



INDIAN MOUNTAINEERING FOUNDATION

MOUNTAINEERING, TREKKING AND MOUNTAIN ACTIVITY

HEALTH ADVISORY AMIDST COVID-19

PANDEMIC: NO.3: 22ND OCTOBER, 2020

PURPOSE :

In the wake of the raging COVID-19 pandemic and **UNLOCK 5**, the central question that arises before every outdoors enthusiast is this:

How do i do the outdoor mountain activities in a manner that is safe for self and safe for others ?

This third framework of principles and action guides, following the second set issued on the 22nd of July, 2020, attempts to address some of the issues born in response to this central question.

While following these guidelines, one must stay updated and scrupulously follow the rules and regulations, periodically issued, by the authorised Central, State and UT agencies dealing with the rapidly evolving COVID-19 pandemic.

A) BASIC ASSUMPTIONS:

- 1. Outdoors Transmission:** Evidence, so far, suggests that the risk of COVID-19 transmission is very low in the well ventilated outdoor spaces provided physical distancing is maintained and crowding avoided.
- 2. Transmission Dynamics:** COVID-19 is predominantly spread through droplets generated by the acts of : coughing, sneezing, loud talking and laughing that can travel distances up to 1 to 2 meters (3-6 feet) and then settle down on adjacent surfaces and objects. The SARS-CoV-2 virus carried in these droplets can enter the human system either directly through breath , or indirectly, through contaminated hands touching the T- area of the face (Nose, Mouth and Eyes). So, Physical Distancing of 2 meters , Hand Hygiene and Face Masks are the best defences against acquiring and transmitting the infection.
- 3. Slipstream Effect:** Some simulation models suggest that a fast moving human body may disperse finer aerosolised droplets generated by heavy, laboured breathing through a side stream travelling more than 2 meters behind the fast moving person. However from a practical standpoint, this effect is unlikely to be of significance, except under the following circumstances:
 - a)** Mountain biking and Trail running in tight packs,
 - b)** Working through narrow bottlenecks and cruxes with the resultant crowding, such as :
Traverses across narrow, exposed trails, Couloirs ,Gullies and Rock Steps, River Crossing in linked human chains, etc.
 - c)** Rescue Operations
- 4. Super spreading Events :** could simply be defined as events in which one infected person infects far more number of persons than is usual for an average person or event leading to sudden emergence of case clusters.

Following Events, Spaces and Behaviours, carry the risk of Super spreading :

- a) Dormitories, Night halt mountain lodges, Dining/Kitchen Tents, Shared Toilette Tents, etc.
 - b) Delivering First Aid, especially, CPR and Airway management without protective N-95 masks, gloves and goggles. (First responders must of necessity carry these 3 items)
 - c) Rescue teams working on the mountain.
 - d) Camp parties and Bonfire parties.
5. **Biosafety Bubble and Immune Shields:** Once a self-reliant team has attained a period of 7-14 days of isolation while hiking through the remoteness of the mountains , without any close and prolonged contact with outsiders , it has for all practical purposes , also completed self-quarantine and created a bio-safe bubble around itself, provided it continues avoiding contact with outsiders . Also, inclusion of recovered former COVID-19 persons in teams, if feasible, would add a shield of bio-safety to the team. They could be used to mediate with the interfaces of the outside world, while others stay within the safety of the bubble.

B) Principles and Rules :

The Meta- Principle : The Japanese Principle of 3-Cs : Avoid : Close contact, Crowds and Closed spaces. This is in a sense the mother-of-all rules, from which all others flow.

1.1) Self Disclosure Rule : Every team member is under ethical obligation to disclose to the leader, under cover of confidentiality, any of the following ;

- a) Any travel history to/from any foreign country/containment or red zone in the past 14 days,
- b) Any symptoms suggestive of COVID-19 during the past 17 days,
- c) Sharing of household with a person with COVID-19 during the past 14 days,
- d) Coming within one meter of a person with COVID-19 for 15 minutes or longer (class, bus, other conveyance, work place, shops, etc) during the past 14 days,
- e) Having had a direct physical contact with a person with COVID-19 (hand shake/body hugs) or with their secretions (sneeze, cough, touching contaminated tissue paper) , in the past 14 days.

If the answer to any one of the aforementioned questions is : YES, then that person must be presumed to have had a high risk exposure and quarantined for 14 days before being allowed into the expedition.

1.2) Physical Distancing Rules :

- a) During all social and inter-personal interactions , trekking : **2 meters of distance(minimum),**
- b) While hiking on a steep up hill trail (deep, heavy breathing) : **6 meters(minimum),**
- c) While passing others : **2 meters**
- d) Mountain biking and Trail running : **20 meters (possibility of slip stream effect)**
- e) Long waits at bottle necks , choke points and cruxes (Belay Stations, Narrow Ledges, Couloirs, Gullies, Chimneys, Rock Steps, Crevasse Crossing, River Crossing, Tyrolean Traverses) : **2 meters and a mask/face cover.**
- f) Inside Tents : **2 meters (minimum) and mask.**

1.3) Direct Contact Rules :

a) Avoid touching **frequently touched** objects and surfaces with bare hands , such as : Tent flaps and zips (particularly of toilette tents), Quickdraws , Belay Devices, Karabiners, Trekking Sticks, etc. **Use gloves and do hand hygiene using 70% alcohol handrub or, soap and water for atleast 20 seconds; Avoid hand-to-Face touch.**

b) Avoid shaking, dry dusting or flapping sleeping bags inside tents.

1.4) Disinfection Rules :

a) **Cleaning** : refers to removal of germs and dirt from surfaces and objects without destroying them by using : **Soap and Water.**

b) **Disinfection** : refers to the use of chemicals such as **1% Hypochlorite solution or 70% Ethyl/ Iso-Propyl alcohol** to destroy the germs on surfaces and objects.

c) **Prepare** Bleaching solution by mixing 5 table spoons of Bleach with approximately 4 liters of water at room temperature; or 4 teaspoons of Bleach with approximately 1 liter of water at room temperature. These solutions can be used for up to 24 hours for disinfecting surfaces such as tents, toilettes, vehicle seats & floor and, other frequently touched objects. For electronic items and screens like cell phones, GPS, walkie-talkie sets use 70% alcohol. Utensils and clothes can be washed with usual detergents and warm water.

d) **For Hand Hygiene:** a 20 seconds wash with soap and water remains the **gold standard.** Where this is not feasible, use 70% alcohol for 20 seconds.

1.5) Camp Hygiene Rules :

a) Maintain a 200 feet/60m (75 paces) separation between tents, as also between the kitchen tent and the water source . Within the tents, a distance of 2 meters must be maintained between the sleeping bags. Tent surfaces must be cleaned with 1% hypochlorite solution twice a day. **Quarantine Tents:** Any one down with fever or Flu like symptoms must be put up in a separate tent, should wear a triple layer surgical mask and be served food in the tent through a dedicated set of utensils and cutlery.

b) **Toilette tents** , being small enclosed, poorly ventilated spaces that are shared by multiple persons and thus also contain multiply touched objects and surfaces need particular attention. One toilette tent must be shared by a minimum number of persons that is practically feasible under the given circumstances, say 2-3 per tent.

Flaps must be kept open when not in use . Liquid Bleach , Soap and water must be available outside the tent and it must be each users responsibility to carry out bleach disinfection of the surfaces after use and do the hand hygiene. Personal towels must be carried.

c) **Practice Leave-No-Trace principles** and collect all plastic bio-waste such as : gloves, masks and empty hand sanitizer bottles in yellow waste bags and carry them down.

1.6) Acclimatization Rules:

Above 3000 meters, ascent profiles must deliberately be planned on a conservative side with no more than : **300 (1000feet) meters of sleeping height gain per day , with a rest day thrown in every 3rd day.** Though this may slow down the climb, it will curtail the need of emergency evacuations which will be problematic and uncertain in times of COVID-19.

1.7) Ethical Principles :

- a) Non Maleficence (Do no harm) : to self and others in your team , the mountain communities and Nature** that you encounter on the way. **Be honest** and isolate yourself from others in case you develop any new flu like symptoms or fever.
 - b) Beneficence (Maximize good) :** Develop relationships of mutual understanding, support and help with others. Develop **Buddy Systems** of mutual support and help.
 - c) Autonomy (Respect Dignity, Rights and Interests of others) :** Respect privacy of others, particularly of personal spaces . Confidentiality of information disclosed by others must be maintained, **except** where it concerns public health and safety of other team members, in which case the it must be disclosed to the leader / First Aid leader, in public interest.
Seek prior community consent of passage and camping from the mountain village communities you are likely to encounter enroute.
 - d) Justice and Fairness :** Do not blame or stigmatize any person for developing infection during the expedition. **Transparency and Mutual Accountability must be maintained for all transactions and decision making during the expedition.**
Member Expectations, Expedition Goals and Decision Making rules (by leader/ consensus/majority) must be deliberated upon and made explicit at the beginning of the expedition itself.
- D) Planning, Preparation and Hiking :**

1.8) The Road Map:

Planning and Preparation are best structured through responses to a series of practical questions:

- a) Where do we want to go? Is it a safe destination? Is it accessible? Do we have all the required information and permits? Will the local communities be open and receptive to the presence of outsiders?**
- b) How do we get there in a manner that is safe and reliable? Can we avoid passage through hot spots, crowds and close encounters with others while travelling?**
- c) How do we maintain health safety and self-reliance during the hike? Can the physical distancing rules be reliably maintained during the hike and camping?**
- d) What if things do not go according to the plan? What will be the cosequences?**

Choosing an Objective :

During COVID times, try selecting an objective, that is a **little below** the threshold of the teams climbing competence and ability so as to avoid getting into situations requiring outside rescue help, as also overburdening the already over stretched local healthcare systems.

Select hiking objectives based on the **ease and reliability** of obtaining : advance information (Quarantine , Health ,curfew, movement and forest regulations) , District permissions (District Magistrates Office), Forest Permissions(District Forest Officer) , local transport, lodging, food and portrage.

Choosing the Team: Size and Composition:

How many should go ?

While outdoor activities are generally safe, problems can arise from crowdedness and the resultant close contacts. While a party of three is the minimum from climbing safety perspective, a party of 10-15 has the added benefit of self-reliance and a margin-of-safety built into it, while avoiding crowding. In case bigger groups are planned, it would be safest to break them into smaller sub groups of 10-15 each with a staggered movement to create a separation in space and time.

Who should go ?

- a) **Physical fitness for the objective** becomes even more important as any unfit member is likely to create a mid-trek evacuation with the resultant logistical issues, as also the added risk of COVID exposure during evacuation. So match the baseline physical fitness of potential members to the anticipated demands of the hiking objective.
- b) **Health Risk Stratification (COVID specific risk) :**
Risk stratification may be done by factoring in a two-variable matrix of : 1) **Age** , and 2) **Underlying Chronic Medical Conditions** (Diabetes, Hypertension, Obesity, Coronary Heart Disease, Chronic Kidney Disease, Chronic Obstructive Lung Disease, Immunosuppressed States) :

A.1) Age less than 50 years + One or more underlying condition: Moderate Risk: Consult your physician before deciding to go.

A.2) Age more than 50 years + One or more underlying condition: High Risk: Consider deferring hiking until COVID pandemic settles down.

A.3) Age more than 65 years + One or more underlying condition: Very High Risk: No Go, until the Pandemic ends.

Choosing a Climbing Style :

Alpine Style : One of the great opportunities opened up by the COVID-19 pandemic is the possibility of promoting : small group alpine ascents on smaller peaks of up to 6,500 meters.

Expeditionary Style : Big teams, never good from the perspective of Human, or Environmental health, may need to be broken down into smaller sub-teams of 10-15 each with staggered movement so as to avoid crowding at camp sites.

Hybrid Style(Him-Alpinism) : which combines an expeditionary style until the Base Camp or the Advanced Base Camp with alpine style summit ascents beyond ,may blend advantages of both.

The Hiking/Climbing Schedule:

a) Arriving at the Home Station:

If feasible, members may undergo a 7-14 day quarantine, pre-departure.

Avoid stays in dormitories as these can turn into super-spreading spaces.

Conduct a team session focused on : Exchange of expectations, team goals, sphere of risk that every one understands and is willing to take, along with consent and waiver, turn-around rules, style of leadership and communication.

b) Transport from Home Station to Trail Head:

Dedicated buses with the interior surfaces sanitized with 1% Hypochlorite solution and seating arrangements at 2 meters distance with everyone in masks.

Self-Reliant stocks of food and water may be carried in the bus so as to avoid stoppage on wayside eateries and dhabas.

Air Conditioning must be turned off and all windows kept open to maintain cross ventilation.

c) Rail head –to-Base Camp trek and beyond :

Stagger the movement of porters and mules ahead of the team.

Team movement in small groups of 5-10 each, while maintaining a physical distance of 2 meters (6 meters while on steep up hill sections with the resultant deep, heavy breathing that may spread aerosols through the slip stream effect).

Masks need not be worn while trekking; they will get wet from the breath vapour and turn ineffective, as also cause a sense of suffocation.

Masks and Hand sanitizer must however be readily accessible to be used at all rest points.

Refer to Assumptions : Article (5) and Rules : 1.5 , 1.4 ; 1.2 ;1.6

This Advisory must be read along with **the first set of advisory** detailing approach to Risk Stratification released on March 22,2020, and is available on IMF website.

CODA

Given what we know about the state of COVID-19 as of:

October22, 2020, It is perfectly possible to do outdoor mountain activities in a safe, responsible and sustainable manner while adhering to the health principles and action guides mentioned above.

**Dr Anil Gurtoo
Director-Professor & HOD, Medicine
Incharge, COVID Care Wards,
Lady Hardinge Medical College & SSKH
New Delhi
Email- anilgurtoo2@gmail.com**