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Information on face masks and respirators

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Masks FAQ

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Key points

- Wearing a mask or respirator is just one way to prevent the spread of SARS. Other important precautions include good personal hygiene, especially hand hygiene, and gloves, aprons, gowns, visors, and goggles when appropriate.
- Wearing a mask is not a guarantee of protection against SARS.
- Masks and respirators are not recommended for the general public. They are recommended for healthcare workers, and possible SARS patients only.
- Healthcare workers should wear a respirator complying with the European standard EN149:2001 FFP3 or higher filtration.
- Possible or probable SARS patients should wear a surgical face mask or higher filtration.

Respirators FAQ

What is the difference between a mask and a respirator?

The main purpose of a mask is to help prevent particles (droplets) being expelled into the environment by the wearer. Masks are also resistant to fluids, and help protect the wearer from splashes of blood or other potentially infectious substances. They are not necessarily designed for filtration efficiency, or to seal tightly to the face.

Respirators are intended to help reduce the wearer's exposure to airborne particles. Some, including the ones recommended here resemble surgical face masks. They are made to defined national standards, such as the United States NIOSH-approved N99 respirator, or the similar (but not identical) European standard EN149:2001 FFP3 respirator. The standards define the performance required of the respirator, including filtration efficiency. When worn correctly, they seal firmly to the face, thus reducing the risk of leakage.

When should masks or respirators be used?

Masks and respirators are components of a number of infection control measures intended to protect healthcare workers, and prevent the spread of SARS. These include general hygiene measures set out in local infection control manuals or SARS policies, and in particular efficient hand hygiene before and after contact with possible or probable cases of SARS, and with the patient's environment. Gloves, goggles, visors, gowns and/or aprons are also used (see the relevant sections of the web site that deals with personal protective equipment in primary and secondary care and local SARS policies).

Healthcare workers should use respirators, correctly fitted, for contact with possible or probable cases of SARS. A mask should be used only if a respirator is not available on the grounds that, although not recommended, it is better to wear a mask than no protection at all.

Patients should use a mask while symptomatic whether in hospital, at home or in transit.

Who should wear a mask or respirator?

All healthcare workers who come into contact with a possible or probable case of SARS should wear a respirator conforming to at least EN149:2001 FFP3. If a respirator is not immediately available, the next highest category of mask available should be worn (FFP2 (N95)) although it must be stressed that the EN149:2001 FFP3 respirator is the only one that can be recommended. Healthcare workers include community/ primary care teams, hospital

clinical teams, ambulance staff, physiotherapists and other professional support staff, porters and domestic staff.

Patients with possible or probable SARS should wear a surgical face mask, if able to do so, when in close contact with uninfected persons. If the patient is at home and unable to wear a mask, others in the household should do so.

Visitors should follow local SARS policies, including wearing a mask as instructed.

WHO recommends that well individuals traveling from or to SARS affected areas do not need to wear a mask.

Wearing a mask or respirator is not a guarantee of protection against SARS.

If I can't immediately obtain an FFP3 respirator, what should I do in the interim?

There is no substitute for FFP3 respirators recommended by the Health and Safety Executive (HSE). In the event of an FFP3 respirator not immediately being available, however, the highest standard mask available should be worn. No effort should be spared to obtain FFP3 respirators as quickly as possible.

We have N95 masks available - are these equivalent to FFP3?

No, N95 masks are equivalent to FFP2, not FFP3. FFP3 is the only respirator recommended by the HSE for health care workers in contact with potential SARS cases. However N95 masks give much better protection than surgical masks provided they are correctly fitted, so in a situation where FFP3 respirators are not immediately available they could be used, but strictly as a stop-gap measure, until FFP3 respirators are obtained. Having a supply of N95 masks in your health care facility already should not be viewed as obviating the need to obtain a supply of FFP3 masks for use in connection with SARS.

What is the correct way to use a respirator?

User instructions are usually supplied with the respirator. If respirators are individually packed, the instructions are on the packaging. If the respirators are supplied in shelf packs, i.e. several unwrapped respirators in one box, the instructions are either on the side of the box or on a loose insert. If the contents of the shelf box are split, a photocopy of the instructions should accompany each respirator. **Please read these instructions**.

It is also important that the respirator is protected from damage during transit. It is important to follow the instructions carefully, and to do a fit check each time a new respirator is worn. The checks given in the user instructions vary according to the design of the respirator.

Fit is critically important. The respirator must seal tightly to the face or air will enter from the sides. A good fit can only be achieved if the area where the respirator seals against the skin is clean-shaven. Beards, long moustaches, and stubble may cause leaks around the respirator.

If breathing becomes difficult, the respirator becomes damaged or distorted or contaminated by body fluids, or if a proper face fit cannot be maintained, go to a safe area and change the respirator immediately.

The respirator is one component of a number of infection control precautions. These include hand hygiene, gloves, goggles, visors, gowns or gown and apron. Protective equipment should be removed in the following order: gloves, gown or gown and apron, respirator, goggles, followed by hand hygiene. The respirator should only be removed in a safe area, away from the patient. After the protective equipment has been successfully removed it is particularly important to ensure that hands are washed thoroughly.

Does a beard or stubble affect the performance of a respirator?

Yes. See What is the correct way to use a respirator?

How do I ensure that the respirator fits correctly?

It essential that you are familiar with the instructions that are supplied with the respirator, as it will only offer protection if fitted correctly. Every user should be trained in the use, maintenance and care of the respirator. In the event that the instructions are missing, the metal strip on the mask must be molded to the bridge of the nose. The two elastic bands must be separated and one fitted to the top of the head, and one to the back of the neck to ensure the respirator fits closely to the face. The simplest way of fit-testing the respirator is to fit it as detailed above, and then pant hard a few times. The mask should move in and out with the breaths if it is fitted correctly and there are no air leaks from the sides.

How often should respirators be changed?

Respirators are effective for approximately 8 hours. Respirators used in close contact with a possible or probable SARS case should be disposed of immediately after use; they should not be re-used. They should only be removed when the wearer is in a safe area, outside the patient's room.

What protection should be worn for intubation and other aerosol-producing procedures?

If possible, aerosol-producing procedures should be avoided. These procedures include nebulised medication, diagnostic sputum induction, bronchoscopy, airway suctioning and intubation. If unavoidable, the procedure should take place in a negative pressure single room with as few staff present as possible. All staff present should wear a correctly fitted respirator with a filtration efficiency of at least EN149:2001 FFP3, goggles, visor, gloves, single use gown or gown and apron according to local policy.

Masks FAQ

What is the correct way to use a mask?

The mask should fit snugly over the face, with the coloured side out and the metal strip at the top. Position the strings to keep the mask firmly in place over the nose, mouth and chin.

Mould the metallic strip to the bridge of the nose. Do not touch the mask again until it is removed. Healthcare workers should discard the mask as clinical waste according to local policy. Patients should place the mask in a plastic bag, then into domestic waste, then wash hands. Go to a safe area and replace the mask at once, if it is damaged or soiled.

Follow local infection control or SARS policies, because the mask is just one of several infection control precautions. Hand hygiene is particularly important after removing the mask.

How often should masks be changed?

Masks or respirators used in close contact with a possible or probable SARS case should be disposed of immediately after use. They should only be removed when the wearer is in a safe area, outside the patient's room.

The length of time a patient on home isolation should wear a mask before changing it depends on the quality of the mask, and how much the patient is coughing. As a guide, the mask should be changed after eight hours, or sooner if it becomes saturated or breathing is difficult.

How should masks and respirators disposed of?

Healthcare workers should dispose of masks and respirators as clinical waste, according to local infection control policy. Patients on home isolation should place the used mask in a plastic bag, and then into domestic waste. It is important to wash hands after handling the mask. This includes touching the mask while it is still being worn.

Which masks or respirators should be worn in the community/primary care?

All healthcare workers who come into contact with a possible or probable case of SARS should wear a respirator conforming to at least EN149:2001 FFP3. If a respirator is not immediately available, the next highest category of mask available should be worn (FFP2 (N95)). See 'Who should wear a mask or respirator?'

Where can community/primary care staff get masks and respirators?

Staff should be able to order masks and respirators using their normal supply route, including direct ordering from pharmaceutical suppliers. The majority of NHS trusts order them from NHS Logistics Authority.

Who should fund masks and respirators in the community/primary care?

Masks and respirators should be funded in the same way as other personal protective equipment.

Are masks available on FP10?

No.

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