



F.No.LA/GAD(COVID-19)UTL/2021
THE ADMINISTRATION OF UNION TERRITORY OF LADAKH
GENERAL ADMINISTRATION DEPARTMENT
E-mail Id: gadutladakh@gmail.com

UT Secretariat, Ladakh
Dated 04.06.2021

OFFICE MEMORANDUM

Subject:- 'Non-pharmacological interventions' or COVID-19 Appropriate Behaviours-preventive measures thereof.

The undersigned is directed to enclose herewith the copy of D.O. letter dated:-28th of May 2021 and connected enclosures received from Principal Scientific Advisor, Government of India, regarding captioned subject.

As advised, all the Administrative Secretaries/ ADGP/ DCs/ HoDs/ Directors/ Chief Engineers, are requested for wide dissemination and implementation of said enclosed Covid-19 guidelines detailed therein the manual on- '*Stopping the transmission, crush the pandemic-'Masks, distance, sanitation and ventilation to prevent the spread of SARS-CoV-2 virus'* in their respective departments for effective control of the spread of Covid-19 pandemic in UT of Ladakh.

Enclosures:-15 Leaves


(Sonam Chhosdon)
Under Secretary
General Administration Department

**All Administrative Secretaries,
UT Secretariat, Ladakh**

Copy also to:-

1. Additional Director General of Police, Ladakh.
2. Deputy Commissioner/CEO, LAHDC, Leh & Kargil.
3. All Directors/Head of the Departments, Chief Engineers/ Registrar UoL, Ladakh.
4. District Informatics Officer, NIC, Ladakh.
5. E-Office file

Covid Appropriate behaviours PSA

के. विजयराघवन

भारत सरकार के प्रमुख वैज्ञानिक सलाकार
K. VijayRaghavan
Principal Scientific Adviser,
Government of India



सत्यमेव जयते

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Friday, 28 May 2021

Shri Radha Krishna Mathur
Lieutenant Governor
The Union Territory of Ladakh
Rajniwas, Karzoo, Leh
Ladakh – 194101

Dear Sh. Radha Krishna Mathur ji,

I hope you are keeping well in these difficult times. This pandemic, and the steep and large second wave, have highlighted the importance of curbing transmission. While we continually develop and maintain surge capacity in our health systems, we must simultaneously use preventive measures to reduce the load there. This can be done by several 'non-pharmacological interventions' which are in our hands. As vaccines roll-out and till most are vaccinated, these 'non-pharmacological interventions' or COVID Appropriate Behaviours are important defenses in our hands.

If we follow, and help everyone follow, these simple steps, we can control the spread of the disease and bring it to a manageable level. These steps are important to follow even after vaccination till most are vaccinated and we have completely crushed the virus.

I enclose a manual on 'Stopping the transmission, crush the pandemic- 'Masks, distance, sanitation and ventilation to prevent the spread of SARS-CoV-2 virus' both in Hindi and English for your use. The manual specifies some simple steps which can adopted easily by individuals, community, corporations and local bodies, both in rural and urban areas. These steps need to be adapted to local context without diluting its purpose.

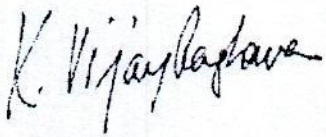
2021

1. **Masks** are simple well-proven and effective in reducing/stopping transmission of the disease. We recommend that: a. People wear double mask in congested spaces, b. ASHA/Anganwadi/health workers be provided with certified N95 masks keeping in mind their frontline role and c. Anyone testing positive be provided N95 masks, if feasible. There are many donors who are willing to send face covers, surgical masks and N95 masks to states and union territories who may need them, and states as well as union territories may also want to purchase and subsidise/distribute free of cost in chosen areas.
2. **Isolation:** Scaling up the use of Rapid Antigen Tests has now been included in ICMR guidelines. The advantage is convenience, scale, and high-value in high-positivity areas. Following the ICMR guidelines, testing should be enhanced. For example, bus stops/train stations, areas where infections are high or expected to be high, may be key locations to rapidly track and isolate infected persons. ASHA/Anganwadi/Health workers must be trained in conducting the rapid antigen test and provided with protective masks and gear.
3. **Ventilation:** This is a very important but poorly understood and appreciated defence mechanism against the virus. Infected persons—symptomatic or asymptomatic—emit droplets and aerosols containing viruses. The aerosols are carried in the air, in plumes, much like aromas of cooking are carried. In a closed or poorly ventilated area, the aerosols linger and concentrate, even in large rooms, as the infected person continues to talk or sneeze. Fresh air from outside can dilute the aerosols and good cross-ventilation can take the flow towards the outside. The steps to be taken are illustrated in the manual. For example, exhaust fans for cross ventilation in small dwellings (gram panchayats can provide these at subsidised rates), cross ventilation in public transport be made mandatory, regular cleaning and replacing of filters in air-conditioned buses/trains be made mandatory. Offices, shopping malls etc. introduce both ceiling ventilation and High-Efficiency Particulate Air (HEPA) filters. I request your attention and intervention in the implementation of these recommendations in your union territory. I also add that the investment in ventilation by the states and union territories will be valuable in the long-term—from the smallest of dwellings to the largest of offices—as this will also reduce the burden of other respiratory disorders that are exacerbated by poor air-quality.

My office and I will be happy to work with you in every way you seek to get these simple recommendations implemented by you and help your efforts to control the pandemic.

Sincerely,

With warm regards,

A handwritten signature in black ink, reading "K. VijayRaghavan". The signature is written in a cursive style with a long horizontal stroke at the end.

(K. VijayRaghavan)

Principal Scientific Adviser to the Government of India

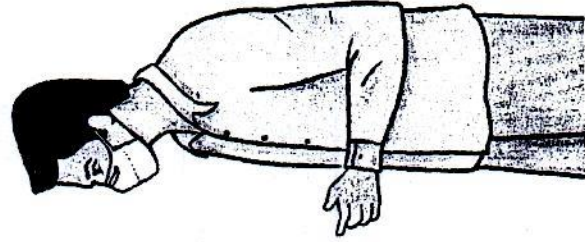
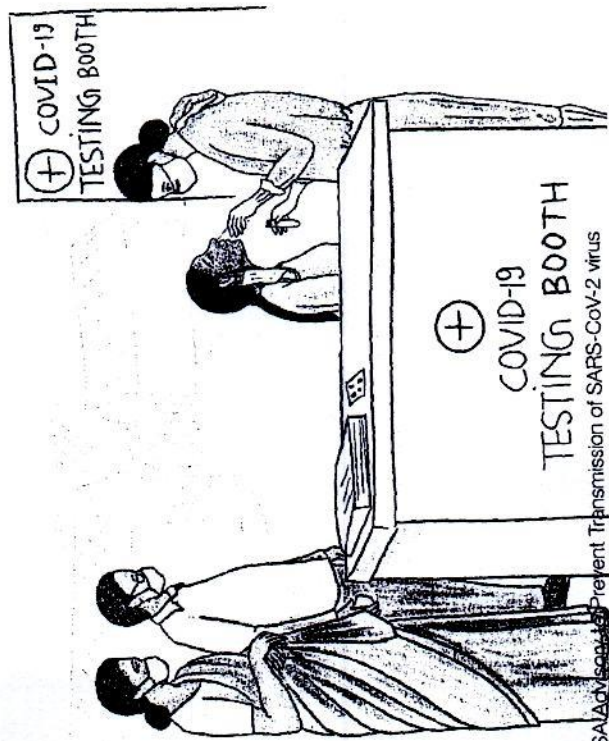
Community-level Testing and Isolation

(For rural/semi-urban areas)

- Get Rapid Antigen Testing done for people entering the area.
- ASHA/Anganwadi/Health Workers must be trained and protected for conducting the Rapid Antigen Test.

- These health workers must be given a certified N95 mask even if they are vaccinated.
- ASHA/Anganwadi/Health Workers to also be provided oximeters to monitor infected person.

* Every person who tests positive should be given a certified N95 mask, or a surgical mask if this is not feasible, and advised isolated as per ICMR guidelines.



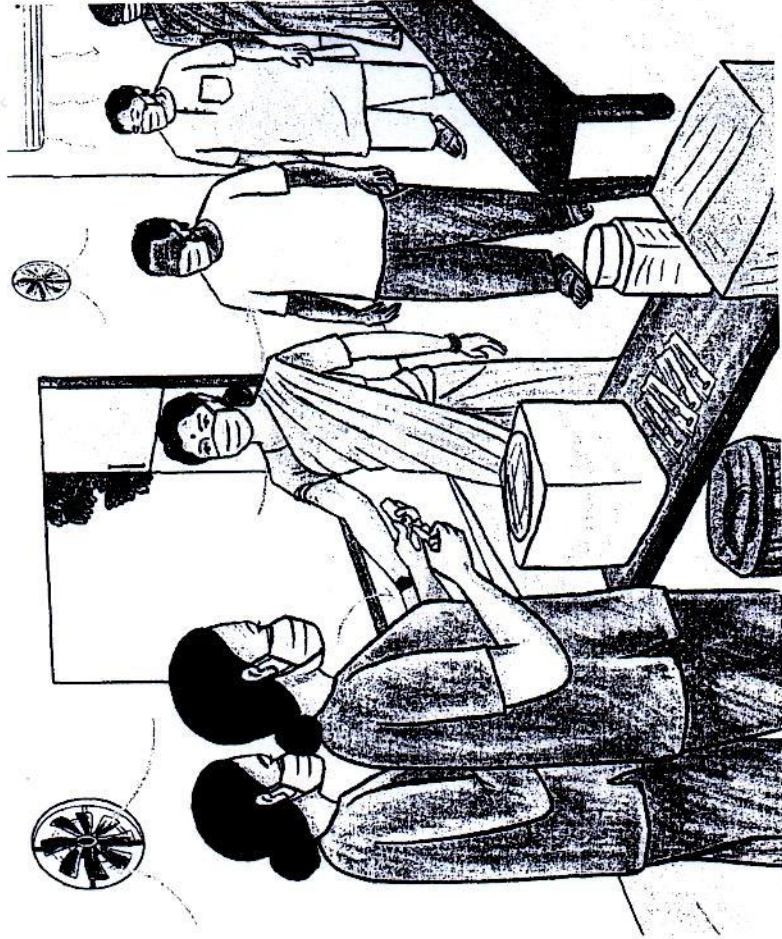
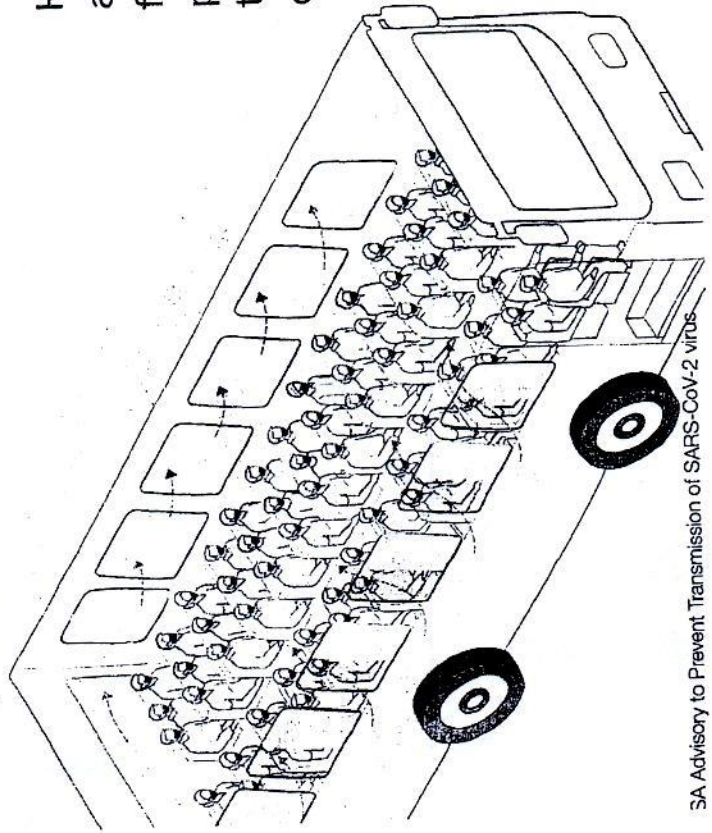
PSA Guidelines on Home Isolation
<https://www.psa.gov.in/innerPage/psa-initiatives/home-care-tips-managing-covid-19/2820/2820>

Ventilation: Additional Considerations

Ensure cross flow of air in public transport vehicles:

- Keep windows open in buses and trains where possible
- Introduce exhaust systems to improve airflow in air conditioned buses and trains
- Also introduce HEPA/regular filters in air conditioning systems. These should be cleaned and replaced regularly.

Higher ventilation and directional air flow away from people can curtail the transmission of the virus.



**Hospitals and health centers must ensure that vaccinations are carried out in well-ventilated and directional air flow controlled areas.*

Ventilation: Centralized Air Management Systems

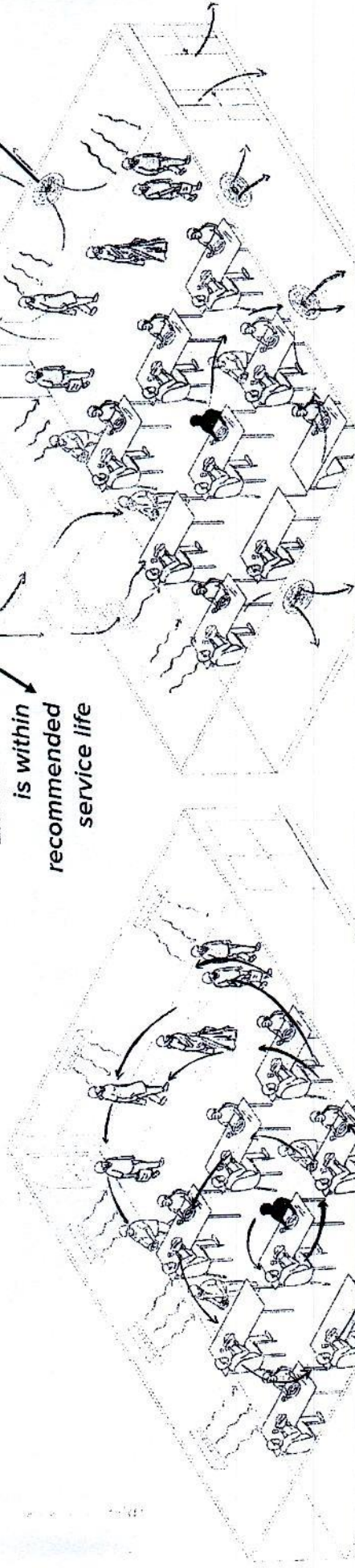
Improved central air filtration/increased filtration efficiency is especially helpful when outdoor air delivery options are limited. **Roof ventilators and HEPA/regular filters are recommended in offices, auditoriums, shopping malls etc.** These filters must be regularly cleaned or replaced.

Ensure appropriate filter fit to ensure air goes through the filter not around it.

Inspect Air Filters, Housing and Racks

Install Gable Fans

Ensure filter is within recommended service life



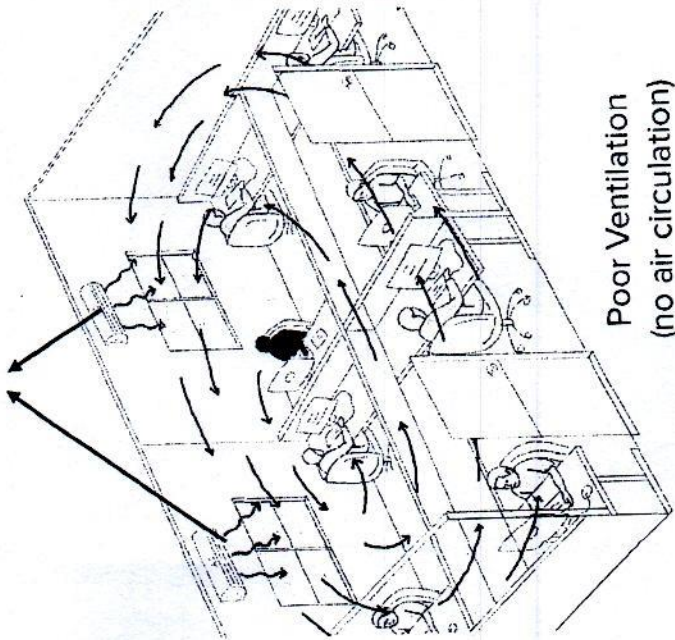
Note: Portable air cleaners that use filters less efficient than HEPA (high-efficiency particulate air) filters also exist and can contribute to room air cleaning. However, they should be clearly labeled as non-HEPA units.

Ideal Ventilation

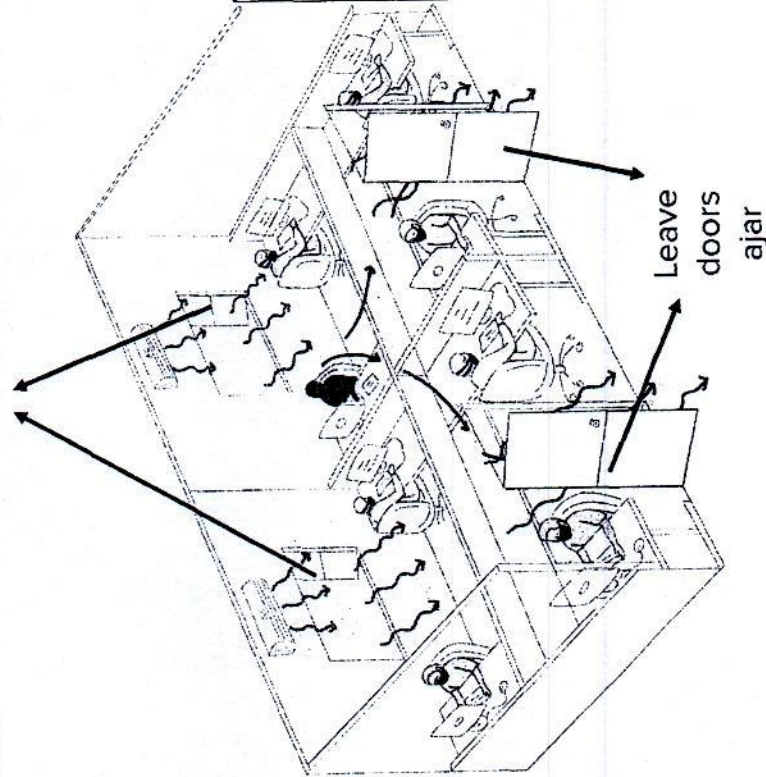
Poor Ventilation

Ventilation: Work Spaces

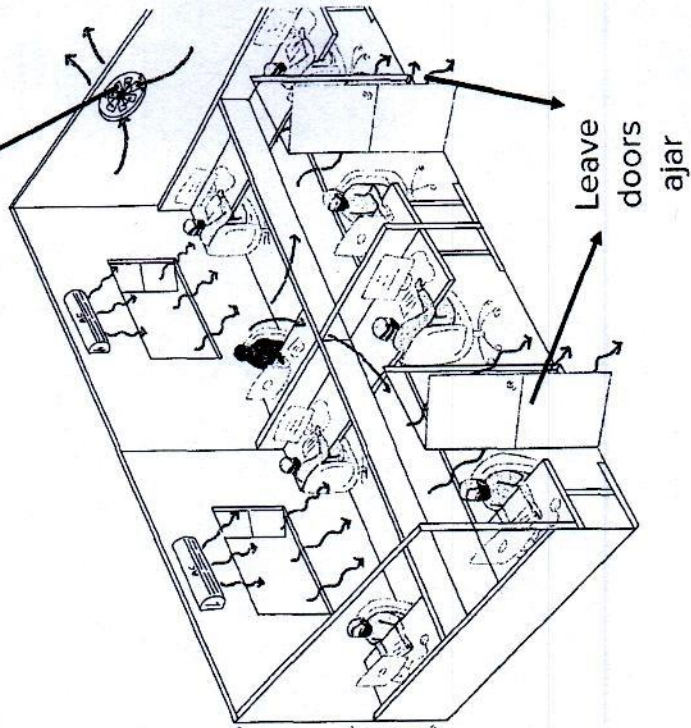
1. Running ACs while keeping windows and doors shut, traps infected air inside the room, and increases risk of transmission from an infected carrier to others.



2. Keep windows and doors ajar while the ACs are running to bring in clean air and dilute virus particles.

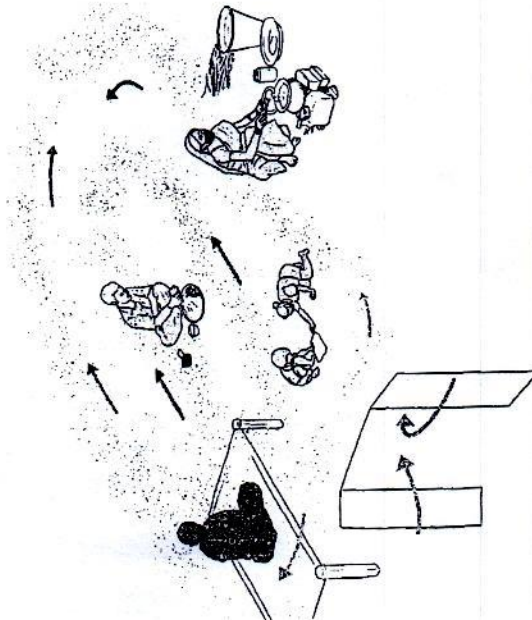


3. Add gable/exhaust fan for maximum air circulation.

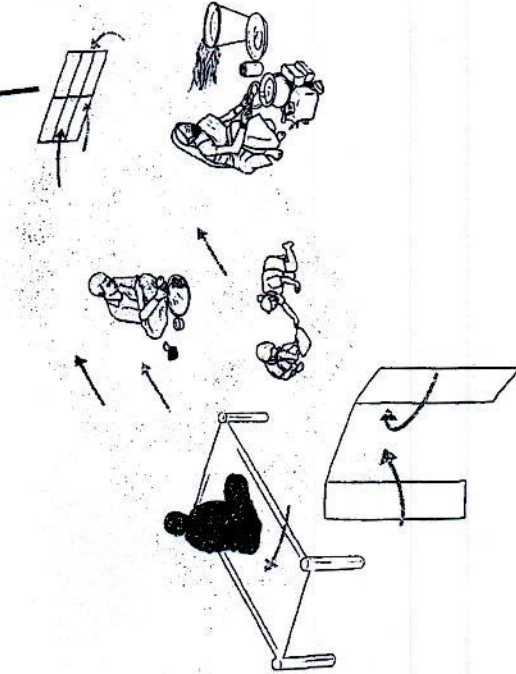


Ventilation: Hutments

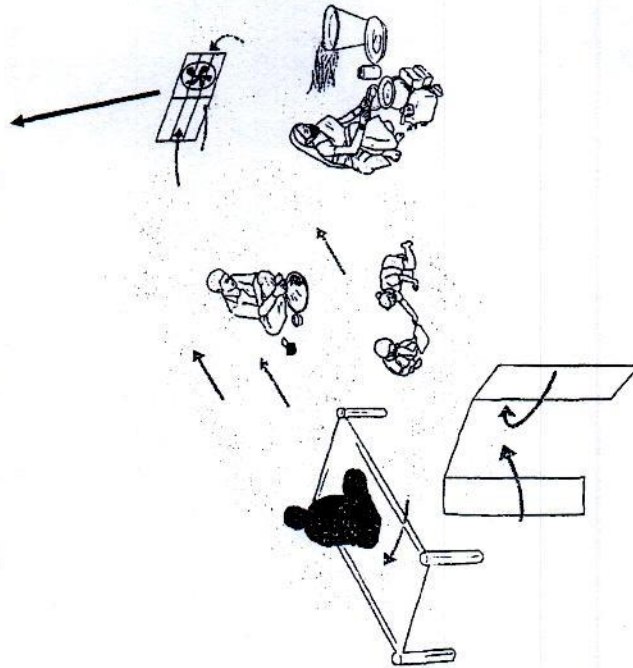
1. Poor Ventilation
(no air circulation).



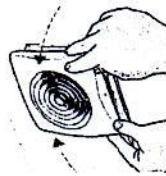
2. Adding jaali or another simple
air outlet improves directional
air flow and reduces viral load.



3. Installing exhaust fans next to
the jaali/ air outlet further
improves directional air flow to
lower the risk of transmission.



**Lack of window/cross ventilation creates
excessive viral load and increases chances
of infection inside poorly ventilated spaces.**

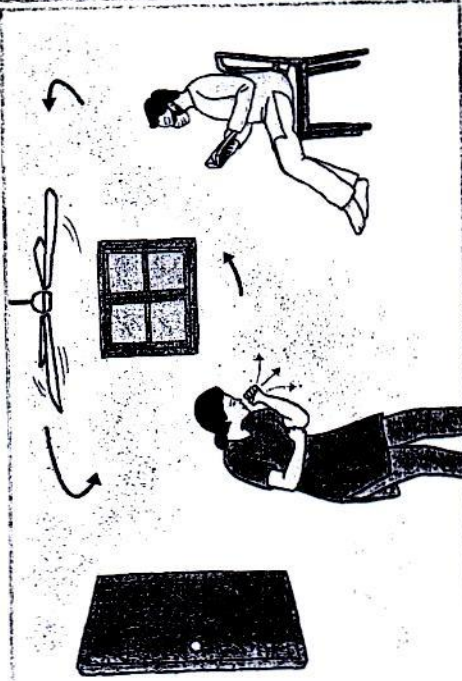


* It is advised that jaali/air outlets with exhaust fans are installed by gram panchayats in homes where there is no cross-ventilation.

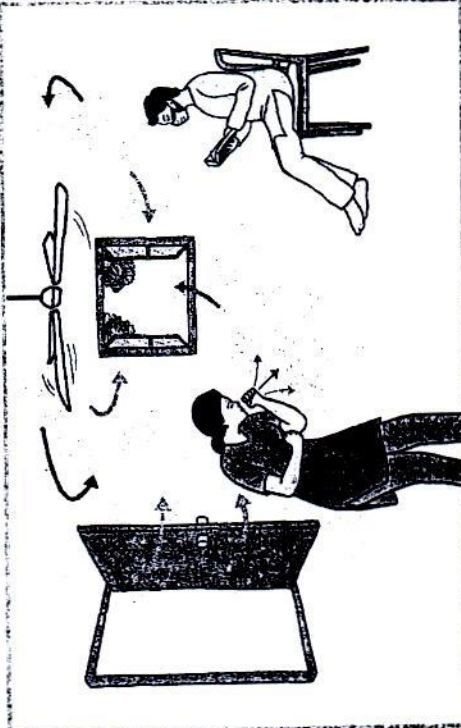
Ventilation: Home

Let outdoor air flow in to displace indoor air. This directional air flow and improved ventilation can lower the potential for infection from accumulated viral load in closed spaces. **Better the ventilation, lower the potential for transmission.**

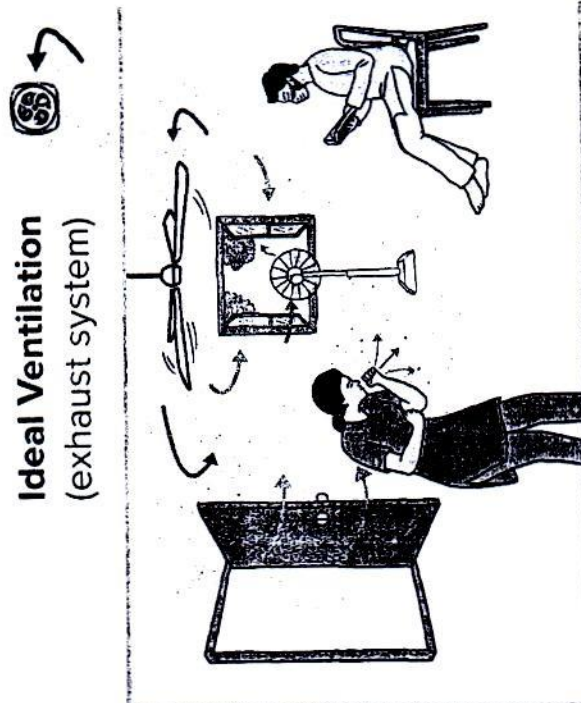
Poor Ventilation (windows and doors shut)



Good Ventilation (windows and doors open)



Ideal Ventilation (exhaust system)



Fan placement is important. Avoid placing fans in a way that could potentially cause contaminated air to flow directly to someone else. **Installing an exhaust fan is important.** Keep exhaust fans running if the windows and doors are shut.

Add an exhaust fan OR turn a pedestal fan into an exhaust fan by turning it to face outdoors, to create the ideal air flow for maximum protection from indoor infection.

Wear Masks

PSA Guidelines on Masks here: <https://static.psa.gov.in/psa-prod/publication/ManualonHomemadeCover.pdf>



- ✓ A double layer cotton homemade mask is better than none.
- ✓ N95 mask offers maximum protection.

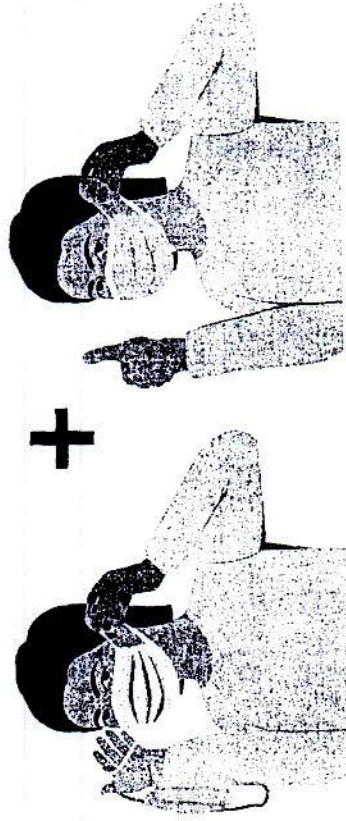
A mask should:

- Fit snugly on your face leaving no air pockets around your nose or chin.
- Cloth masks should be washed and sun-dried each day.

* Wear masks when away from home and also at home when with outsiders.

Pair Two Masks Together

* Double masking recommended



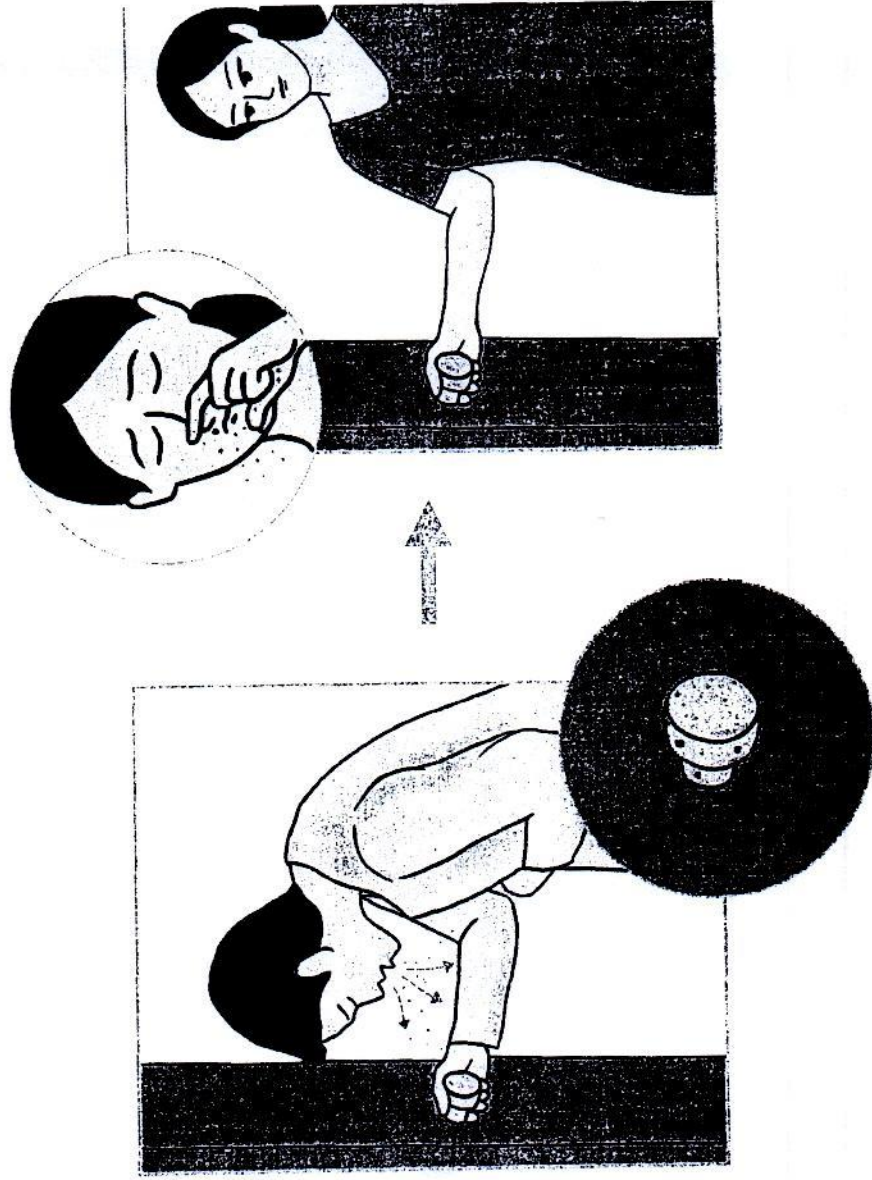
For Double Masking:

- Wear a surgical mask, then wear another tight fitting cloth mask over it.
- If you do not have a surgical mask, wear two cotton masks together.
- Ideally surgical mask should be used only once, but when pairing, you can use it up to 5 times by leaving it in a dry place for 7 days after one use (ideally give it some sun exposure) and then reuse as double layer.

Surgical masks should never be washed.

Surface Transmission

- ▶ Droplets emitted by an infected person land on various surfaces.
- ▶ When someone touches these contaminated surfaces, and, without washing hands with soap, touches their mouth, nose or eyes, they can contract the virus.
- ▶ These virus laden droplets can survive on non porous surfaces such as glass, plastic and stainless steel for a fairly long time.



* Frequent cleaning of high contact points such as door handles, light switches, tables, chairs and the floor with disinfectants, like bleach and phenyl, can remove the virus contamination from surfaces.

Aerosol and Droplet Transmission

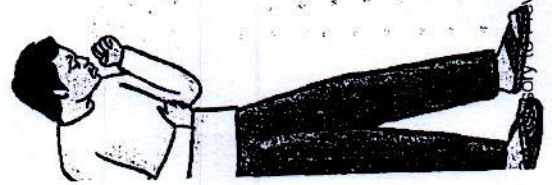
Saliva and nasal discharge in the form of droplets and aerosols carry the virus from one person to another.

Larger size droplets fall to the ground and on surfaces, and smaller aerosol particles are carried in the air to greater distances.

In closed un-ventilated indoor spaces, droplets and aerosols become quickly concentrated and greatly increase the risk of transmission to people in the area.

Infection transmission risk is much lower in outdoor areas, as virus particles get quickly dispersed.

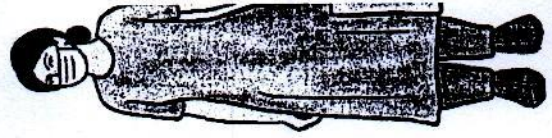
☹️ Just as smells can be diluted by ventilation, the dangerous concentration of the virus can be reduced by ensuring that outdoor air flows in.



Droplets fall within 2 meters from an infected person



Aerosols and droplets are the key transmission mode of the virus.



Aerosols can be carried in the air up to 10 meters



1. Aerosols



2. Droplets



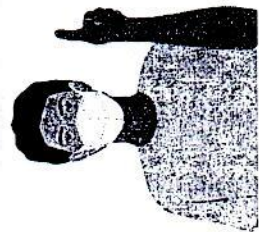
3. Surface



Key routes of virus transmission from one person to another.

- ▶ The SARS-CoV-2 multiplies in the body of an infected person, the 'host', and from there can be transmitted to others.
- ▶ The virus is released in the saliva and nasal discharge of an infected person through exhalation, talking, speaking, singing, laughing, coughing, and sneezing etc.
- ▶ Breaking the transmission of the virus from one person to another by following COVID Appropriate Behaviour will curtail the pandemic.

Even one infected person showing no symptoms can release enough droplets to create a "viral load" that can infect many others. Symptoms can take up to two weeks to appear in an infected person, during which time they may continue to transmit the virus to others. Some people may never show symptoms and still transmit the virus.



*** Wear a mask even when you are around people who do not show any symptoms of infection.**

Understanding SARS-CoV-2 Transmission

The SARS-CoV-2, is a highly pathogenic human coronavirus (HCoV), which has caused the global pandemic with alarming morbidity and mortality.

The virus spreads from human to human through saliva and nasal respiratory discharge. Mutations can accumulate in the virus which make new 'variants of concern.' Some virus variants may have higher transmission and infection rates.

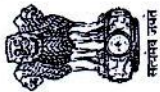
If COVID Appropriate Behaviour is not followed, surges of infection can re-occur. The virus can quickly spread from a small number of people to a very large population.

Rigorously follow COVID Appropriate Behaviour to reduce and control the transmission of the virus.

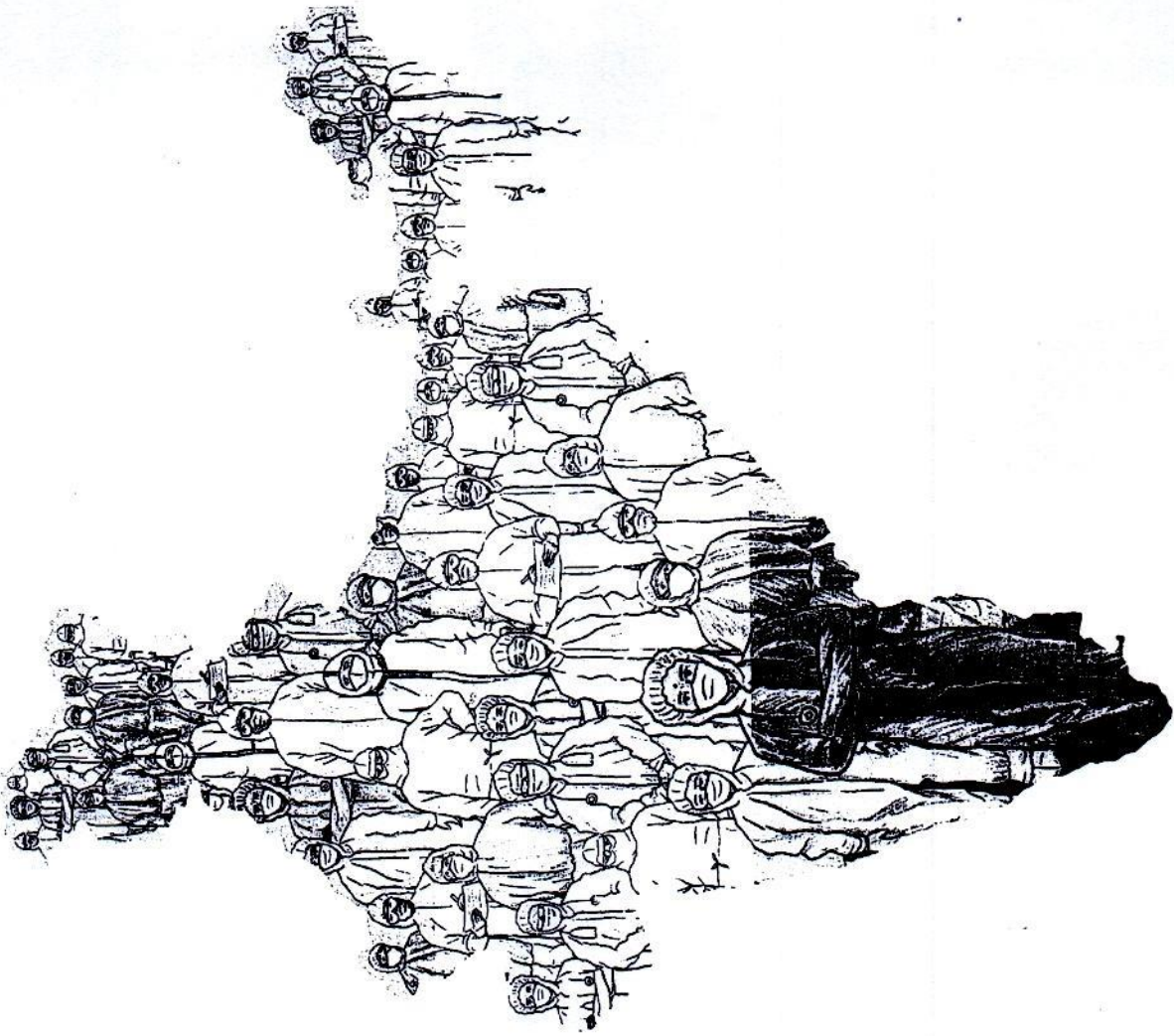
Simple interventions and behaviour change can protect you and others from infection.

***Always Remember:** People who show no symptoms can also spread the virus!





Office of the Principal Scientific Adviser
to the Government of India



Stop the Transmission, Crush the Pandemic.

Masks, distance, sanitation and ventilation
to prevent the spread of SARS-CoV-2 virus.

May 2021