

EXPERIMENT NO:-09

AIM OF THE EXPERIMENT:

To learn how to wear and dispose masks.

THEORY:

Masks are a key measure to suppress transmission and save lives. Masks cover your mouth and nose. Depending on the type, a mask can be used for either protection of a healthy person to prevent onward transmission.

A surgical mask helps to stop germs in your mouth coming from outside and stops spreading. It can also keep you away from breathing in some germs.

Types of Masks:

There are many types of masks you can use to protect yourself & others from getting & spreading COVID-19. When choosing a mask, choose one that fits snugly.

1. **Bandana:** A bandana is a triangular or square piece of cloth that's often worn as a head or neck covering. Tying a bandana over your mouth & nose is a time-honored way to keep dust & other particles out of the respiratory system. Bandanas provide protection against droplets from cough or sneeze-related "spray".
2. **Home Made cloth Mask:** Not ideally recommended when taking care of infected patients as they do not provide adequate protection but they are still better for routine use than not covering your mouth & nose. Densely woven cotton fabrics, such as quilting cotton, are best. Single-layer fabric masks are less effective than double-layer masks, which may be less effective than triple-layer masks.
3. **Disposable surgical masks:** Loose-fitting, a disposable device made of polypropylene, may be effective in blocking particle droplets, splashes, sprays which may contain germs, keeping them from reaching mouth & nose. It does not block small particles in the air that may be transmitted by nearby coughing or sneezing. It is used by persons caring for sick persons with respiratory infections & symptoms such as cough, sneezing, fever, health care & front-line workers. Surgical masks are not designed to be used more than once. Ideally, you should dispose of a mask after wearing it.
4. **N95, KN95 & other respirators:** A special respiratory mask (respirator) forms a tight seal around your nose & mouth. It may be needed so that you do not breathe in small germs like tuberculosis bacteria, measles or chicken pox viruses. N95 face respirators offer the most protection against novel coronavirus & other respiratory diseases. N95 protects the person wearing the mask because they filter out 95% of particles from the air breathed in. Wearing any of the other masks in the list (cotton & disposable) are intended to protect others around you from your own respiratory droplets & "spray".

KN95 are made to China specifications & standards & N95s are made to US design standards. Both are rated to filter out 95% of very small particles. Buy KN95s that meet the National Institute of Occupational Safety & Health (NIOSH) requirements. About 60% of KN95s in the US may be fake & do not meet NIOSH requirements, according to the CDC.

Even more effective than N95 respirators are the N99 (99% filtration), N100 (99.97% filtration), R95 (95% filtration & partially resistant to oil) & P95, P99 & P100 (95%, 99% & 99.97% filtration respectively & strongly oil resistant).

It should be worn by:

1. Health care & frontline workers who are attending to patients with respiratory infections as cough, cold & patients under investigation.
2. While entering rooms of confirmed or suspected COVID patients.
3. While obtaining clinical specimens, soiled medical supplies & equipment or who so ever come in contact with potentially contaminated environmental surface.

Dispose of a used mask: (remember mask should be treated as medical waste)

Different germs can survive on a used mask for different durations. Experts feel that viruses, when left exposed, can survive for few hours or few days too. The infected masks have respiratory secretions on them & can be dispersed & transmitted through the air. So, please be sensitive. Always wash your hands before & after taking off the mask.

The World Health Organization (WHO) recommends discarding them in the “correct” rubbish bin immediately after use & not reusing them. What is the “correct” bin? Mask & other disposable material that are used to contain the pandemic such as gloves, must not be disposed off in the recycling bin with packaging, cans etc or with organic waste . Do not through them away with your general household rubbish.

The Brazilian sanitary and environmental engineering association (ABES) has issued advice on the correct way to dispose off used mask & gloves. The materials should be placed into two small plastic bags-one inside the other. Tie the bags firmly & through them away with your general domestic waste if the materials have been in contact with infected person, take extra care & write “RISK OF CONTAMINATION “on the bag.

RESULT: Understood about the mask & their uses.