COVID-19
Coronavirus Disease 2019

DISQUE SAÚDE 136

Simpósio Internacional de
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Implementation of the WHO Core Components for Infection Prevention and Control for the protection of health workers

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Virtual, December 3, 2020

Political unrest, economic recession, and vulnerabilities

Opinion

The Rebellion Against the Elites in Latin America

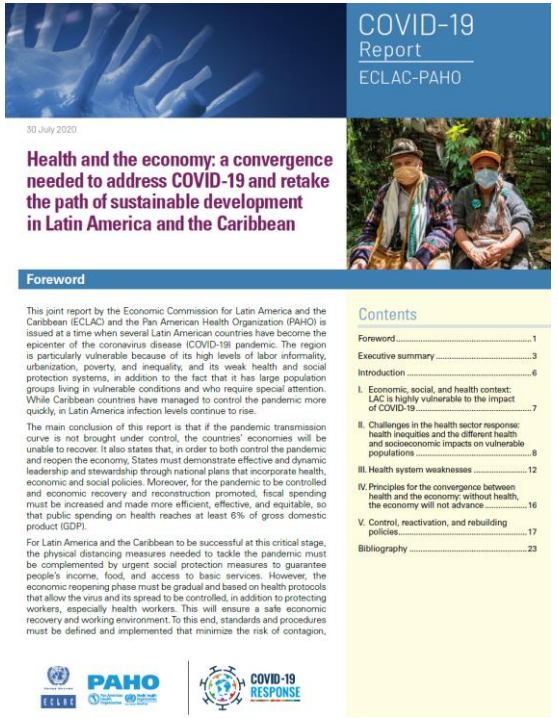
A widespread sentiment of dissatisfaction and lack of fairness is driving protests across the region.

By Michael Shifter

Mr. Shifter is an expert on United States-Latin American relations.

Jan. 21, 2020

Protesters in Santiago, Chile, in October. Tomas Munita for The New York Times



COVID-19 Report

ECLAC-PAHO

30 July 2020

Health and the economy: a convergence needed to address COVID-19 and retake the path of sustainable development in Latin America and the Caribbean

Foreword

This joint report by the Economic Commission for Latin America and the Caribbean (ECLAC) and the Pan American Health Organization (PAHO) is issued at a time when several Latin American countries have become the epicenter of the coronavirus disease (COVID-19) pandemic. The region is particularly vulnerable because of its high levels of labor informality, urbanization, poverty, and inequality, and its weak health and social protection systems, in addition to the fact that it has large population groups living in vulnerable conditions and who require special attention. While Caribbean countries have managed to control the pandemic more quickly, in Latin America infection levels continue to rise.

The main conclusion of this report is that if the pandemic transmission curve is not brought under control, the countries' economies will be unable to recover. It also states that, in order to both control the pandemic and reopen the economy, States must demonstrate effective and dynamic leadership and stewardship through national plans that incorporate health, economic and social policies. Moreover, for the pandemic to be controlled and economic recovery and reconstruction promoted, fiscal spending must be increased and made more efficient, effective, and equitable, so that public spending on health reaches at least 6% of gross domestic product (GDP).

For Latin America and the Caribbean to be successful at this critical stage, the physical distancing measures needed to tackle the pandemic must be complemented by urgent social protection measures to guarantee people's income, food, and access to basic services. However, the economic reopening phase must be gradual and based on health protocols that allow the virus and its spread to be controlled, in addition to protecting workers, especially health workers. This will ensure a safe economic recovery and working environment. To this end, standards and procedures must be defined and implemented that minimize the risk of contagion,

Contents

PAHO COVID-19 RESPONSE

"(…) The pandemic has erupted in a complex economic, social, and political scenario, with low levels of growth and high levels of labor informality. The Economic Commission for Latin America and the Caribbean (ECLAC) projects a 9.1% decline in gross domestic product (GDP) because of the pandemic. (…)"

"(…) Among other hardships, the spread of the virus may impede treatment of the most common chronic diseases in these population groups, exposing them to the risk of early death.(…)"

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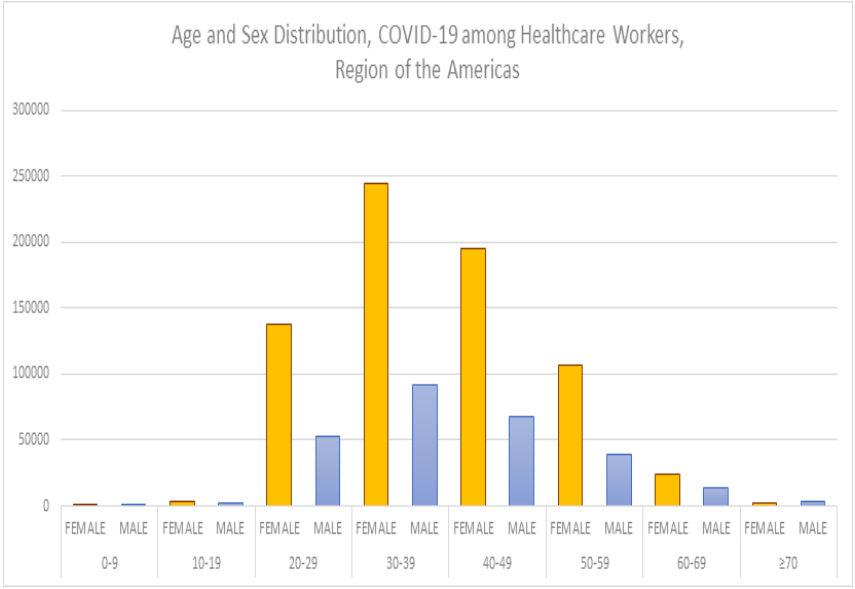
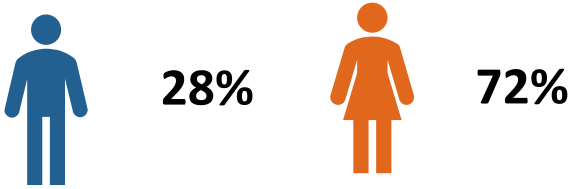
The burden of COVID-19 among health workers in the Region of the Americas

1,049,784 cases

3,086 deaths





Source – Line list of reported cases with exception of Brazil, Mexico, Panama, Paraguay, USA (sit reps) – 1 Dec 2020

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Occupational risks for infections in healthcare settings

- Late recognition or suspicion of COVID-19 in patients
- Work in high-risk department
- Longer duty hours
- Suboptimal IPC – hand hygiene
- Lack of or improper use of PPE
- Insufficient training
- Long exposure to large number of COVID-19 patients

WHO Situation Report, April 11, 2020 - https://www.who.int/docs/default-source/coronaviruse/situation-reports/20200411-sitrep-82-covid-19.pdf?sfvrsn=74a5d15_2

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[Qualitative Review]

Barriers and facilitators to healthcare workers' adherence with infection prevention and control (IPC) guidelines for respiratory infectious diseases: a rapid qualitative evidence synthesis

Catherine Houghton[1], Pauline Meskell[2], Hannah Delaney[3], Mike Smalle[4], Claire Glenton[5], Andrew Booth[6], Xin Hui S Chan[7], Declan Devane[1], Linda M Biesty[1]

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Editorial group: Cochrane Effective Practice and Organisation of Care Group.
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Houghton C, Meskell P, Delaney H, Smalle M, Glenton C, Booth A, Chan XHS, Devane D, Biesty LM. Barriers and facilitators to healthcare workers' adherence with infection prevention and control (IPC) guidelines for respiratory infectious diseases: a rapid qualitative evidence synthesis. Cochrane Database of Systematic Reviews 2020, Issue 4. Art. No.: CD013582. DOI: 10.1002/14651858.CD013582.

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Ann Intern Med. 2020;173:120-136. doi:10.7326/M20-1632

REVIEW

Annals of Internal Medicine

Epidemiology of and Risk Factors for Coronavirus Infection in Health Care Workers

A Living Rapid Review

Roger Chou, MD; Tracy Dana, MLS; David I. Buckley, MD, MPH; Shelley Selph, MD, MPH; Rongwei Fu, PhD; and Annette M. Totten, PhD

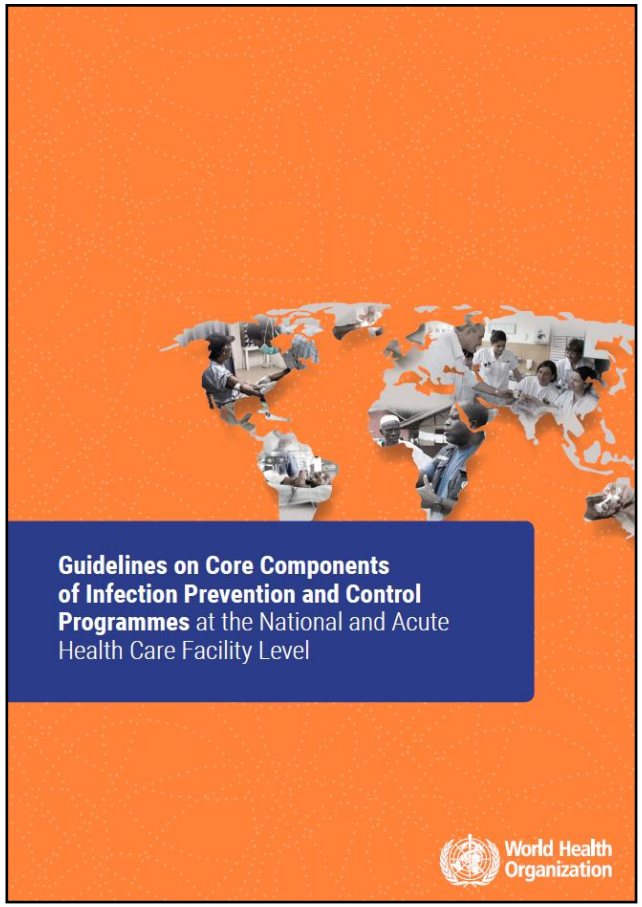
Data synthesis:

- Depression, anxiety, and psychological distress were common in HCWs during the coronavirus disease 2019 outbreak.
- The strongest evidence on risk factors was on PPE use and decreased infection risk.
- The association was most consistent for masks but was also observed for gloves, gowns, eye protection, and handwashing;
- Certain exposures (such as involvement in intubations, direct patient contact, or contact with bodily secretions) were associated with increased infection risk.
- Infection control training was associated with decreased risk.

Conclusion:

- Health care workers experience significant burdens from coronavirus infections, including SARS-CoV-2.
- Use of PPE and infection control training are associated with decreased infection risk, and certain exposures are associated with increased risk.

WHO IPC Core Components



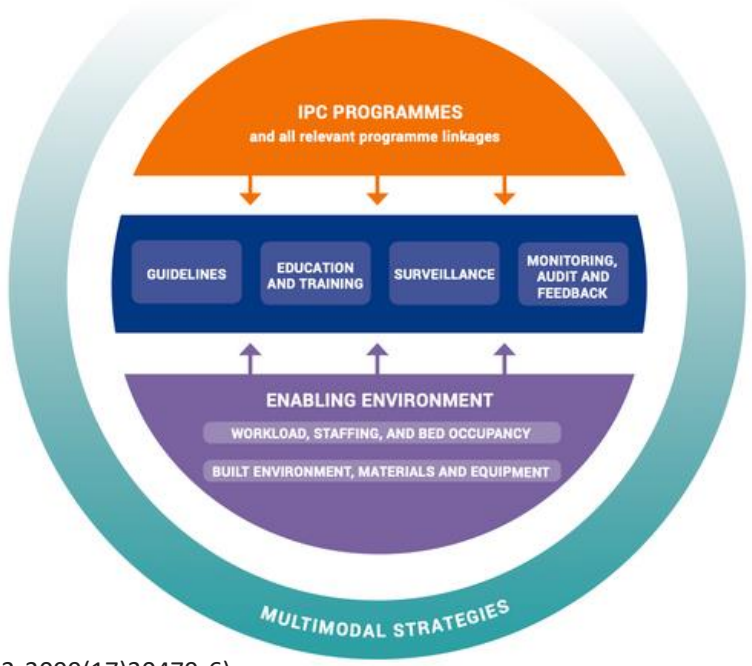
Storr et al. Antimicrobial Resistance and Infection Control (2017) 6:6
DOI 10.1186/s13756-016-0149-9

Antimicrobial Resistance and Infection Control

GUIDELINES ARTICLE Open Access

Core components for effective infection prevention and control programmes: new WHO evidence-based recommendations

Julie Storr[1], Anthony Twyman[1], Walter Zingg[2], Nizam Damani[1], Claire Kilpatrick[1], Jacqui Reilly[3], Lesley Price[3], Matthias Egger[4], M. Lindsay Grayson[5], Edward Kelley[1], Benedetta Allegranzi[1*] and the WHO Guidelines Development Group



Storr J et al. 2017 (doi: 10.1186/s13756-016-0149-9), Price L et al. 2017 (doi: 10.1016/S1473-3099(17)30479-6) and https://www.who.int/infection-prevention/tools/core-components/en/

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WHO IPC Core Components
CC1 – IPC Programs

Summary of IPC core components and key remarks

1 IPC Programs

R1a

The panel recommends that an IPC programme with a dedicated, trained team should be in place in each acute health care facility for the purpose of preventing HAI and combating AMR through IPC good practices. The organization of IPC programmes must have clearly defined objectives based on local epidemiology and priorities according to risk assessment and functions that align with and contribute to the prevention of HAI and the spread of AMR in health care. It is critical for a functioning IPC programme to have dedicated, trained professionals in every acute care facility. A minimum ratio of one full-time or equivalent infection preventionist (nurse or doctor) per 250 beds should be available. However, there was a strong opinion that a higher ratio should be considered, for example, one infection preventionist per 100 beds, due to increasing patient acuity and complexity, as well as the multiple roles and responsibilities of the modern preventionist. Good quality microbiological laboratory support is a very critical factor an effective IPC programme.

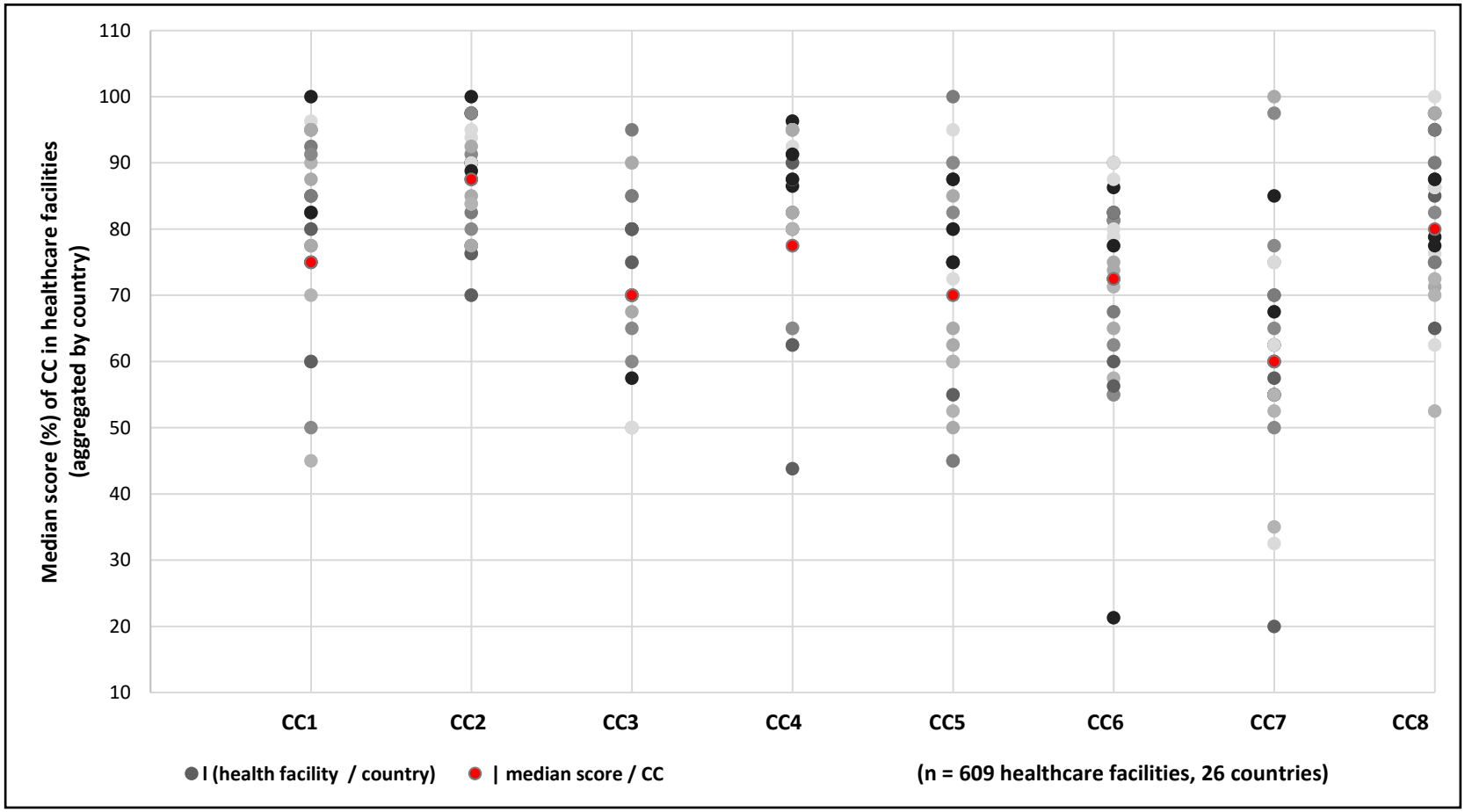
Strong, very low quality

R1b

Active, standalone, national IPC programmes with clearly defined objectives, functions and activities should be established for the purpose of preventing HAI and combating AMR through IPC good practices. National IPC programmes should be linked with other relevant national programmes and professional organizations. The IHR (2005) and the WHO Global Action Plan on AMR (2015) support national level action on IPC as a central part of health systems' capacity building and preparedness. This includes the development of national plans for preventing HAI, the development or strengthening of national policies and standards of practice regarding IPC activities in health facilities, and the associated monitoring of the implementation of and adherence to these national policies and standards. **Good practice statement**

https://www.who.int/infection-prevention/tools/core-components/en/

Implementation of WHO IPC Core Components in the Region (2019)



preliminary data as of April 2020 – not published yet.

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WHO IPC Core Components
CC2 – IPC guidelines

Summary of IPC core components and key remarks

2 IPC guidelines

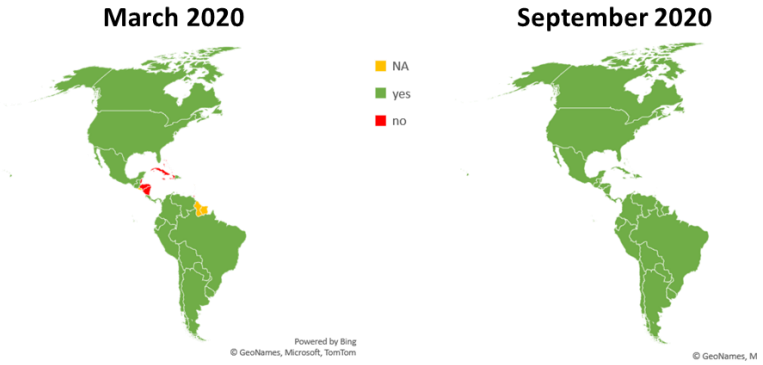
R2a

The panel recommends that evidence-based guidelines should be developed and implemented for the purpose of reducing HAI and AMR. The education and training of relevant health care workers on the guideline recommendations and the monitoring of adherence with guideline recommendations should be undertaken to achieve success. Strong, very low quality

R2b

Developing relevant evidence-based national IPC guidelines and related implementation strategies is one of the key functions of the national IPC programme. The national IPC programme should also ensure that the necessary infrastructures and supplies to enable guideline implementation are in place. The national IPC programme should support and mandate health care workers' education and training focused on the guideline recommendations. **Strong, moderate quality**

Member States reporting IPC guidelines for COVID-19



https://www.who.int/infection-prevention/tools/core-components/en/

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WHO IPC Core Components
CC3 – Education and Training

Summary of IPC core components and key remarks

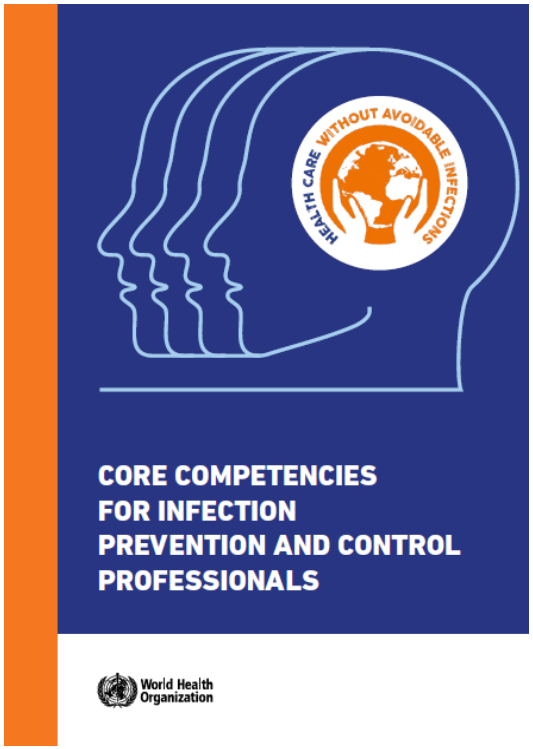
3 Education and Training

R3a

The panel recommends that IPC education should be in place for all health care workers by utilizing team- and task-based strategies that are participatory and include bedside and simulation training to reduce the risk of HAI and AMR. IPC education and training should be a part of an overall health facility education strategy, including new employee orientation and the provision of continuous educational opportunities for existing staff, regardless of level and position. Three categories of human resources were identified as targets for IPC training and requiring different strategies and training contents: IPC specialists, all health care workers involved in service delivery and patient care, and other personnel that support health service delivery (administrative and managerial staff, auxiliary service staff, cleaners, etc.). **Strong, moderate quality**

R3b

The national IPC programme should support the education and training of the health workforce as one of its core functions. The IPC national team plays a key role to support and make IPC training happen at the facility level. To support the development and maintenance of a skilled, knowledgeable health workforce, national pregraduate and postgraduate IPC curricula should be developed in collaboration with local academic institutions. The national IPC programme should provide guidance and recommendations for in-service training to be rolled out at the facility level according to detailed IPC core competencies for health care workers and covering all professional categories listed in core component. **Good practice statement**



https://apps.who.int/iris/bitstream/10665/335821/9789240011656-eng.pdf?ua=1

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WHO IPC Core Components CC5 – Multimodal strategies

Summary of IPC core components and key remarks

5 Multimodal Strategies

R5a

The panel recommends that IPC activities using multimodal strategies should be implemented to improve practices and reduce HAI and AMR. Successful multimodal interventions should be associated with an overall organizational culture change as effective IPC can be a reflector of quality care, a positive organizational culture and an enhanced patient safety climate. **Strong, low quality**

R3b

The panel recommends that national IPC programmes should coordinate and facilitate the implementation of IPC activities through multimodal strategies on a nationwide or subnational level. Ministry of health support and the necessary resources, including policies, regulations and tools, are essential for effective central coordination. This recommendation is to support facility level improvement. uccessful multimodal interventions should be associated with overall cross-organizational culture change as effective IPC can be a reflector of quality care, a positive organizational culture and an enhanced patient safety climate. **Strong low quality**

https://www.who.int/infection-prevention/tools/core-components/en/

WHO IPC Core Components
CC7 – Workload, staffing and bed occupancy

Summary of IPC core components and key remarks

7 Workload, staffing and bed occupancy

R7a

The panel recommends that the following elements should be adhered to in order to reduce the risk of HAI and the spread of AMR: (1) bed occupancy should not exceed the standard capacity of the facility; (2) health care worker staffing levels should be adequately assigned according to patient workload. Standards for bed occupancy should be one patient per bed with adequate spacing between patient beds and that this should not be exceeded. Intended capacity may vary from original designs and across facilities and countries. For these reasons, it was proposed that ward design regarding bed capacity should be adhered to and in accordance with standards. In exceptional circumstances where bed capacity is exceeded, hospital management should act to ensure appropriate staffing levels that meet patient demand and an adequate distance between beds. These principles apply to all units and departments with inpatient beds, including emergency departments. The WHO Workload Indicators of Staffing Need method provides health managers with a systematic way to determine how many health workers of a particular type are required to cope with the workload of a given health facility and decision-making. Overcrowding was recognized as being a public health issue that can lead to disease transmission. **Strong, very low quality**

https://www.who.int/infection-prevention/tools/core-components/en/

WHO IPC Core Components
CC8 – Built environment, materials and equipment for IPC at the facility level

Summary of IPC core components and key remarks

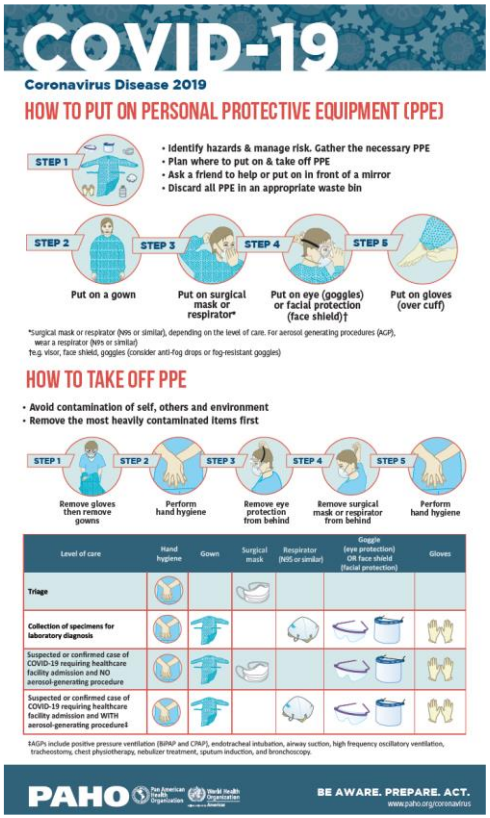
8 Environment, materials & equipment

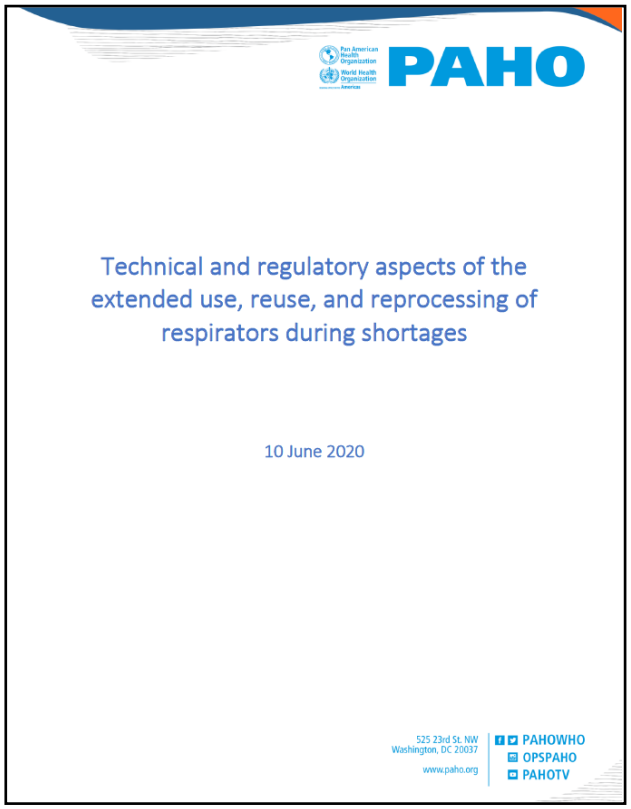
R8a Patient care activities should be undertaken in a clean and/or hygienic environment that facilitates practices related to the prevention and control of HAI, as well as AMR, including all elements around the WASH infrastructure and services and the availability of appropriate IPC materials and equipment. An appropriate environment, WASH services and materials and equipment for IPC are a core component of effective IPC programmes at health care facilities. **Good practice statement**

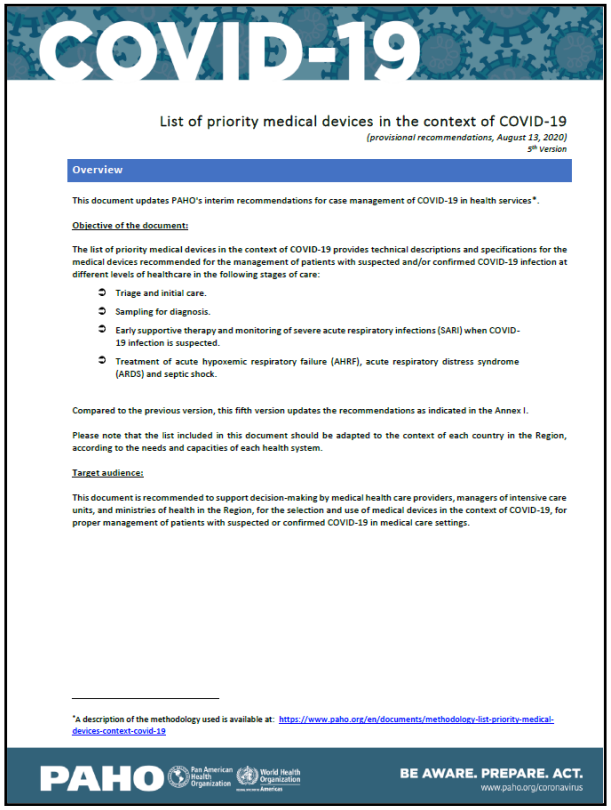
R8b The panel recommends that materials and equipment to perform appropriate hand hygiene should be readily available at the point of care. WHO standards for the adequate number and appropriate position of hand hygiene facilities should be implemented in all health care facilities. **Good practice statement**

https://www.who.int/infection-prevention/tools/core-components/en/

Requirements and technical specifications, use of PPE







https://www.paho.org/en/documents/technical-specifications-medical-devices-case-management-covid-19-healthcare-settings, https://iris.paho.org/handle/10665.2/52431, and https://iris.paho.org/handle/10665.2/52580

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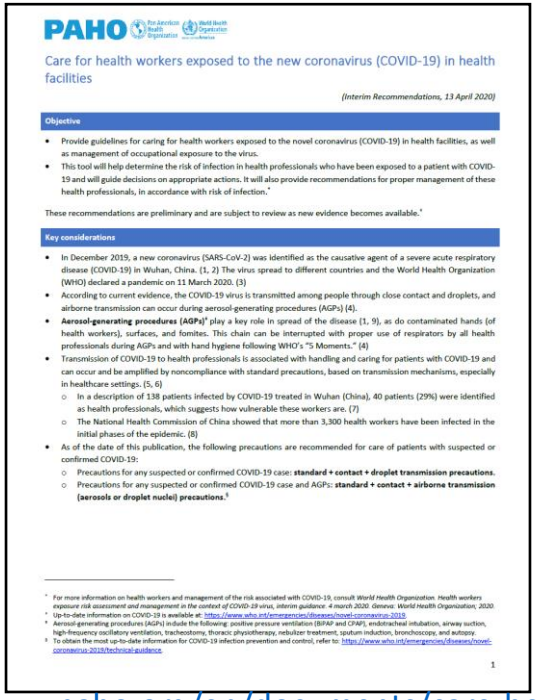
Care for health workers exposed to the new coronavirus (COVID-19) in health facilities



PAHO

Care for health workers exposed to the new coronavirus (COVID-19) in health facilities

(Interim Recommendations, 13 April 2020)

Objective

- Provide guidelines for caring for health workers exposed to the novel coronavirus (COVID-19) in health facilities, as well as management of occupational exposure to the virus.
- This tool will help determine the risk of infection in health professionals who have been exposed to a patient with COVID-19 and will guide decisions on appropriate actions. It will also provide recommendations for proper management of these health professionals, in accordance with risk of infection.*

These recommendations are preliminary and are subject to review as new evidence becomes available.*

Key considerations

- In December 2019, a new coronavirus (SARS-CoV-2) was identified as the causative agent of a severe acute respiratory disease (COVID-19) in Wuhan, China. (1, 2) The virus spread to different countries and the World Health Organization (WHO) declared a pandemic on 11 March 2020. (3)
- According to current evidence, the COVID-19 virus is transmitted among people through close contact and droplets, and airborne transmission can occur during aerosol-generating procedures (AGPs) (4).
- **Aerosol-generating procedures (AGPs)**‡ play a key role in spread of the disease (1, 9), as do contaminated hands (of health workers), surfaces, and fomites. This chain can be interrupted with proper use of respirators by all health professionals during AGPs and with hand hygiene following WHO's "5 Moments." (4)
- Transmission of COVID-19 to health professionals is associated with handling and caring for patients with COVID-19 and can occur and be amplified by noncompliance with standard precautions, based on transmission mechanisms, especially in healthcare settings. (5, 6)
  - In a description of 138 patients infected by COVID-19 treated in Wuhan (China), 40 patients (29%) were identified as health professionals, which suggests how vulnerable these workers are. (7)
  - The National Health Commission of China showed that more than 3,300 health workers have been infected in the initial phases of the epidemic. (8)
- As of the date of this publication, the following precautions are recommended for care of patients with suspected or confirmed COVID-19:
  - Precautions for any suspected or confirmed COVID-19 case: **standard + contact + droplet transmission precautions.**
  - Precautions for any suspected or confirmed COVID-19 case and AGPs: **standard + contact + airborne transmission (aerosols or droplet nuclei) precautions.**§

* For more information on health workers and management of the risk associated with COVID-19, consult *World Health Organization. Health workers exposure risk assessment and management in the context of COVID-19 virus, interim guidance. 4 march 2020. Geneva: World Health Organization; 2020.*

† Up-to-date information on COVID-19 is available at: https://www.who.int/emergencies/diseases/novel-coronavirus-2019.

‡ Aerosol-generating procedures (AGPs) include the following: positive pressure ventilation (BiPAP and CPAP), endotracheal intubation, airway suction, high-frequency oscillatory ventilation, tracheostomy, thoracic physiotherapy, nebulizer treatment, sputum induction, bronchoscopy, and autopsy.

§ To obtain the most up-to-date information for COVID-19 infection prevention and control, refer to: https://www.who.int/emergencies/diseases/novel-coronavirus-2019/technical-guidance.

1

https://www.paho.org/en/documents/care-health-workers-exposed-new-coronavirus-covid-19-health-facilities

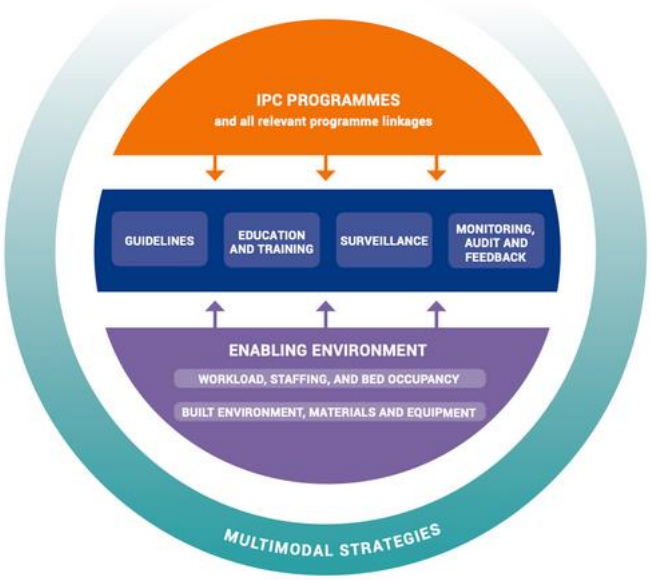
- Provide **guidelines** for caring for health workers **exposed** to the novel coronavirus (COVID-19) in health facilities,
- **Determine the risk of infection in health professionals** who have been exposed to a patient with COVID-19.
- **Recommendations for management** of health professionals, in accordance with risk of infection.

Pan American Health Organization

World Health Organization
REGIONAL OFFICE FOR THE Americas

WHO IPC Core Components and its challenges for implementation

Strategic Line of Action 1: Implement continuous processes to improve the quality of care to people, families, and communities in the delivery of comprehensive health services (PAHO – CD57/12, 2019)



Core Component	Comment
1 – IPC programmes	• Political commitment for IPC in MoH • Organized and functional IPC program at the hospital level
2 – IPG guidelines 3 – IPC education and training	• Implementation science and knowledge transfer
5 – Multimodal strategies	• Local contexts
7 – Workload, staffing and bed occupancy	• Trained human Resources • High turnover of HCW
8 – Built environment, materials and equipment for IPC at the facility level	• Lack of allocation of specific funds

https://www.who.int/infection-prevention/tools/core-components/en/ and https://doi.org/10.1016/S1473-3099(17)30479-6

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Activities to protect health workers and patients from COVID-19

CASE CONTROL STUDY ON HEALTH WORKERS COVID-19: A RESEARCH PROTOCOL

https://www.who.int/publications/i/item/assessment-of-risk-factors-for-coronavirus-disease-2019-(covid-19)-in-health-workers-protocol-for-a-case-control-study

World Health Organization

Research & Development Infection Prevention and Control Group - WHO Unity Studies

Questions and comments

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