



INTERNATIONAL FEDERATION FOR EMERGENCY MEDICINE

Global Response to COVID-19 for Emergency Healthcare Systems and Providers: From the IFEM Task Force on ED Crowding and Access Block

Coronavirus disease (COVID-19) was declared a pandemic by the World Health Organization (WHO) on March 11, 2020.¹ As of March 25, 2020 the virus has since affected 169 countries with over 450,000 confirmed cases and over 21,000 deaths.^{1,2,3}

This press release is to confirm IFEM support for methods that must be enacted immediately to ensure the delivery of timely and effective emergency care, including prompt patient admission, and protect the integrity of global healthcare as defined by the WHO.⁴

1. Immediate and aggressive measures to limit transmission of COVID-19.

- Social distancing (more than 2 meters),
- Screening tools⁵ should be available plus clear instructions for:
 - Self-isolation of symptomatic individuals
 - Self-quarantine of exposed individuals
 - Work quarantine for frontline healthcare workers
- The cancellation of all large gatherings ('large' determined by region-specific guidelines and local governments)⁶, up to the avoidance of any groups more than 2 persons at a time
- Closing of non-essential venues,
- Cancellation of non-essential services, and
- Strengthening of laboratories and public health systems so that testing is available and contact tracing and follow-up can be conducted. In low-resource areas where testing is not widely available, we emphasize that the social measures outlined above are particularly important.

2. Ensure that frontline providers have adequate PPE or PPE alternatives if resources run out.

Adequate personal protective equipment, including N95 respirators, surgical masks, eye and face protection, gowns, gloves, and hand sanitation facilities should be available for all healthcare workers. These should be used in accordance with WHO guidance and clinicians should ensure the practice of [correct donning and doffing techniques](#) to avoid unintentional protocol breaches. PPE depletion is inevitable in some regions and the need for immediate conservation globally is essential, such as:

- Using a surgical mask or N95 respirator for as long as possible during a shift, changing only if wet, contaminated, or felt to have degraded in protection
- Using washable gowns
- Reusing forms of PPE that can be safely cleaned, e.g. goggles, some face shields, etc.
- Limiting staff who see patients, and
- Implementing telemedicine where possible.

In addition, it is essential to engage engineers and respirator/mask design experts in collaborative approaches to design protective systems that can be made with local resources. The current use of a "bandana" or "face scarf" when resources are gone, is not known to be safe. Specific materials that can filter the virus need to be identified for mask replacement. These must be readily available and be presented in a way they can be easily used to protect healthcare workers, while awaiting resupply. In



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addition the value of UV light or microwave technology in sterilizing materials for re-use needs to be determined.

3. Vulnerable clinicians must be protected.

Healthcare providers at risk of developing serious disease (e.g. age over 60, underlying comorbidities, immunosuppressed) should have work assignments that limit their exposure, including telemedicine responsibilities.⁷ Emergency Departments should develop institution-specific policies regarding staffing based on demographics of emergency care providers.

4. Vulnerable populations in the community must be protected

The elderly, those with comorbidities, individuals with significant mental health conditions, indigenous groups or other individuals who rely on others for support are particularly at risk. This includes those who live in nursing homes, live in high-density housing, and individuals experiencing homelessness. With early identification of these individuals or institutions, local community volunteers and families can set up phone monitoring, and clinicians can support this with telemedicine. Mobile visits can be done to ensure these groups have adequate basic supplies such as food, medications, etc. and be directed for medical assessment as needed.

5. Create and preserve hospital capacity

In many countries, even with appropriate containment, mitigation, and suppression measures, it is expected that the surge of patients requiring hospitalization and intensive care will overwhelm current capacities. Countries expecting this surge should prepare adequately. This may involve:

- Cancelling elective surgeries
- Transferring all patients not requiring hospitalization to outpatient care, and
- Increasing hospital and ICU bed capacity.

Clinicians should continue to be autonomous in their decision-making for patient admission, relying on acumen, guidelines, and expertise.

6. Immediate emergency department functional re-design

The International Federation for Emergency Medicine recognizes the emergency care systems around the world will vary in their capacity to respond to a surge of patients.⁹ Preparations should include

- Separate high risk COVID-19 and low risk COVID-19 patient care areas and staff where possible,⁸
- Establishment of well-supported telehealth hotlines to divert low-risk patients from the ED,
- COVID-19 testing away from hospitals for worried well or mildly ill patients,
- COVID-19 assessment in a designated area near or in the hospital with the capacity to do limited tests such as chest x-rays and minimal labs for the purpose of determining if admission is needed,
- Preserving an area in the ED for only acutely ill suspect or known COVID-19 patients who need resuscitation,
- Designated COVID-19 inpatient wards and intensive care units,



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Forward deployment of resources (pre-hospital) such as mobile COVID-19 teams that can set up clinics or provide care at nursing homes, shelters, etc. and ambulances for the care of COVID-19 cases is recommended if possible.¹⁰ Pre-hospital teams can be involved in reducing ED volumes through these home-based assessments. Seamless and continuous communication between health professions and organizations (ex. between hospital and EMS) is critical.

It is essential that in this surge, the care of non COVID-19 patients are not forgotten, as they can become unrecorded casualties in this pandemic.

7. Deployment of ALL health care providers including learners must be considered.

To do this, organizations must examine the skills of the learners and other healthcare providers and match them to tasks appropriately. For example,

- Retired or at-risk clinicians can do telemedicine.
- Medical, nursing, paramedicine students etc. can support low acuity clinics such as testing sites or immunization centres when a vaccine is available
- Deployment of non-medical volunteers to provide support for the vulnerable in the community, assist in hospitals in appropriate capacities, or even work on higher level technical problems such as challenges related to PPE shortages, etc.

8. Palliative care

Emergency clinicians will be called onto provide palliative care as opposed to acute interventions for patients who have little hope of survival. This should be done within an ethical framework and in a manner that is compassionate to the individual and the family, while protecting family members from inoculation.

*Finally, ALL Institutions must prioritize the physical and psychological needs of staff.*¹¹

IFEM recognizes COVID-19 will affect some countries more than others, and the response should be tailored accordingly. In evaluating the measures proposed here, repercussions to population psychological health, economic stability, and longitudinal stability should not go without consideration.¹²⁻¹⁴ Nevertheless, in countries where there is risk of significant spread, immediate actions outlined here must be taken to minimize the impact of this virus. IFEM can play a role in information sharing and support between international emergency medicine clinicians.

For any questions related to this press release or this topic, please contact Eddy Lang (eddy.lang@albertahealthservices.ca), Kim Hansen (hansenke@gmail.com), Arshia Javidan (arshia.javidan@mail.utoronto.ca) or Laurie Mazurik (lmazurik@gmail.com).



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