures against the COVID-19 virus, i.e., hand hygiene, cough etiquette, and wearing of face masks (See Appendix III).[7,8]
   1.3. If possible, change your doorknobs so that your doors can be opened/closed using the elbows.
   1.4. Add markings where necessary, to maintain appropriate social distance (i.e., tape markings in front of the reception area, in order for the patients to maintain a safe distance from the staff and from each other).[1]
   1.5. Utilize digital tools such as electronic patient records, online payment of bills, and electronic prescriptions.[1]
   1.6. Provide supplies for respiratory hygiene, alcohol-based hand rub (ABHR) with 60-70% isopropyl or ethyl alcohol, and no-touch trash bins in all rooms in the clinic.
   1.7. Provide adequate ventilation in all rooms. Do not use electric fans.[6] (Refer to Section II.D for more details).

2. **Clinic Entrance and Reception/Waiting Area**
   2.1. Place a disinfecting mat or footbath at the entrance, or provide booties for the patients.[6]
   2.2. No mask, no entry policy. Provide surgical masks near the entrance for patients not wearing masks.[6,8]
   2.3. Consider placing physical barriers to limit contact of front desk staff and patients and to conserve on PPE.[1]
   2.4. Provide infrared no-touch thermoscan.[1]
   2.5. Reduce the number of chairs in the waiting area and place them six (6) feet (2 meters) apart.[9] If waiting area is small, consider letting your patients wait in the car until it is their turn to be seen.
   2.6. Remove reading materials, toys, flower vases, and other communal objects.[1,3,7,9]

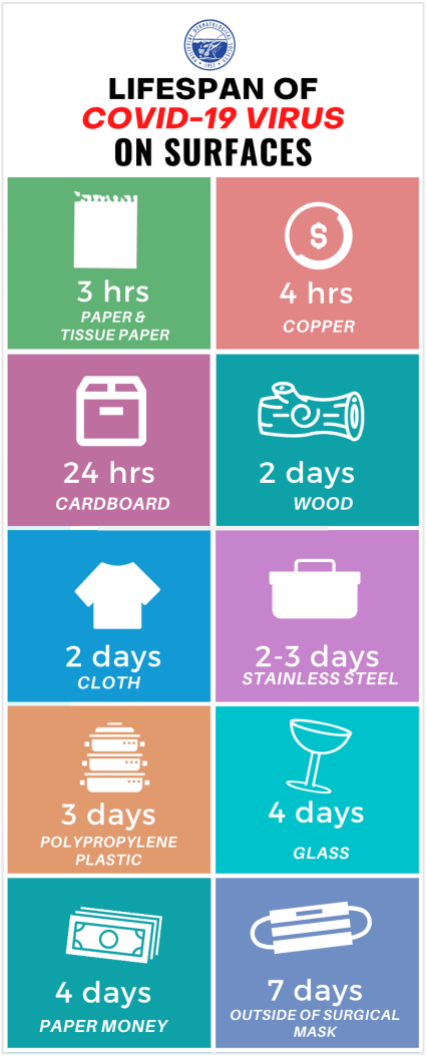
3. **Treatment Room**
   3.1. A smoke evacuator should be available for use when performing aerosol-generating procedures.[10]

D. INFECTION CONTROL

1. **Physical Barriers**
   1.1. Consider installing physical barriers, such as those made with clear plastic (≥ gauge 10) or acrylic, to limit contact between clinic staff and patients.[1,3]
   1.2. Put a wipeable cover, such as a plastic cover or cling wrap, on electronics (e.g., keyboards, touch screens, and mobile phones)[11] and medical equipment (e.g., stethoscopes and dermatoscopes).[6]
   1.3. Clean physical barriers after every patient encounter or as deemed necessary.

2. **Ventilation and Air Filtration**
   2.1. Make sure your clinic has at least 12 air changes per hour (ACH) to reduce airborne SARS-CoV-2.[12,13]
   2.2. For a specialized setup, negative pressure ventilation may be utilized in the out-patient consultation room to reduce COVID-19 transmission.[3,12]
   2.3. Use smoke evacuators to control generated smoke from laser/electric surgical procedures. These are more effective than room suction systems.[14]
   2.4. High-Efficiency Particulate Air (HEPA) filters can remove airborne particles 0.3 µm in diameter while Ultra-Low Particulate Air (ULPA) filters can remove particles 0.1 µm in diameter, making them superior.[15]

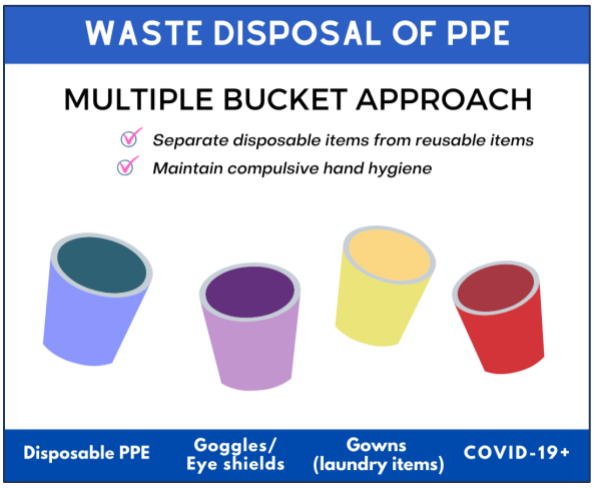
3. **Soaps and Detergents**
   3.1. Clean with soap or detergent, any visible dirt or organic material such as blood, before using chemical disinfectants on surfaces.[16,17]
   3.2. For hard surfaces and floors, clean with regular household detergent and water, then disinfect at least daily.[11]
   3.3. Clean soft surfaces (e.g., carpets, rugs, and drapes) using soap and water or using cleaners appropriate for use on these surfaces at least weekly.[11]



4. **Chemical Disinfectants**
   - 4.1. Use U.S. Environmental Protection Agency (EPA)-approve disinfectants listed here.[3,18]
   - 4.2. Without disinfection, COVID-19 virus is detectable on plastic and stainless-steel surfaces for up to 72 hours after aerosol application.[19,20]
   - 4.3. Use 60-70% ethyl or isopropyl alcohol, 0.5% sodium hypochlorite, or 0.5% hydrogen peroxide[21,22] to disinfect frequently held materials (e.g., pens, thermometers, and phones) and common high-touch areas (e.g., exam tabletops, countertops, beds, chairs, doorknobs, exam light switch, chairs, and faucet handles). Do this at the end of the day and in between patients.[7] See Appendix IV for instructions on how to make chlorine solution.
   - 4.4. Have hand sanitizers in the waiting room for patients and clinic staff.[7]

5. **Ultraviolet C (UVC) Devices (200-280 nm)**
   - 5.1. Few studies demonstrate the effectiveness of UVC devices against viruses; more studies involve bacteria and fungi.
   - 5.2. UVC devices **may** be effective in lowering Healthcare-Associated Infection (HAI) rates[23] and could be installed to augment existing measures of infection control.[24]
   - 5.3. Effectiveness of UVC depends on the exposure time and the ability of UV light to reach viruses in water, air, folds and crevices of materials and surfaces.[24]
   - 5.4. Clean surfaces before treating with UVC.[25]
   - 5.5. At least 1 J/cm^2 must be used for UVC decontamination.[25,26]
   - 5.6. Avoid being near the UVC device when it is being used because exposure can cause a severe sunburn-like reaction on the skin and can damage the retina.[24]
   - 5.7. Exercise caution when selecting equipment as there is a lack of uniform performance standards and a highly variable degree of research, development, and testing for UVC products.[24]
   - 5.8. Look for third party testing as well as certification of device materials by organizations such as National Sanitation Foundation (NSF), Underwriters Laboratories (UL), Canadian Standards Association (CSA), and Österreichische Vereinigung für das Gas- und Wasserfach (OVGW).[2]

6. **Waste Disposal**
   - 6.1. Follow the standard color coding for garbage bags: black for non-infectious dry waste, green for non-infectious wet waste, and yellow for general infectious waste.[27]
   - 6.2. All health care waste produced during the care of confirmed or suspected COVID-19 patients, including PPE, should be collected safely in designated containers and red-colored bags, labeled and packed properly, treated, and then safely disposed of, preferably on-site.[28]
   - 6.3. Separate disposable from reusable PPE.



E. PERSONAL PROTECTIVE EQUIPMENT

1. Special Considerations

1.1. The use of PPE is only one of the infection prevention and control measures for COVID-19. PPE should be used in conjunction with local policies.

1.2. There is a global shortage of PPE. One has to know the proper PPE to wear based on their risk exposure. Below are some interventions aimed at conserving PPE:[29]

1.2.1. Consider using telemedicine to minimize the number of patients seen in your clinic.

1.2.2. Set up engineering and administrative controls to prevent the spread of COVID-19 infection (See Fig. 1).[30,31]

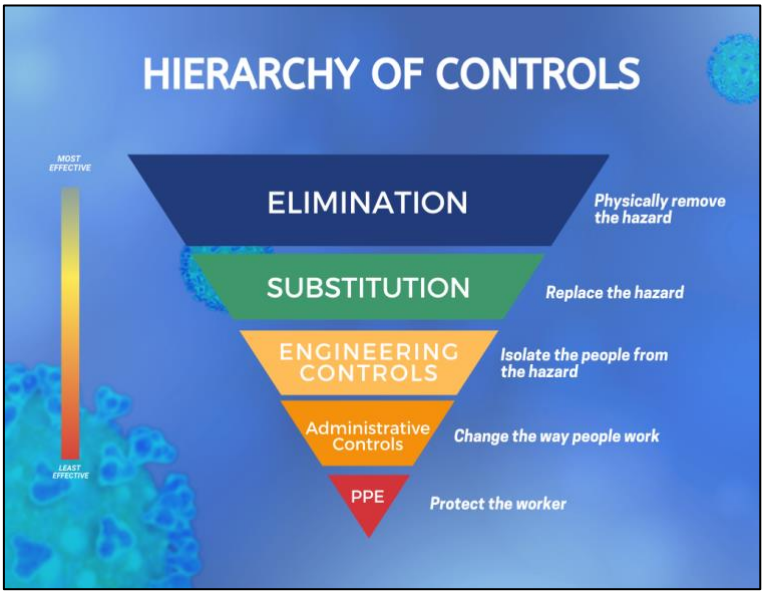


Fig. 1. Controlling exposures to occupational hazards is the fundamental method of protecting our clinic staff. *Adapted from: CDC - Hierarchy of Controls - NIOSH Workplace Safety and Health Topic. Available from: https://www.cdc.gov/niosh/topics/hierarchy/default.html*.

2. General Recommendations

2.1. Consider the factors that influence PPE selection:[32]

2.1.1. Type of exposure anticipated:

a. Splash/spray-risk or touch
b. Surgical procedures (aerosol vs. non-aerosol generating)
c. Category of isolation precautions

2.1.2. Durability and appropriateness for the task (direct vs. indirect patient care)

2.1.3. Fit

2.2. Be aware of the strategies to optimize the use, conservation, decontamination and reuse of PPE.[33]

2.3. Know the proper way of donning and doffing of PPE (Appendix V.).[34]

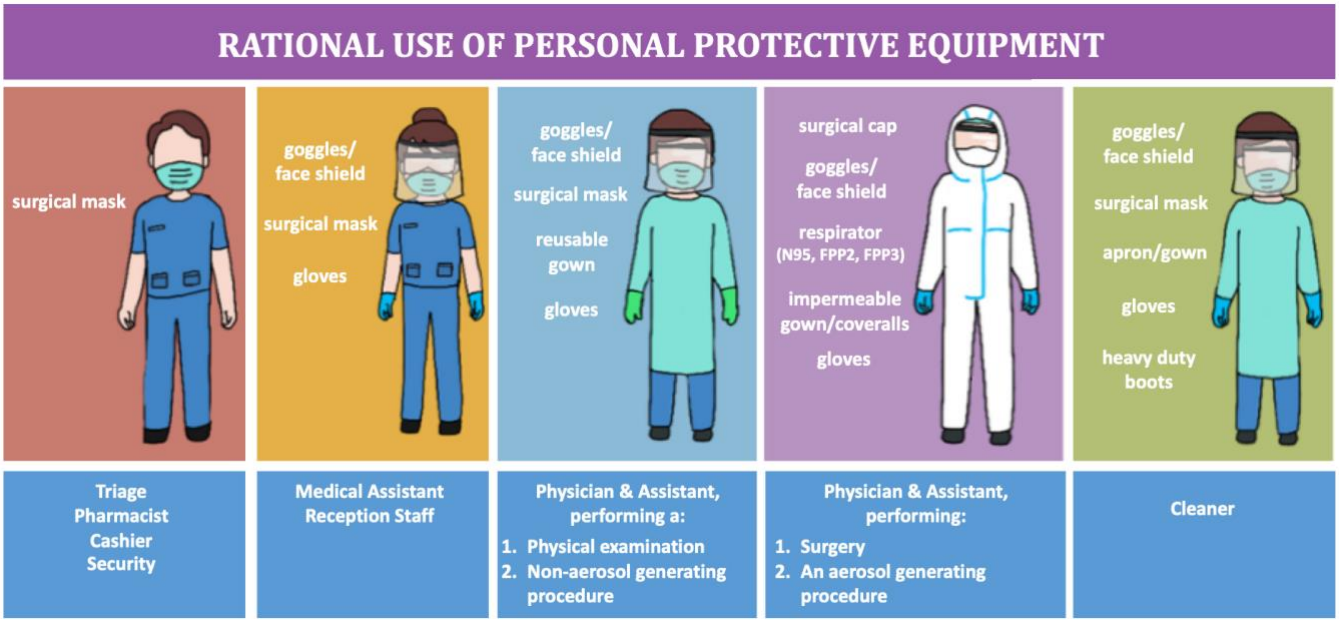
2.4 Limit opportunities for "touch contamination."

2.5. Remove PPE outside the room, and discard disposable and reusable PPE properly.

2.6. Ideally, change PPE in between patients.

2.7. The general recommendations in the table below are synthesized from several references on the rational use of PPE during this COVID-19 pandemic.[35-38]

Table 1. Rational use of PPE based on occupation or task .[35-38]



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