

Infection Prevention and Control (IPC) for Novel Coronavirus (COVID-19)



Module 1: Preparedness, readiness and IPC

Principles of Emergency Management



Evaluate prevention, mitigation preparedness and response efforts; facilities seek to return to “normal” or Build Back Better (BBB)

Prevention and Mitigation

Strategies that can help a facility prevent and reduce the impact of an emergency (e.g., providing the staff vaccination against diseases)

Recovery

Preparedness and Readiness

Activities in reaction to a known or suspected event

Response

Actions that take place before an emergency

What is preparedness in health care?



- The knowledge, capacities and organizational systems developed by governments, response and recovery organizations, communities and individuals to effectively anticipate, respond to, and recover from the impacts of likely, imminent, emerging, or current emergencies.
- Actions which take place before an emergency and increase a facility's ability to respond when an emergency occurs.
- All levels: National, regional and facility.

Why?



- Because preparedness is an integral part of ***health system strengthening*** and is critical to ***health emergency disaster risk management***
- Inadequate IPC measures may lead to transmission to patients, staff, visitors and within the community.

What is readiness?



The capacities and the systems that should be in place to enable a rapid, effective response in case of a health emergency disaster (in the current situation: importation of COVID-19 cases) and to be ready to “aggressively” contain the event (outbreak) before further spread.

What is readiness?



Eight pillars of the public health response:

- Country-level coordination, planning and monitoring
- Risk communication and community engagement
- Surveillance, epidemiologic investigation, rapid-response and case investigation
- Points of entry
- National laboratories
- Infection prevention and control
- Case management
- Operations support and logistics, including contingency plans & funding mechanism

Readiness

Pillar 1: country-level coordination, planning and monitoring



Step	Actions to be taken
1	<ul style="list-style-type: none">✓ Activate multi-sectoral, multi-partner coordination mechanisms to support preparedness and response✓ Engage with national authorities and key partners to develop a country-specific operational plan with estimated resource requirements for COVID-19 preparedness and response, or preferably adapt, where available, an existing Influenza Pandemic Preparedness Plan✓ Conduct initial capacity assessment and risk analysis, <u>including mapping of vulnerable populations</u>✓ Begin establishing metrics and monitoring and evaluation systems to assess the effectiveness and impact of planned measures

Readiness

Pillar 1: country-level coordination, planning and monitoring



Step	Actions to be taken
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2

- ✓ Establish an incident management team, including rapid deployment of designated staff from national and partner organizations, within a public health emergency operation centre (PHEOC) or equivalent if available
- ✓ Identify, train, and designate spokespeople
- ✓ Engage with local donors and existing programmes to mobilize/allocate resources and capacities to implement operational plan
- ✓ Review regulatory requirements and legal basis of all potential public health measures
- ✓ Monitor implementation of SCOP based on key performance indicators in SPRP and produce regular situation report

Readiness

Pillar 1: country-level coordination, planning and monitoring



Step	Actions to be taken
3	<ul style="list-style-type: none">✓ Conduct regular operational reviews to assess implementation success and epidemiological situation, and adjust operational plans as necessary✓ Conduct after action reviews in accordance with IHR (2005) as required✓ Use COVID-19 outbreak to test/learn from existing plans, systems and lesson-learning exercises to inform future preparedness and response activities

IPC: A basic requirement for outbreak preparedness and a critical element of readiness



Infection Prevention and Control (IPC)

should be an ongoing activity undertaken/supported by the national programme and by the IPC focal point/team/committee, the health care facility senior management officials and all staff at the facility level.

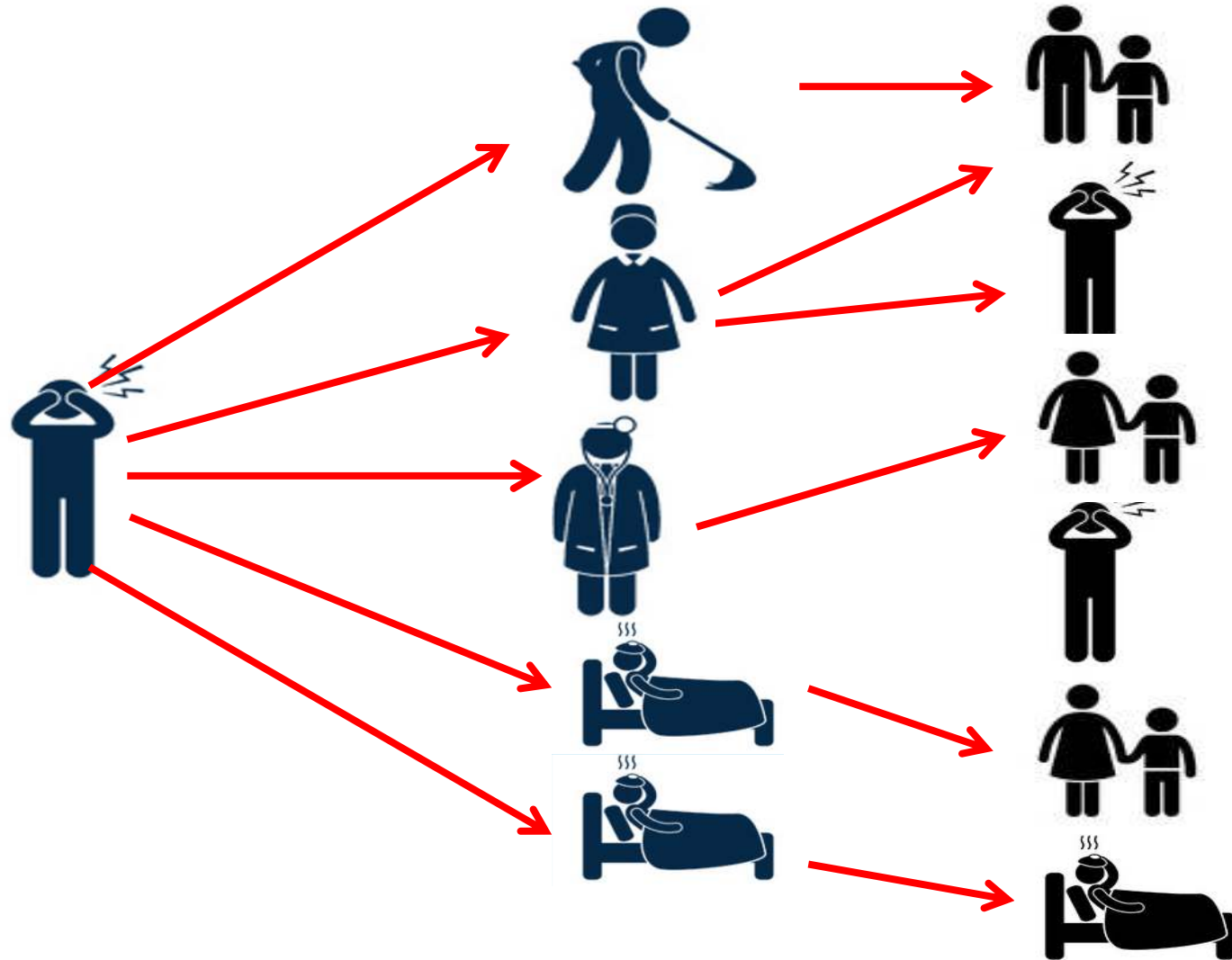
What is infection prevention and control?



Infection prevention and control is:

- a scientific approach with
 - practical solutions designed to prevent harm, caused by infections, to patients and health care workers
 - grounded in principles of infectious disease, epidemiology, social science and health system strengthening, and
 - rooted in patient safety and health service quality

Who is at risk of infection?



Everyone

Benefits of IPC



Protecting yourself



Protecting your
patients



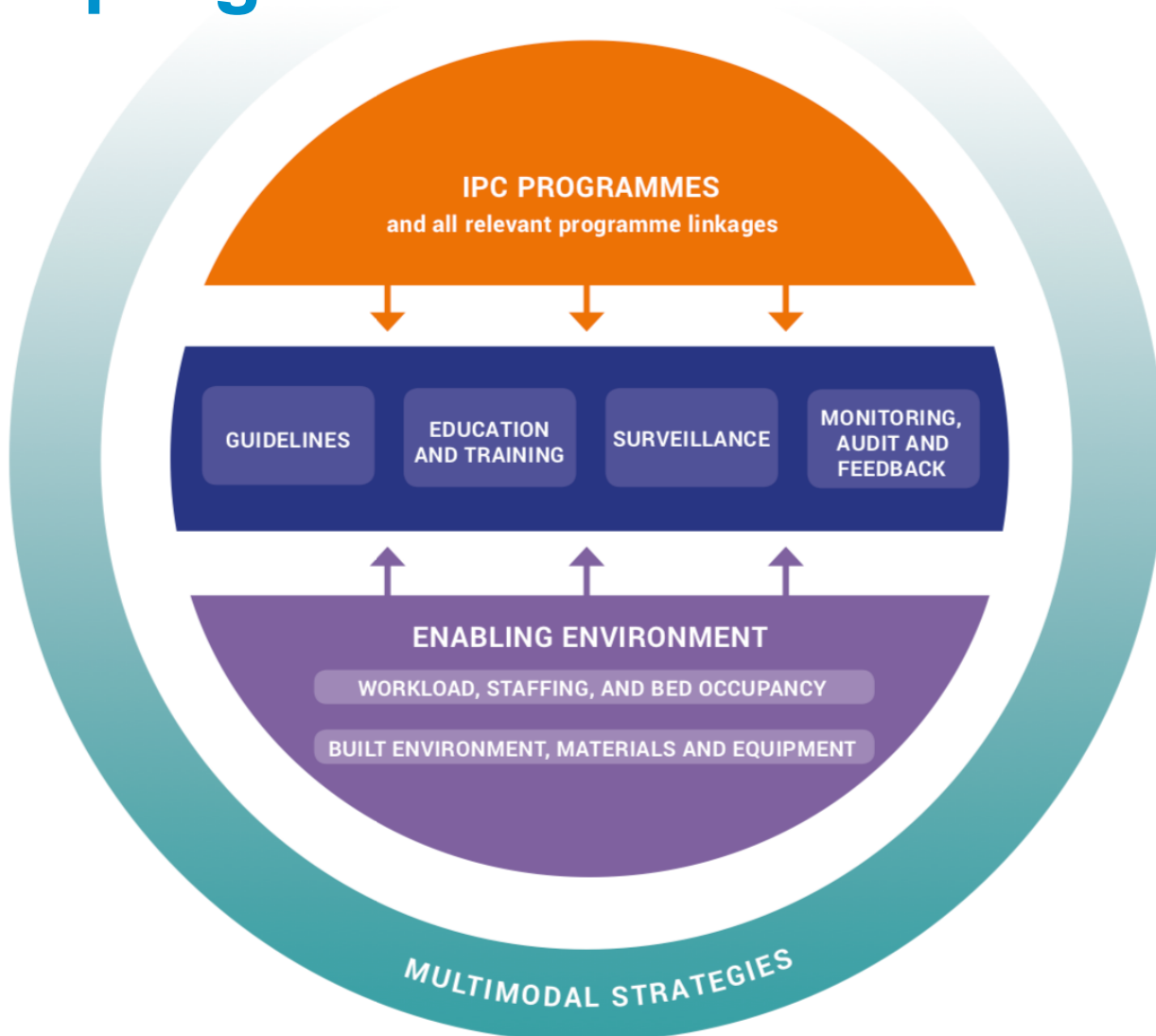
Protecting your
family & community

IPC goals in outbreak preparedness



1. To reduce transmission of health care associated infections
2. To enhance the safety of staff, patients and visitors
3. To enhance the ability of the organization/health facility to respond to an outbreak
4. To lower or reduce the risk of the hospital (health care facility) itself amplifying the outbreak

Core components for effective IPC programmes in all contexts



- Effective IPC programmes must be based on the implementation of all Core Components
- If no IPC knowledge, system, organization, and resources are in place, it is unlikely that a country/ a facility is able to respond effectively to an outbreak

At least the IPC Minimum Requirements must be in place

MINIMUM REQUIREMENTS for infection prevention and control programmes



The starting point for implementing the World Health Organization core components of infection prevention and control programmes at the national and health care facility level

Thus, the minimum requirements represent the starting point for undertaking the journey to build strong and effective IPC programmes at the national and facility level (Fig. 2) and **SHOULD** be in place for all countries and health care facilities to support further progress towards full implementation of all core components.

The *minimum requirements* are defined as:

IPC standards that should be in place at the national and facility level to provide minimum protection and safety to patients, HCWs and visitors, based on the WHO core components for IPC programmes.

IPC Minimum Requirements



NATIONAL LEVEL	FACILITY LEVEL
<p>CC1 – A functional IPC programme in place with at least one full-time trained IPC focal point and a dedicated IPC budget.</p>	<ul style="list-style-type: none">• Primary care: trained IPC link person• Secondary care: 1 trained IPC focal point per 250 beds with dedicated time and budget• Tertiary care: 1 full time trained IPC focal point per 250 beds with dedicated time and budget + multidisciplinary IPC committee + access to the microbiology laboratory
<p>CC2 – Evidence-based national IPC guidelines adapted to the local context</p>	<ul style="list-style-type: none">• Primary care: SOPs at least on standard precautions and basics of transmission-based precautions• Secondary and tertiary care: additional SOPs on surgery, prevention of endemic HAIs, and occupational health

IPC Minimum Requirements



NATIONAL LEVEL	FACILITY LEVEL
<p>CC3 – Education & Training: National policy that all HCW are trained in IPC + IPC national curriculum + monitoring of IPC training effectiveness</p>	<ul style="list-style-type: none">• All care levels: IPC training for all clinical front-line staff and cleaners upon hire (but also <i>annually</i> in tertiary care facilities) + specific IPC training for IPC focal points.
<p>CC4 – National technical group developing plans for health care-associated infection (HAI) surveillance and IPC monitoring</p>	<ul style="list-style-type: none">• Primary – Secondary care: HAI surveillance not a minimum requirement but should follow national plans.• Tertiary care: Active surveillance of HAIs and AMR and feedback should be a core activity of the IPC programme.

IPC Minimum Requirements



NATIONAL LEVEL	FACILITY LEVEL
<p>CC5 – Multimodal improvement Strategies (MMIS) should be implemented for IPC interventions</p>	<ul style="list-style-type: none">• Primary care: MMIS to implement priority IPC measures (hand hygiene, injection safety, decontamination of medical equipment, environmental cleaning)• Secondary care: MMIS for implementation of all standard and transmission-based precautions and for triage• Tertiary care: same as secondary care + MMIS for specific types of HAI (e.g. CLABSI) according to local risk and epidemiology
<p>CC6 – National technical group for IPC monitoring developing plans + recommendations on IPC indicators + system + training</p>	<ul style="list-style-type: none">• Primary care: monitoring of IPC indicators based on IPC priorities (see CC5)• Secondary and tertiary care: a dedicated individual responsible for IPC monitoring and timely feedback + hand hygiene as a priority indicator

IPC Minimum Requirements



NATIONAL LEVEL	FACILITY LEVEL
CC7 – Workload, staffing and bed occupancy levels	<ul style="list-style-type: none">• Primary – systems for patient flow + triage + for the management of consultations.<ul style="list-style-type: none">• To optimize staffing levels, facilities must undertake an assessment of facility appropriate staffing levels.• Secondary - tertiary care: system to manage the use of space + establish standard bed capacity for the facility + no more than one patient per bed + at least 1 metre between the edges of beds.<ul style="list-style-type: none">• To optimize staffing levels, facilities must undertake an assessment of facility appropriate staffing levels.
CC8 – Built environment, materials, and equipment for IPC	<ul style="list-style-type: none">• Primary care: Patient care activities should be undertaken in a clean and hygienic environment, facilities should include separate areas for sanitation activities, decontamination and reprocessing medical equipment and have sufficient IPC supplies and equipment for providing IPC measures.• Secondary – tertiary care: Facilities should have sufficient single isolation rooms or availability to cohort if appropriate.

IPC Minimum Requirements in the context of COVID-19 outbreak



Step	Actions to be taken
1	<ul style="list-style-type: none"> <input type="checkbox"/> Assess IPC capacity at all levels of healthcare system, including public, private, traditional practices and pharmacies. Minimum requirements include functional triage system and isolation rooms, trained staff (for early detection and standard principles for IPC); and sufficient IPC materials, including personal protective equipment (PPE) and WASH services/hand hygiene stations <input type="checkbox"/> Assess IPC capacity in public places and community spaces where risk of community transmission is considered high <input type="checkbox"/> Review and update existing national IPC guidance: health guidance should include defined patient-referral pathway including an IPC focal point, in collaboration with case management. Community guidance should include specific recommendations on IPC measures and referral systems for public places such as schools, markets and public transport as well as community, household, and family practices <input type="checkbox"/> Develop and implement a plan for monitoring of healthcare personnel exposed to confirmed cases of COVID-19 for respiratory illness <input type="checkbox"/> Develop a national plan to manage PPE supply (stockpile, distribution) and to identify IPC surge capacity (numbers and competence)
2	<ul style="list-style-type: none"> <input type="checkbox"/> Engage trained staff with authority and technical expertise to implement IPC activities, prioritizing based on risk assessment and local care-seeking patterns <input type="checkbox"/> Record, report, and investigate all cases of healthcare-associated infections <input type="checkbox"/> Disseminate IPC guidance for home and community care providers <input type="checkbox"/> Implement triage, early detection, and infectious-source controls, administrative controls and engineering controls; implement visual alerts (educational material in appropriate language) for family members and patients to inform triage personnel of respiratory symptoms and to practice respiratory etiquette <input type="checkbox"/> Support access to water and sanitation for health (WASH) services in public places and community spaces most at risk
3	<ul style="list-style-type: none"> <input type="checkbox"/> Monitor IPC and WASH implementation in selected healthcare facilities and public spaces using the Infection Prevention and Control Assessment Framework, the Hand Hygiene Self-Assessment Framework, hand hygiene compliance observation tools, and the WASH Facilities Improvement Tool <input type="checkbox"/> Provide prioritized tailored support to health facilities based on IPC risk assessment and local care-seeking patterns, including for supplies, human resources, training <input type="checkbox"/> Carry out training to address any skills and performance deficits

<https://www.who.int/docs/default-source/coronaviruse/covid-19-sprp-unct-guidelines.pdf>

What is the role of the IPC focal point, team or committee?



Individual IPC focal point

- Knowledge: have an understanding of the IPC strategies needed for outbreaks/epidemics, etc.

Healthcare Facility

- Infrastructure
- Policy and SOPs development
- Assessment, preparedness and readiness

IPC Committee

- Participate in response and recovery
- Participate in surveillance & monitoring
- Patient management
- Education