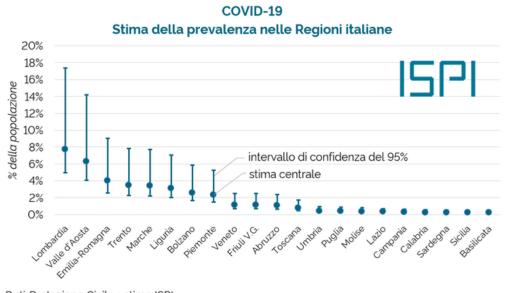
## Covid-19: let's think about phase 2 and sports activity. Climbing.

In a short while the health authorities will offer a model of behavior for what I put to the discussion by presenting these ideas, but it is important to reiterate that a model applicable to a large population provides cost-benefits with a failure rate that is not always acceptable for the individual.

A new vaccine against Sars-Cov-2 will reduce the percentage of people infected, but now in the incoming epidemic phase 2 we will have to rely on this model of presence of carriers of the Sars-Cov-2 virus.



Dati: Protezione Civile + stime ISPI.

To give an example, 190,000 infected people are expected in the Emilia Romagna Italian region, 4 people per 100, the normal presence of people in an big indoor room. Everyone can evaluate their area by looking at the tables of the last census.

For phase 2 sports activities we evaluate the risk of contagion during the activity. The basic personal safeguards against contagion are a mask and gloves that cannot be used during sports action.

The sport climbing activities we will see from phase 2 are:

**Regulated competitive activity**: identified athletes or teams who meet in a defined area following a competitive calendar. These form a cohort (small sample of the population) isolated enough to be checked with virus and antibody presence tests at periodic intervals. In this way the risk of contagion during the performance is limited.

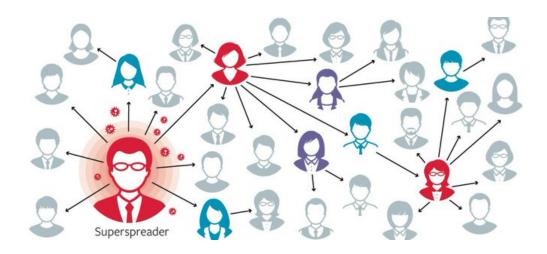
Personal devices are the mask and disposable gloves. The devices must be used in the rest

or socialization phases, while during the action the mask is not used, clothes that contain the diffusion of aerosols, the shirt are used.

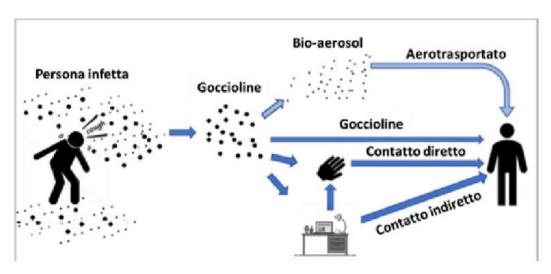
The use of liquid chalk (in alcoholic solution) is in any case mandatory acting as a sanitizing agent.

Spacing in indoor rooms is important.

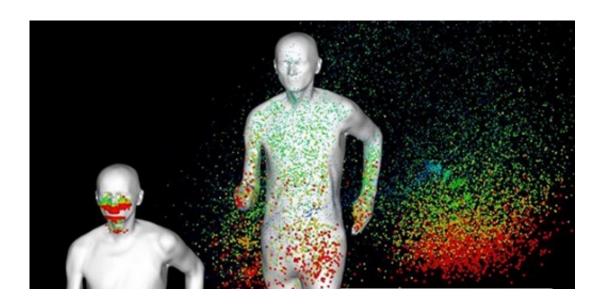
**Free activity, outdoors or indoors**. Athletes are not controlled in the health profile, so a sample of climbers is subject to the diffusion model that can be exemplified:



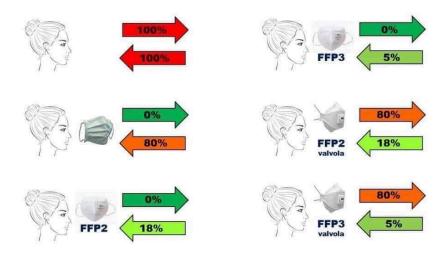
The potential super spreader will be a person who lives in crowded places, meets people, moves for work or something else, all options that raise his potential viral load and his contagiousness, always potential. The spread of the virus follows various routes, as we all know by now



These routes are accentuated by the emission power of the droplets / aerosols in sports action, which are much more common than in sedentary life.



Climbing in open terrain requires protective behavior that uses only one device: the mask, which we summarize here in the various features



**RIEPILOGO PROTEZIONE MASCHERINE** 

The mask should be used in times of inactivity. During rest, in moments of socializing or assisting your partner in action (secure climbing, bouldering assistance).

During the action, the mask is not used, clothing is used that contains the diffusion of aerosol, the shirt.

The use of liquid chalk (in alcoholic solution) is in any case mandatory acting as a sanitizing agent.

During the recovery phases, the mask is put on and the appropriate spacing is always maintained to avoid the spread of aerosols. Distancing is always an important condition.

## The indoor climbing activity requires some more precautions.

Personal devices are the mask and disposable gloves.

Here too, the principals must be used in the rest or socializing phases, while during the action the mask is not used, clothes that contain the diffusion of aerosols, the shirt are used. Climbing accessories must be strictly personal (chalk bag or balls).

The use of liquid chalk (in alcoholic solution) is in any case mandatory acting as a sanitizing agent.

Spacing in indoor rooms is important.

The use of common "dry" equipment (beams, panels, pangullich, benches and weights) requires the mandatory use of liquid magnesite (in alcoholic solution) or disposable gloves where convenient.

## The structural controls of the rooms

provide for the control of the aerial phase: ventilation and the possibility of infection (AiCARR document). To minimize the effects of the presence of an infected person in the workplace, AiCARR recommends reducing the level of occupancy of the rooms, for example, from one person per 7 m2 to one every 25 m2, in order to reduce any possible airborne contamination. Considering that the outside air is not normally contaminated by the virus, AiCARR recommends that you frequently ventilate rooms that are not equipped with mechanical ventilation; if in the rooms there are ventilation systems that supply fresh air, AiCARR suggests keeping them always on (24 hours a day, 7 days a week) and operating them at the nominal or maximum speed allowed by the system to remove the particles suspended in the air (aerosol) and contain deposition on surfaces.

Mechanical ventilation and air filtration can take place through dedicated systems (ventilation only), or through air conditioning systems (mixed primary air systems and all-air systems); dilution with external air and high efficiency filters reduce the presence of particulates and bioaerosols thus contributing to the reduction of the risk of contagion. AiCARR recommends to always evaluate the opportunity or the need to close the recirculation ways and to avoid that the introduced air is contaminated by that extracted or expelled from the environments. The filters: Coronaviruses have dimensions of about 150 nm enlarged by the droplet that carries them, it is good that the filters of the air conditioners provide these characteristics, such as the HEPA (High Efficiency Particulate Air) filters for high efficiency particulates: these filters trap 99.7% of dust particles and other allergens that are larger than 0.3 microns in diameter.

The dynamic controls of the rooms include:

Removal of dust and sanitization of rooms and spacing in changing rooms. Strong criticism regards the use of showers.

The presence in places of communities not dedicated to climbing / training of sanitizing gel, while in the climbing / training area the use of liquid chalk (in alcoholic solution) available to customers.

The rental must be limited to what is strictly necessary and to sanitizable equipment (washing with detergents or sterilizing solutions).