

About Masks: Some facts regarding the different type of masks

Q1 - What are the common types of masks?

- 1 Cloth mask
- 2 Surgical mask

Q2 - What are the Respirators?

N- 95
N- 99
N- 100
are the respirators

Q3 - what is the difference between mask and respirator?

Mask has loose fit, it doesn't seal nose and mouth snugly.
During respiration air moves along the edges of the mask, while respirator has tight seal and most of the times air passes only through its material after filtration.

Q4 - Are all respirator masks are same

No, respirators are graded according to their filtration efficiency.
According to the used filter type
According to the type of materials used
And additional features
They are of different types.

Q5 - what is the efficiency grading?

According to the efficiency of filtration these are usually graded as-
95, 99 and 100
Means these respirator masks are capable of trapping 95%, 99% and 99.9% of particles, smaller up to the 0.3 micron size.
This grading can also be done as
P1 (FFP1) - 80%
P2 (FFP2) - 95%
P3 (FFP3) - 99.95%
Filtration efficiency.

Q6 - What is the N,R or P meaning written over mask?

N - not oil proof
R- oil resistant
P- oil proof
(Eg. N 95 is not oil proof).

Q7 - Few respirator masks have valve, what is that?

That valve is nothing but a simple exhalation port with one way valve mechanism, it reduces effort of expiration, reduce heat inside the mask, dissipate humidity and reduce co2 the amount of from the dead space of mask.

Q8 - When to use surgical masks?

Surgical mask or procedure mask is the most common mask used by health workers.

It is not designed to protect wearer from inhaling the air born bacteria and viruses.

It is used to block only large particle droplets, splashes, sprays or splatter.

It also reduce the exposure of wearer's saliva and respiratory secretions to others. Surgical mask also remind wearer not to touch their mouth/nose which could otherwise transfer virus/bacteria after having touched a contaminated surface.

Q9 - what is the filtration capacity of surgical mask?

It can vary between 10-90% according to the manufacturer.

Q10 - How one can assure about the quality of mask?

Mask should be certified by the

NIOSH (National institute for occupational safety and health)

Or

NPPTL (National personal protective technology laboratory)

Q11 - Does cloth mask effective?

Cloth is a woven material thus pore size is bigger than surgical mask which is made up of non-woven polypropylene material thus cloth mask is less effective than surgical mask in terms of filtration efficiency.

Q12 - Does extra layer improve efficacy of cloth mask?

No, it's not advisable. Each extra layer adds only 2% of extra protection on the cost of comfort.

Q13 - Can surgical/cloth mask be used routinely?

Yes these can be used routinely.

Few studies done on normal population concluded that the use of simple mask can decrease the incidence of flu up to 75%.

Few East Asian countries following this practice of routine use of mask.

Q14 - Can mask be reused?

Cloth mask can be reused after washing

- Surgical mask should be discarded after single use or after soiled

- Respirator mask should be discarded when resistance of breathing get increased or get soiled.

Viruses/bacteria's can grow and flourish inside the reused mask.

Q15 - What are recommendations for using masks?

- We feel it is probably safe to wear one. In fact the US are advocating people should wear masks whilst in public.

- Sick person should wear the surgical mask to prevent spread.
- Any person who is taking care of sick person should also wear the mask preferably the N95 mask.
- N 95 mask should be used by health workers all the time as they have the potential to get exposed with the respiratory secretions of the infected patient eg. During the Endotracheal intubation, CPR, Ventilation, Bronchoscopy and Tracheostomy etc.