Aide-memoire: personal protective equipment
Aide-memoire: personal protective equipment
Aide-memoire: personal protective equipment

Actions to ensure reliable improvements in infection prevention and control (IPC) practices.

Personal Protective Equipment (PPE), i.e. mask, eye protection, gowns, gloves, is part of standard and transmission-based precautions (droplet/contact/airborne). Although the use of PPE is the most visible control used to prevent the spread of acute respiratory infection, it is only one of the IPC measures and should not be relied upon as a primary prevention strategy. In the absence of hand hygiene, effective administrative and engineering controls, PPE has limited benefit.

HOW SHOULD I USE THIS AIDE-MEMOIRE?

1. **Familiarize yourself with the content** of each of the five colour-coded sections.
2. **Consider each of the action checks to make a plan**, and outline them in discussions with others on the improvements to be made, **when preparing to implement WHO guidance, or at any time when aiming to improve adherence to IPC guideline recommendations**.
3. **Take action to make improvements** where needed, using the action checks (some web links are also provided to help if you do not know where to start). Note that this process will likely be cyclical/ongoing until all practices are reliably improved and sustained.

All action checks are for IPC focal points but also describe actions necessary by other professionals with important **IPC input** (where this is the case, the term **IPC input** is used acknowledging that individual groups of professionals alone cannot necessarily achieve the action but should combine to influence it to happen).

**Monitor your overall progress – using the action checks will help you improve over time** and will make you better prepared to meet the WHO core components of IPC programmes, when using the WHO infection prevention and control assessment framework.

The multiple actions presented, when **used in combination**, will contribute to influencing the behaviour of the target audience; i.e. those who should perform IPC practices. Focusing on only one aspect, such as a focus on delivering training only, will not achieve sustainable improvement in practices.
THE SYSTEM CHANGE NEEDED TO PROCURE, DELIVER AND MANAGE INFRASTRUCTURE, EQUIPMENT, SUPPLIES AND OTHER RESOURCES (INCLUDING BUDGET) TO ENABLE IPC PRACTICES – “BUILD IT”

Read and use the statements below to ensure that a range of proven improvement actions have been taken.

Your action checks

- Systems to reliably procure and distribute PPE (and associated hand hygiene and waste management products) have been put in place and included IPC input, and the associated, dedicated budget. Systems have also included product evaluations.
- Exercises to understand the adequate numbers of PPE products that are required, as well as the distribution process, have been performed and included IPC input. The correct standard/quality and sizes of PPE have also been included in the exercises.
- Steps to confirm sustainable systems for reliable product/resource availability in patient care areas have been put in place, even if previously thought to be a good system (e.g. a process that includes an alert mechanism for things that could still go wrong), with IPC input. Roles and responsibilities for stocked supplies of PPE (and associated hand hygiene, waste and linen management products) have been outlined with IPC input. This includes replacement/replenishment.
- Systems that ensure easy-to-access PPE products that are reliably available have been established and included IPC input, i.e. products positioned in places that are most suited to those who need to use them, and are in line with IPC-informed policies or standard operating procedures (SOPs), e.g. meetings have been held to discuss point of care locations for PPE dispensers, depending on the setting.
- Up-to-date policies for PPE, including as per IPC guidance on (acute respiratory) infection, have been provided.
- SOPs for use in patient care areas have been provided, including safe and appropriate use of PPE, and associated hand hygiene, and waste disposal actions. Replacement of PPE supplies has also been included. SOPs in paper or in electronic format have been made available so that they are easily accessible to those who need them.
- Budgets for targeted training, monitoring and reminders (see other actions) have been pursued, identified and secured.
- Temporary strategies on rational but safe use of PPE where there are issues with supply, such as a temporary and time-limited SOP, have been considered and clearly outlined, always with IPC input (including minimizing the need for PPE use, organizing work flow to avoid unnecessary use, appropriate extended use, reprocessing where there is an efficient linen/reprocessing service and alternative PPE items).
- Temporary systems to ensure on-site safe PPE waste disposal due to increased use (i.e. functional collection containers) have been put in place with IPC input.
- Temporary strategies have been put in place always with IPC input, for a local authority to assess any proposed local production of PPE according to specific minimum standards and technical specifications.
- Annual water service plans have been put in place with IPC input in settings where water access/quality is an issue to ensure that there is infrastructure to act upon PPE reprocessing, where this is necessary.
**A sample of WHO resources that can help you if you do not know how to start**


A CULTURE OF SAFETY TO FACILITATE AN ORGANIZATIONAL CLIMATE THAT VALUES THE INTERVENTION – “LIVE IT”.

Read and use the statements below to ensure that a range of proven improvement actions have been taken.

Your action checks

- The right leaders/role models/observers have been identified and engaged with IPC input, and teams formed where relevant (these may be from many different settings, including in health care or community leaders/families). Staff have been asked which PPE role models they would best respond to (these can be very different in different settings and come from all levels).

- Role models/leaders with the right expertise for championing, influencing and being real-time observers for appropriate PPE use have been engaged, with IPC input, e.g. a “champion” badge to show that a culture of safety has been considered serious.

- Leaders/senior managers have been encouraged to have done the following (not exhaustive):
  - understood and actively supported actions in line with PPE policies and SOPs;
  - role modelled the right practices for PPE use (not forgetting associated hand hygiene actions and waste management) by performing these actions correctly in front of staff. Training sessions have also been attended alongside staff, particularly while (acute respiratory) infections are prevalent;
  - encouraged “buddy” systems to suit the local setting to promote the right practices, as per SOPs, including having engaged managers/supervisors specifically in how they can be ongoing role models;
  - made visible the commitment to budget allocation for PPE and associated resources;
  - shown commitment to protected time for targeted, real-time training. Training plans have been signed off for all levels of staff;
  - provided written or auditory messages with IPC input (with plans made to update regularly, i.e. monthly);
  - held discussions (at both facility and national level as appropriate), e.g. virtual or on-site meetings/ focus groups with all the right people and an agenda to allow for problems with PPE to be discussed, questions to be heard and solutions to improvements outlined, with IPC input. Suitable, regular times for “safety talks”, in person or virtually, have been set, using a range of ways that make sure that the right people are available (including use of the social media). Discussions have been facilitated in a way that allows everyone to have a chance to talk;
  - promoted and supported staff motivational activities with IPC input, e.g. in the form of an award that is announced publicly to encourage staff to continue to adhere to appropriate PPE use, as per SOPs.

A sample of WHO resources that can help you if you do not know how to start


1 Leaders: anyone in administrative or management positions.
Read and use the statements below to ensure that a range of improvement actions have been taken.

**Your action checks**

- **Accurate reminders** (based on WHO recommendations) have been sourced/developed/adapted if not by IPC then with **IPC input** and used to champion PPE use and associated hand hygiene and waste management actions. Directions on when and how to use products/equipment have been included and disposal as relevant, as well as motivational slogans (posters, short videos and electronic reminders where possible are some examples).

- **Decisions** have included staff, on the types of reminders that will engage them, **always with IPC input**. For PPE use, illustrative reminders are usually preferred.

- The most **appropriate placement** of reminders has been arranged **between IPC and staff**, and has **focused on the point of care** wherever persons with (acute respiratory) infections are (both inpatient and outpatient settings).

- Any **issues with placement** of reminders have been addressed with **IPC input**, including allocated wall placement (to avoid damage) and any “competition” with other reminders.

- **Regular replenishment** of reminders (posters)/other communications have been planned with **IPC input**, including auditory messages from leaders, e.g. on a monthly basis. Slight variations in how the reminders are presented have been planned, in order to maintain people’s attention.

- **Scripts/prompts** for local champions/role models have been provided when talking about PPE use, considering the local context and culture.

- A range of **staff messages** have been developed and issued to drive action and ensure ongoing motivation; this might be compliance feedback or facts about the prevalent (acute respiratory) infections, and have been arranged **between IPC and leaders**.

**A sample of WHO resources that can help you if you do not know how to start**


Read and use the statements below to ensure that a range of improvement actions have been taken.

Your action checks

- **Responsibility** for checking current training and education programmes has been allocated and have included the correct, up-to-date PPE use (for standard, droplet/contact and airborne PPE recommendations) and associated hand hygiene and waste management actions, at the right times. To address any staffing/responsibility changes, a mechanism for reassigning responsibility has also been put in place.

- **A plan** for all training resources to be updated where and when necessary, mapping guideline/policy/SOP recommendations to training content, has been put in place.

- **Mechanisms**, such as a reliable annual and/or “new guidance issued” alert, have have been put in place to ensure timely updates to training resources, including allocated responsibilities.

- Training **needs assessments** have been conducted across different disciplines/levels, namely, anyone who would have the need to use PPE and may be in contact with body fluids, and any other assessments (from monitoring activities) have also been used to inform training.

- **The required expertise** to conduct targeted training and answer questions (this may mean asking external experts) has been identified and confirmed.

- **A schedule** has been prepared and **targeted training** of staff and identified others has been delivered, including refresher courses.

- **Different (practical) approaches**, including demonstrations and peer review checks, in person or through online tools, have been included (the type of training should be relatable to the target audience). Staff has ultimately been empowered through training, which will lead to autonomy, encouraging them to consistently do the right thing and to serve as role models to others.

- **Easily accessible training schedules** with deadlines for completion and targets have been made available for all staff to view. Different methods have been applied to motivate training attendance/completion, e.g. certificates of completion, recognition/rewards, statements from leaders who have already completed the training.

- Depending on the setting, **additional educational materials** for patients and visitors have been prepared **always with IPC input** and, for example, train-the-trainer sessions have been offered to support these communities.

- **A schedule** has been prepared and delivered to provide **targeted training on the temporary use of alternative items** in the absence of recommended PPE, e.g. masks, and on reprocessing requirements and extended use of PPE.

- **Direction/training materials** on the local production of PPE where this is temporarily necessary have been provided, **always with IPC input**.
A sample of WHO resources that can help you if you do not know how to start


MONITORING AND FEEDBACK TO ASSESS THE PROBLEM, DRIVE APPROPRIATE CHANGE AND DOCUMENT IMPROVEMENT OF PRACTICES – “CHECK IT”.

Read and use the statements below to ensure that a range of improvement actions have been taken.

Your action checks

- Dedicated, trained staff have been identified to execute monitoring activities.
- Monitoring/observation tools have been checked for validity and reliability in line with guidance/SOPs and data collection recommendations, and have been made available for use.
- An audit/surveillance monitoring schedule has been created to include roles and responsibilities, and made available to ensure that staff engage with this as an improvement/feedback approach.
- The audit/surveillance reporting and feedback schedule has been executed and targeted in a way that engages staff.
- Monitoring activities have embraced alert mechanisms, not just routine planned activities, to highlight in real time when systems and processes fail and, for example, when products are not reliably available or not fit for purpose.
- Additional mechanisms for patient/visitor feedback have been considered, depending on the setting, with IPC input.
- Audit and surveillance activities, with reporting and feedback, have included at least the following:
  - reliable, sufficient availability of PPE (masks/respirators, aprons/gowns, gloves), along with hand hygiene products and other necessary equipment (for waste disposal or reprocessing) – the right-sized products functioning and correctly placed, considering end-to-end distribution. The impact of any changes to procurement plans has also been monitored, e.g. a new type of gown and the need for staff acceptability and tolerability surveys, as well as a review of the waste/reprocessing implications;
  - PPE use/practices, including timing and donning and doffing techniques and associated hand hygiene and waste management action, as described for standard, droplet/contact, airborne precautions, (consider reporting percentage of staff);
  - PPE consumption/utilization rate and replenishment of products, specific to individual settings, where possible, as well as PPE requests in specific settings (to assess rational and safe use, e.g. inappropriate double gloving);
  - staff knowledge and perceptions on appropriate and safe use of PPE and associated hand hygiene and waste management;
  - availability, positioning and legibility of reminders (e.g. posters, leaflets, auditory messages), as well as their ability to engage and frequency of replacement;
  - training attendance records and evaluations, including information on informed and empowered staff;
  - infection rates, aimed at stimulating improved practices.

A sample of WHO resources that can help you if you do not know how to start

The WHO Regional Office for Europe

The World Health Organization (WHO) is a specialized agency of the United Nations created in 1948 with the primary responsibility for international health matters and public health. The WHO Regional Office for Europe is one of six regional offices throughout the world, each with its own programme geared to the particular health conditions of the countries it serves.

Member States

Albania
Andorra
Armenia
Austria
Azerbaijan
Belarus
Belgium
Bosnia and Herzegovina
Bulgaria
Croatia
Cyprus
Czechia
Denmark
Estonia
Finland
France
Georgia
Germany
Greece
Hungary
Iceland
Ireland
Israel
Italy
Kazakhstan
Kyrgyzstan
Latvia
Lithuania
Luxembourg
Malta
Monaco
Montenegro
Netherlands
North Macedonia
Norway
Poland
Portugal
Republic of Moldova
Romania
Russian Federation
San Marino
Serbia
Slovakia
Slovenia
Spain
Sweden
Switzerland
Tajikistan
Turkey
Turkmenistan
Ukraine
United Kingdom
Uzbekistan

World Health Organization
Regional Office for Europe

UN City, Marmorvej 51, DK-2100 Copenhagen Ø, Denmark
Tel.: +45 45 33 70 00 Fax: +45 45 33 70 01
Email: eurocontact@who.int
Website: www.euro.who.int