STEP UP

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THEMATIC REPORT

PREVENTION MEASURES

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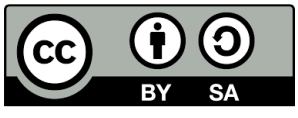

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Background and methods

The current COVID-19 pandemic is having a strong impact in everyday life and creating an unprecedented challenge to health and care systems worldwide. Numerous measures to respond to the urgent care needs of those impacted are being taken, while also trying to reduce the long-term impact on vulnerable people, in all ways possible. Since the first cases appeared, countries have developed several strategies, adapted services and a wide range of innovations came up, requiring flexibility, especially to address people's continued care. After the emergency state, a collaborative leadership approach will be essential and working together as a collective, investing in a participatory citizenship, will be key.

The emergency state, the use of teleworking, the social distance, all implied uncovering new methods of work, understanding society's biggest fragilities and will imply changes in work and training, tools and routines that will only be clear in the next months and years. In this process of living "remotely", by far younger generations had an easier adaptation. If, besides age, we address adults with lower qualifications and skills, as it is often the case in the care sector, this is more serious, as they are easily hampered in the search of reliable information due to missing digital skills.

Apart from all the innovations that are being developed and new ways of delivering services, there is the need to prepare bottom-up initiatives that build-up the competences of the professionals in the care sector so that they are prepared to deal with such emergency situations in the future.

STEP_UP intends to develop a training tool for social care professionals, community leaders, informal caregivers and volunteers, where they are introduced to the actual impact of behaviours in the spread of a pandemic/emergency situation. There they can learn about preventive measures, their impacts and different levels – individual, at work, in the family, at state level, among others.

Although there is plenty of information available online, it is difficult to know which one is reliable. Also, there is the need to prepare the right training methods to approach the care sector, in an adequate and engaging way.

The core of this tool will be an educational game but also a Virtual Library was created to allow measures to be shared, consulted and benchmarked.

Besides the other results, a manual on social and policy interventions will be delivered, offering targeted guidelines and insights on early detection, preventive measures, health and social care interventions and policy measures for EU countries.

Based on the desk research to identify measures to stop spreading the epidemic growth that are stored in the Virtual Library (link), the information from the first round of workshops and eventual additional publications, each partner of STEP_UP elaborates a thematic report in August 2021.

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Each report addresses one of the crosscutting themes to combat epidemic diseases or pandemics such as COVID-19, SARS, Ebola virus or Yellow Fever. The reports will be used to build the Social and Policy Interventions Manual, to be delivered at the end of the project in national languages.

To be sustainable for the future and to detect overarching guidelines to stop epidemic growth, the thematic reports focus on more diseases than COVID-19 only. The length of the report is expected to be 12-15 pages at a minimum.

The crosscutting themes are divided among partners as follows:

Table 1 - Division of themes by partners

Crosscutting theme WHO: pandemic and epidemic diseases include among others influenza (pandemic, seasonal, zoonotic), COVID-19, SARS, Ebola, The Plague, Yellow Fever, Cholera	Partner
Early detection: measures, methods and systems available in the partner countries and globally to detect a health emergency virus outbreak before it is widely spread.	AFEdemy
Prevention measures: Limit transmission of COVID-19 – these may be individual or organisational measures. Includes screening (e.g. temperature), washing hands, wearing masks, etc. It is the behaviour itself	SHINE
Healthcare and social care interventions: measures in healthcare organisations, public health, social care	CIPH
Policy measures: Minimize the impact of COVID-19 – these are measures defined / imposed by the government to specific individuals or society. E.g. wearing mask is a preventive measure but the policy measure is the obligation of using mask in the streets. Includes containment, mitigation and suppression measures	ISIS
Communication: governmental, experts communication	WISE

Epidemic diseases and pandemic

Communicable diseases have plagued mankind since time immemorial. In many cases, science has been able to find solutions to keep the spread and burden of these diseases under control. Sometimes, however, a new disease breaks out and increases unexpectedly in the number of disease cases (epidemic) or there is an exponential disease's growth, mostly affecting several countries and populations (pandemic) before effective solutions are found. The most recent example of such a pandemic is COVID-19.

It is not possible to consider that no other health emergency situations will occur in the future. To enable the target group of adult learners of STEP_UP to be prepared for future outbreaks,

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this report also focuses on measures on epidemic diseases or pandemics that infested Europe in the past or are compatible to COVID-19. Main source: United States Center for Disease Control and Prevention.

Black Death/Plague

The Black Death or Plague is a bubonic plague that struck Europe and Asia in many different centuries in the past. The plague caused many casualties: estimations are that about 50% of the populations were killed. The plague is spread by a bacillus that travels from person to person through the air, or by bites of infected fleas and rats. Symptoms are that people are covered with black boils that oozed blood and pus. The disease was very effective: people could go to bed healthy and be dead in the morning. Prevention is to make the environment rodent-proof, avoid skin contact and control fleas on pets. Plague vaccines are in development but are not expected to be commercially available in the immediate future.[1]

1918 H1N1 / Spanish Flu

The 1918 H1N1 flu pandemic, sometimes referred to as the "Spanish flu," killed an estimated 50 million people worldwide. Mortality was high in people younger than 5 years old, 20-40 years old, and 65 years and older. An unusual characteristic of this virus was the high death rate it caused among healthy adults 15 to 34 years of age. At that time there was no vaccine to protect against influenza infection and no antibiotics to treat secondary bacterial infections. Control efforts were limited to interventions such as isolation, quarantine, good personal hygiene, use of disinfectants, and limitations of public gatherings.

SARS-CoV

Severe acute respiratory syndrome (SARS) is a viral respiratory illness caused by a coronavirus called SARS-associated coronavirus (SARS-CoV). SARS was first reported in Asia in February 2003. The illness spread to more than two dozen countries in North America, South America, Europe, and Asia, before the SARS global outbreak of 2003 was contained. Since 2004, there have not been any known cases of SARS reported anywhere in the world. In general, SARS begins with a high fever (temperature > 38 degrees Celsius). Other symptoms may include headache, discomfort and body aches. Some people also have mild respiratory symptoms at the outset. Most patients develop pneumonia. SARS is spread by close person-to-person contact and droplets spread by air.

2009 H1N1 / Mexican Flu Pandemic

In 2009 an influenza (flu) virus emerged that had never been seen before in humans. This virus contained a unique combination of influenza genes not previously identified in animals or people. The United States Center for Disease Control and Prevention estimated that 150,000-575,000 people worldwide died during the first year the virus circulated. 80 percent of these deaths were estimated to have occurred in people younger than 65 years of age. This is quite different from typical seasonal influenza epidemics, during which about 70-90 percent

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of the deaths are estimated to be people older than 65. An effective vaccine is available, and many younger people were vaccinated in 2010.

MERS

Middle East Respiratory Syndrome (MERS) broke out in 2012 and is an illness caused by a virus (more specifically, a coronavirus) called Middle East Respiratory Syndrome Coronavirus (MERS-CoV). Most MERS patients developed severe respiratory illness with symptoms of fever, cough and shortness of breath. About 3 or 4 out of every 10 patients reported with MERS have died. MERS-CoV can be spread through close contact, such as caring for or living with an infected person. Preventive measures are washing hands, cover mouth and nose with a tissue, avoid personal contact and clean and disinfect frequently surfaces.

Introduction to the measures

At the start of the Stop epidemic growth through learning (STEP_UP) project, partners performed a desk research to identify measures that are used or recommended to stop the spreading of epidemic diseases or pandemics. The identified measures are categorized and stored in the virtual library on the project website.

The measures are categorized as follows:

- Early detection: measures, methods and systems available in the partner countries and globally to detect a health emergency virus outbreak before it is widely spread
- Prevention measures: Limit transmission of COVID-19 – these may be individual or organisational measures. Includes screening (e.g. temperature), washing hands, wearing masks, etc. It is the behaviour itself
- Healthcare and social care interventions: measures in healthcare organisations, public health, social care
- Policy measures: Minimize the impact of COVID-19 – these are measures defined / imposed by the government to specific individuals or society. E.g. wearing mask is a preventive measure but the policy measure is the obligation of using mask in the streets. Includes containment, mitigation and suppression measures
- Communication: governmental and experts' communication towards general public

Based on this categorization of measures and additional information, each project partner prepared a thematic partner report. This report will become part of the manual on social and policy interventions, Intellectual Output 2 of the project. The manual will target adult learners that work as professionals in municipalities and welfare organizations as well as social and health care providers, mainly those in auxiliary positions and lower skills. Additionally, volunteers in associations, initiatives, and other community organisations will be provided with options and strategies to contribute for public awareness.

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Prevention measures

Background

This report will focus on preventive measures and guidance taken by health authorities to limit the spread of COVID-19 aimed both at the individual and at various sectors of society with high potential for spread. The measures will be categorised by type and by area.

As estimated by the Control Disease Center (CDC) in August 2021, preventive measures like using of masks, social distancing, etc., influenced the evolution of cases, reflecting on the occupancy rates in hospitals[2].

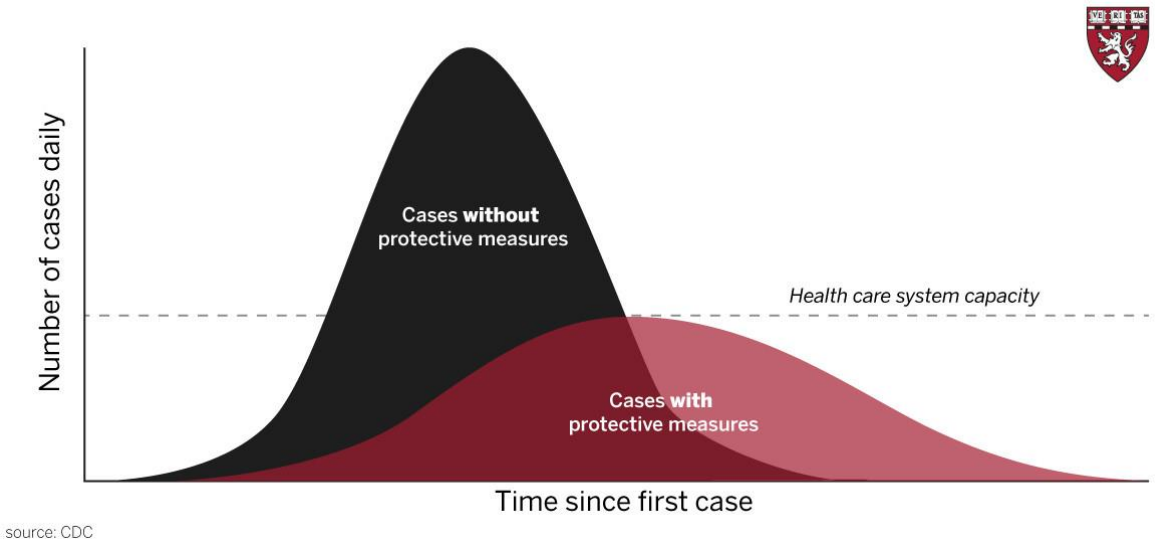

Figure 1 - Effect of protective measures in the evolution of cases and health care occupation.

At the beginning of the pandemic, only a respiratory syndrome of unknown causes was known. [3] On December 31th 2019, 27 cases of this syndrome were reported by Wuhan health authorities. On January 7th, the Chinese authorities named a new coronavirus as the possible cause - nCov.

On January 8th, 41 cases were registered in Wuhan. Symptoms started between December 8th and January 2nd.

Even in mid-January, cases were detected in Thailand and Japan (with people who had been in Wuhan).

On January 10th, the World Health Organization (WHO) declared the province of Wuhan as an area affected by nCov and warned to be especially careful with patients with breathing difficulties who have already been to Wuhan.

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Figure 2 - Cases of COVID on 22nd January 2020. Source: https://vac-lshtm.shinyapps.io/ncov_tracker/

Figure 3 - Cases of COVID on 23rd March 2020.-Source: https://vac-lshtm.shinyapps.io/ncov_tracker/

With the progressive increase of cases, the authorities began to issue recommendations and alerts that were still very oriented to those who were in Wuhan:

- On January 10th, the WHO declared the Wuhan province as an area affected by nCov and warned the world to be especially careful with patients with respiratory difficulties and whoever has been to Wuhan[4].

- On January 16th, the Pan American Health Organization (PAHO) and the WHO issued an alert stressing the importance of respiratory etiquette, hand hygiene for travellers, especially for

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those who have been to Wuhan. In the same document, guidelines for health professionals are already given[5].

However, with further raising in the number of cases, the record of 3 deaths and, moreover, cases being detected outside Hubei province, some countries in the region started to demand mandatory exams for all plane arrivals from risky areas in China.

On January 23, the Government imposes mandatory quarantine on millions of Chinese citizens.

On January 24, Chan et al publish a study in which they report person-to-person transmission[6].

With cases spreading to more and more countries, on 30 January the WHO declares the coronavirus an international emergency[7].

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Figure 4 - Situation on 30 January 2020. Source: https://www.who.int/docs/default-source/coronaviruse/situation-reports/20200130-sitrep-10-ncov.pdf?sfvrsn=d0b2e480_2

The quarantine measures implemented by the Chinese Government begins to show its effects and after 3 weeks the number of cases begins to decrease.

On February 25th, a report by several international and Chinese experts is published, revealing that the peak of cases had occurred and that they would be gradually decreasing.[8]

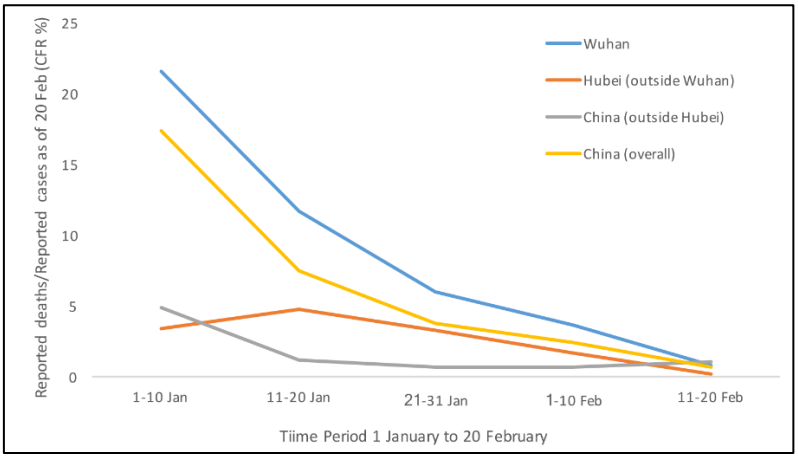

Figure 5 - Case fatality ratio for COVID-19 in China over time and by location, as of 20 February 2020. Source: https://www.who.int/publications/i/item/report-of-the-who-china-joint-mission-on-coronavirus-disease-2019-(covid-1

On March 16, 2020, Ferguson et al publish a new study[9] in which an analysis is made of the evolution of the cases on the United States and Great Britain and predict the following: in the

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absence of measures, in 3 months a peak of deaths would be reached and in the second week of April the demand for intensive care would be more than 30 times the capacity.

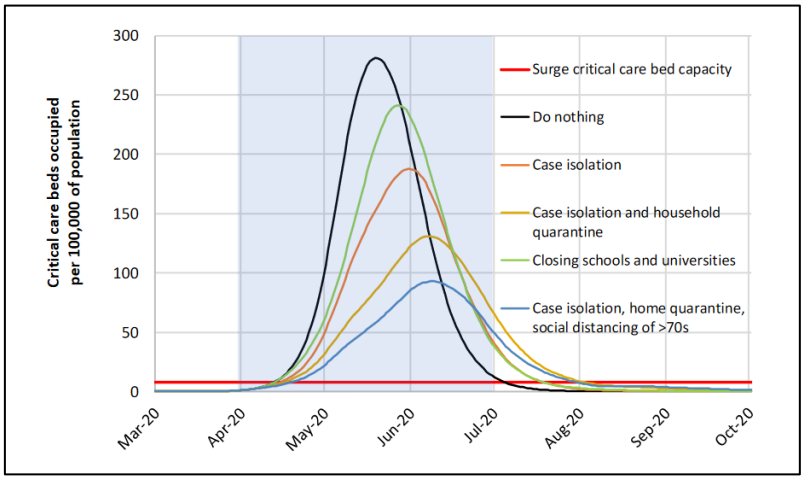

Figure 6 - Mitigation strategy scenarios for GB showing critical care (ICU) bed requirements. Source: https://www.imperial.ac.uk/media/imperial-college/medicine/sph/ide/gida-fellowships/Imperial-College-COVID19-NPI-modelling-16-03-2020.pdf

As of March 2020, and with Italy in a very difficult situation, several countries implemented preventive measures to contain the spread of the virus and to prevent the collapse of hospitals minimizing the impacts on the economy as much as possible.

The next sections will provide an overview of the different measures implemented, categorised per type/area and context.

Categorisation of the preventive measures

The measures presented can vary from country to country and have been adapted to the circumstances and cultural specificities as necessary. They are thus presented in one of their possible approaches but others are possible and can be further consulted in STEP_UP's Virtual Library: https://stepupgame.eu/library/.

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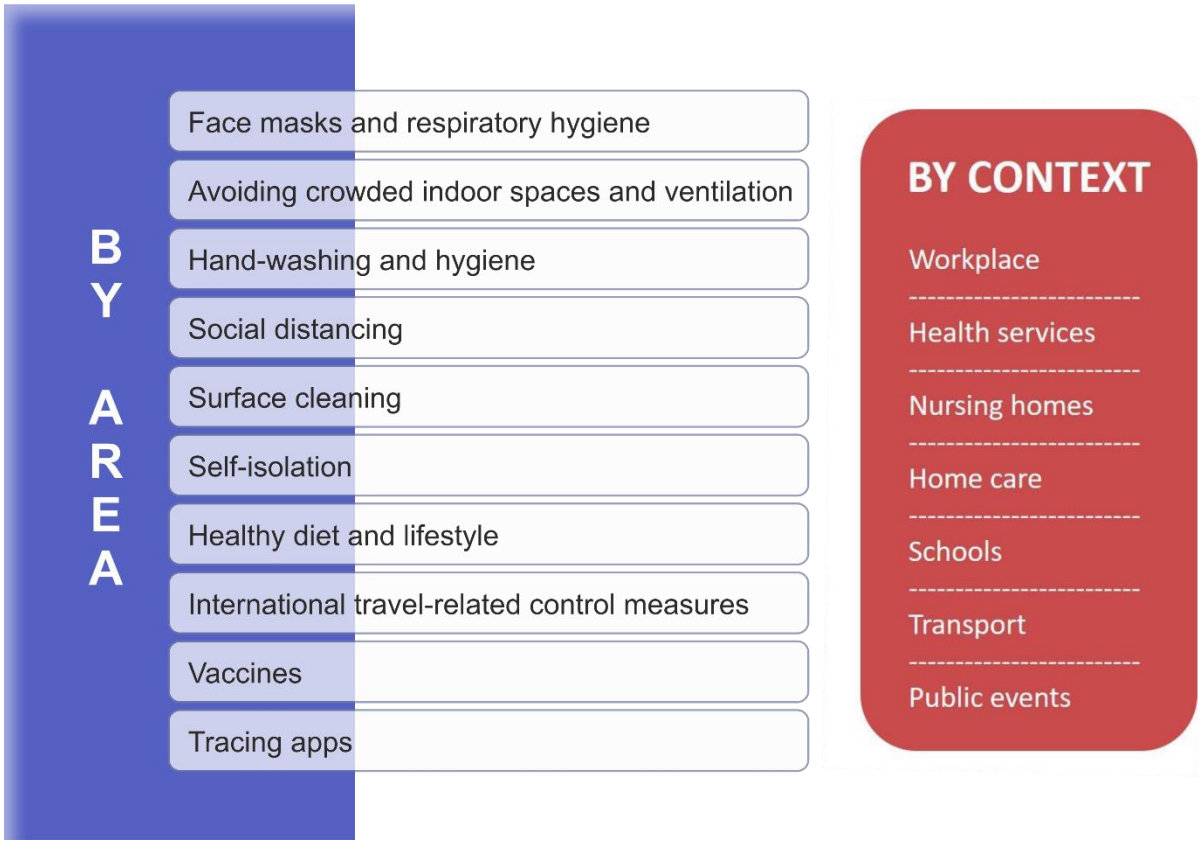

Figure 7 - Proposed categorisation of the preventive measures

Per type / area

1. Face masks and respiratory hygiene

Initially, the use of surgical masks was only advised for those who were infected, people with symptoms or else for caregivers who were in contact with infected or suspected of infection[10]. The use of masks was advised for:

- Individuals with respiratory symptoms if they have fever, cough and difficulty breathing.
- Individuals with suspected 2019-nCoV infection with mild respiratory symptoms.
- Relatives or caregivers to individuals with suspected 2019-nCoV infection with mild respiratory symptoms when in the same room.
- Health care workers when entering a room with patients confirmed or suspected of infection.

Other measures:

- Cover your mouth and nose when coughing or sneezing (with flexed elbow or paper tissue).
- Obligation to wear a mask in closed spaces[11].
- Obligation to wear a mask on public streets.[12]

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2. Indoor spaces and ventilation

"SARS-CoV-2 transmission is particularly effective in crowded, confined indoor spaces where there is poor or no ventilation.[13]"

To reduce the risk of transmission indoors, the quality of the air and the amount of time people are exposed to it are crucial to prevent the spread. The WHO has published a guide on how to improve ventilation in closed spaces[14].

The measures taken consider the specificity of each location:

- Limit the number of people in the same space.
- At home, people infected or suspected of being infected should be in a well ventilated separate room.
- Air renewal should preferably be done by natural ventilation.
- Mechanical ventilation equipment must be well clean and properly maintained.
- Visits to institutionalized people (Hospitals, nursing homes, etc), should take place in a space with well-defined circulation corridors.

3. Hand-washing and hygiene

From the beginning, hand washing and hygiene are the most consensual preventive measures.

- Wash your hands with soap and water or, alternatively, disinfect your hands.
- Use paper towels to clean your hands.
- Avoid touching the mouth and nose.
- Avoid touching the mask.
- Have good respiratory hygiene ("*covering the mouth and nose during coughing or sneezing using medical masks, cloth masks, tissues or flexed elbow, followed by hand hygiene*."[15])
- Wear disposable gloves when in contact with infected or suspected infection
- After any contact with someone infected or suspected of having an infection, wash or disinfect hands thoroughly.
- After remove mask or gloves, the hand hygiene should be performed.
- Avoid exposure to contaminated items of ill people in their environment.

4. Social distancing

Social distancing was generally implemented by the various countries, being advocated by the WHO since the beginning of the pandemic (initially for contact with people infected or suspected of having an infection).[16].

- Minimum distance of 1m with people outside the household (some countries adopt 1,5m or 2m).

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- Limit the number of people at the same table in restaurants and cafes and inside the space.
- Limit the number of people inside the stores.
- Mandatory telework whenever functions allow.
- In accessing services or at workplaces, whenever it is not possible to maintain social distance, plexiglass barriers should be installed.

5. Surface cleaning

With the aim of reducing possible outbreaks, the cleaning of surfaces was highly stressed:

- Each organization must establish a plan for cleaning and sanitizing the installations.
- Cleaning of frequently touched surfaces can be carried out with basic detergent disinfectant.
- The frequency of cleaning of frequent touch surfaces must be at least 6 times per day, but it may be necessary to increase this frequency.
- In catering/cafe areas, the cleaning must be done when a customer leaves and enter another for the same table. Door handles should be cleaned with more frequency (about 1 time per hour)
- Spaces where children can play should be cleaned more often during the day.

6. Prophylactic isolation

Prophylactic isolation is recommended for people who had contact with a COVID patient or are infected without the need for medical admission.

People in isolation must follow some precautions:

- Stay at home and only leave in emergency.
- Protect cohabitants, not sharing the same space and elements of the environment.
- Hygiene your hands and the most used surfaces regularly.
- All waste must be in an exclusive location.
- Body temperature should be measured regularly even if there are no symptoms.

7. International travel-related control measures

With regards to international travel, countries have been adopting more or less restrictive measures, from the requirement of testing to the ban on arrivals, also depending on the COVID pandemic status at each time. These measures include:

- Complete vaccination requirement.
- Negative test, or proof of previous infection of COVID requirement.
- Isolation or quarantine requirements of travellers.

There are some advice that travellers should follow to reduce the risk:

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- Confirmed or suspected cases should not travel.
- Persons who are unwell should be advised to postpone travel and seek medical care.
- People who come from areas with restrictive movement measures may not be allowed to travel.
- All travellers must continue to use personal protection measures such as the use of masks and physical distance both in transport on board and at the point of entry.

8. Healthy diet and lifestyle

Measures implemented by countries, such as quarantine and closing of stores, affect the way people live. The WHO released information about healthy lifestyle during quarantine, disseminated information about healthy lifestyle, covering diet[17] and physical exercise[18]:

Recommendations for the area of Diet:

- Make a plan - take only what is needed.
- Prioritize fresh products.
- Prepare home-cooked meals.
- Follow safe food handling practices.
- Enjoy family meals.

Recommendations for the area of Physical exercise:

- Take short active breaks during the day.
- Follow an online exercise class.
- Walk (if go outside be careful with the social distancing).
- Stand up (to reduce sedentary time).
- Relax

9. Quarantine

The quarantine is advised for people who had contact 2 days before or 14 days after the beginning of the symptoms of a confirmed case[19]:

- Face-to-face contact for more than 15 minutes at distance of less than 1m.
- Direct physical contact with a confirmed case.
- Direct care of an infected person without using the appropriate PPE.

When the authorities decide to implement quarantine, they should provide support, such as:

- Adequate conditions, such as food and water.
- Possibility of remote school for children, paid leave or remote work could be implemented.

When quarantine is at home:

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- Ensure adequate ventilation of spaces.
- Maintain a physical distance of a least 1m between all the persons in quarantine.
- The use of shared spaces should be minimized.

10. Vaccines

The WHO highlighted the importance of vaccines in the fight against COVID19, recommending that health authorities should prioritize the groups with higher exposure to infection.[20]

Thus, for example in Portugal, the vaccination plan was divided into 2 phases[21]:

- Phase 1, for workers from health and care sectors, people aged over 80 or aged 50 to 79 with specific medical problems and 16 years of age or older and Trisomy 21.
- Phase 2, for people with 12 years of age or older, with higher risk pathologies, 79 to 16 years of age, by decreasing age groups, pregnant women aged ≥ 16 years, 16 years of age or older with specific medical conditions and people who have recovered from SARS-CoV-2 infection, diagnosed at least 6 months ago, by decreasing age groups.

11. Tracing apps

One of the innovations developed to support the national and cross-border prevention were tracing and warning apps.

Most Member States have launched a national contact tracing and warning app to be used on a voluntary basis, although with very different adherence patterns depending on the countries and cultural contexts.

The Member States and the European Commission (EC) considered this would be an important area to coordinate transnationally and have set up a new services to allow national apps to talk to each other and be warned if they were in contact with someone who has indicated that they have tested positive for COVID-19. Contact tracing and warning apps are based on Bluetooth proximity technology and only used voluntarily, with respect for users' privacy and not enabling the tracking of people's locations[22].

The official website of the EC refers that this service works according to a "decentralised" system in combination with the Gateway Services, which are set up by T-Systems and SAP, and the server itself is hosted in the Commission's own data centre in Luxembourg. The system is operational and the first national apps were connected to it in October 2020.enables these apps to be used across borders.

Three national apps (Germany, Ireland, and Italy) were first linked on 19 October when the system came online. In total, at the time of this report, 20 apps are based on decentralised systems and can become interoperable.

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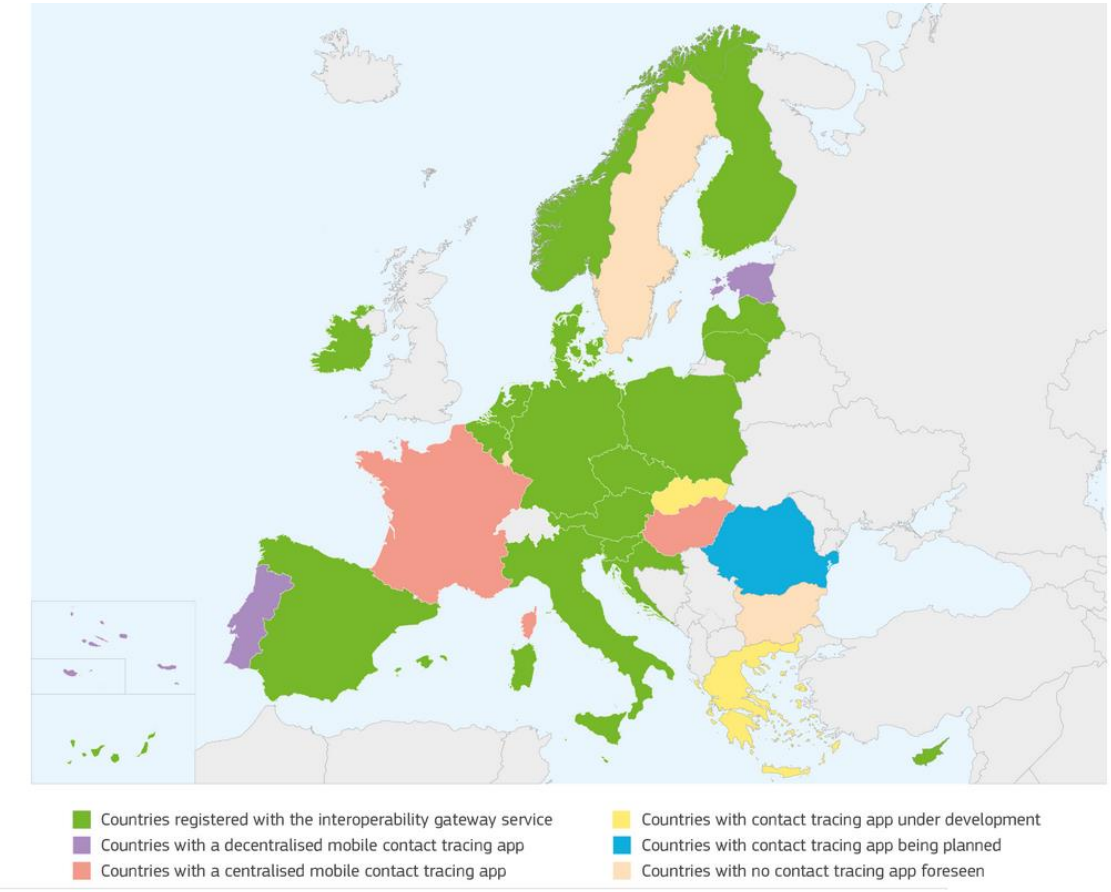

Figure 8 - Tracing apps in the EU. Source: https://ec.europa.eu/info/live-work-travel-eu/coronavirus-response/travel-during-coronavirus-pandemic/how-tracing-and-warning-apps-can-help-during-pandemic_en

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Categorisation per context

1. Workplace

The measures are adjusted to the risk level of each location, being classified as low risk, medium risk and high risk of infection[23].

Some measures are general and transversal to all sectors and level of risk, and are focused on information, personal and space hygiene and reducing face-to-face contacts:

- Hand hygiene.
- Respiratory hygiene.
- Physical distancing (teleworking when possible).
- Avoid workplace events that involve prolonged contacts among participants.
- Reduce work-related travels.
- Regular environmental cleaning and disinfection.
- Risk communication, training and education.

For jobs with medium risk, in addition to the increased frequency of hand and space hygiene some additional measures to employers/managers are advised:

- Provision of individual protection materials;
- Improvement of the ventilation of spaces;
- If a distance of 1 m is not possible, workers should be side by side instead of facing frontally, plexiglass barriers should be installed and shifts increased.

In case of jobs with high risk, the suspension of the activity should be considered. The measures are aimed at worker protection:

- When in the patient's homes or in contact with contaminated elements, workers should use eye protection, mask and disposable gloves.
- Adequate hygiene is necessary before and after contact with any known or suspected case of COVID-19, before and after using PPE[24];
- Provision of training in use of PPE and in infection prevention.

The workers with pre-existing medical conditions should not be exposed to high-risk tasks.

2. Health services

From a very early stage, the WHO gave instructions for the prevention and control of infection in the health services environment[25]. These measures were based on 4 points:

- Precautions to take with patients
    - Hand hygiene and respiratory hygiene.
    - Use of protective equipment.
    - Proper waste management.

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- Sterilization and disinfection of all devices.

- Additional measures according to the transmission mechanism
  - Droplet precautions with suspected cases and in medical procedures that generate aerosols such as intubation.
- Administrative Control
  - Training of health workers.
  - Guides for early detection of a COVID infection.
  - Access to rapid tests.
  - Preventing overcrowding of services, providing adequate waiting rooms and an adequate provision for hospitalized patients that promote a good relationship with professionals of health.
- Environmental control
  - Adequate ventilation.
  - Space cleaning.
  - Separation of at least 1 m between patients.

3. Nursing homes

Containing a part of the population that is most at risk, residential homes for older adults have always had the attention of health authorities, recommending several measures from very early on:

- All professionals of the organisation must follow the measures recommended by the health authorities like hand hygiene, respiratory etiquette, recommended distance between people and use of a mask whenever they are inside the institution.
- Working hours should be organized into shifts so that teams do not contact.
- Use common spaces in shifts to maximize the distance between residents.
- Wherever possible, good ventilation in spaces must be ensured, preferably with natural ventilation.
- New residents not vaccinated against COVID-19 and without a history of SARS-CoV-infection2 in the last 90 days, must comply with a period of isolation of not less than 14 days.
- The organisation must communicate to family members and other visitors the conditions under which the visits take place.
- Visits must be made by appointment and with limited time.
- Persons participating in the visit must maintain compliance with all measures of physical distance, respiratory etiquette, hand hygiene and use of surgical mask.
- Suspension of visits when necessary.

4. Home care

For home care providers and workers, several measures were proposed:

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- Perform proper hand and ensure respiratory hygiene.
- Wear disposable gloves when cleaning or touching contaminated elements.
- The teams are always working with the same equipment, avoiding rotation.
- The caregivers must use the proper PPE.
- In vehicles, employees always wear a mask.
- All employee transport vehicles are regularly disinfected.

5. Schools

Taking into account the concentration of people, the schools had preventive measures, trying not to harm the functioning of the classes. One of the measures was online school but during in-person classes several issues needed to be considered:

- Students must be organized into groups and maintain this organization throughout their period of stay at the school.
- Groups should have breaks and meals organized in order to avoid contact with other groups
- Everyone at school must respect the distancing rules.
- Each group must be assigned a school zone.
- Classroom entrance and exit circuits must be defined for each group.

6. Transport

Due to its characteristics, such as the rotation and physical proximity of users, public transports had measures to minimize the risks of transmission:

- Provide hand sanitizer for workers and users.
- Guarantee the renewal of vehicle air.
- Workers must individually ensure compliance with respiratory etiquette rules.
- Users must respect the adapted circuits, standards, safety and hygiene measures recommended in each means of transport.
- Users must wear a face mask in accordance with legislation.
- Measures to reduce contact with the public and the driver (installation of cabins).
- Reduce maximum capacity.
- In individual transport, in addition to vehicle hygiene, windows should be kept open to maintain air circulation.

7. Public events

For any event, the risk must be assessed, in conjunction with the health authorities. When an event is approved several recommendations are put forward to the organisers:

- Reduce the maximum capacity.

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- Ensure the existence of adequate equipment and/or facilities for the adoption of good hygiene practices.
- Reinforce recommendations on hand hygiene and respiratory etiquette.
- Anyone who is sick or has been in an active community transmission area or in contact with a confirmed case should not participate.
- To reduce the risk of becoming contaminated at a public event, good hand hygiene and respiratory etiquette are recommended, especially for people who have health problems such as diabetes or chronic lung disease.
- The consumption of alcohol or drugs should also be reduced.

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Good Practices

1. Online trainings on good practices to prevent infections

Initiator of the good practice Municipality of Shanghai
Country China
Region/City Shanghai
Type of initiative Public
Link https://uil.unesco.org/unesco-learning-cities-response-covid-19

In the Shanghai area, online teaching started in March 2020 and the focus has been on two levels: the city and the community. At the city level, the Municipality of Shanghai has taught local people how and where to buy masks for protection, how to get food delivered, and provided guidance for other day-to-day tasks to cope with the outbreak. More specifically, teachers have been asked to communicate with parents and students and support the process of teaching citizens how to stay healthy and provide assistance to sick relatives.

At the community level, 35 online courses have been provided by several learning centres in Shanghai, while high-quality video lessons have been broadcast through local TV channels. Community educators have played a particularly crucial role, as they have worked as volunteers to facilitate service-learning and to promote problem-solving in the community[26].

2. Move for Life - Senior Sport

Initiator of the good practice Torres Vedras City Council
Country Portugal
Region/City Torres Vedras
Type of initiative Public
Link https://www.intelligentcitieschallenge.eu/ move-life-senior-sport

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The program “Move for Life - Senior Sport” (in Portuguese "Mexa-se para a Vida"), at the Torres Vedras City Council, consists mainly of physical classes and social events. It aims to promote the improvement of the quality of life of residents above 55 years of age, through the practice of physical activity, creating healthy lifestyle habits and facilitating the existence of positive social contexts. With the interruption of face-to-face activities due to COVID-19, it was necessary to mitigate the lack of physical and socio-affective activity caused by social isolation.

The initiative has two main actions:

Helpline – The nine teachers of the program make phone calls to the 1900 users weekly, transmitting information about exercises adapted to their conditions and detect any type of needs aggravated by the contingency to which they are subjected. The most serious situations are signalled to the Social Area of the Torres Vedras City Council, which, through a network of partners, tries to solve them.

Video Lessons "Move for Life" – The program's teachers produce video classes with physical exercises directed to the population over 55 years old, whether or not they are users of “Move for Life”. Thus, the general population can take advantage of this initiative. These videos are transmitted on Mondays, Wednesdays and Fridays at 10am through the social networks of the Torres Vedras City Council and can be viewed at any time. In addition to combating a sedentary lifestyle, users can see their teachers with whom they have a strong emotional connection. In parallel, the teachers promote, together with the users' family members, the creation of WhatsApp and Messenger groups to facilitate communication among the elderly, mitigating isolation and increasing digital literacy.

The HelpLine was started as soon as the face-to-face classes were suspended: 16th March 2020. The video lessons began to be published on April 20th. The team consists of a coordinator and nine teachers. Everyone was working from home. Teachers make phone calls to seniors, manage social media groups and plan and run video lessons. The coordinator articulates the contacts between the team and the Social Area and the Communication Office of the Municipality of Torres Vedras.

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Conclusions and recommendations

Since the appearance of the first cases of COVID19, and when very little was known about this virus, some preventive requests were immediately mentioned, even if limited to the geographical area where it appeared, such as hand washing or respiratory hygiene. These measures are general for respiratory viruses; however, the rapid spread forced the countries to take more robust actions.

Despite the changing and often contradictory information, as new research results were released, the WHO played an important role in disseminating and publishing guidelines that countries in one way or another were following.

The use of masks, washing hands, disinfecting spaces became part of the daily lives of most people.

In an attempt to protect the most vulnerable and the most exposed, specific measures had to be taken, initially for the health sector and for nursing homes and soon after, for other sectors of society, such as education, public transport, or restaurants, in an attempt to maintain some normality in people's lives and avoid confinement.

Perhaps the most impactful measure, not only on people, but also from an economic point of view, was the confinement of cities, regions, and even entire countries. This measure, in addition to its social impacts, caused severe damages to the economy, creating a sense of urgency in creating a vaccine.

The vaccine was initially considered as a solution to the pandemic. Currently it has allowed for the relief of the restrictive measures, but not yet a return to normality as not all people are vaccinated and even those fully vaccinated can still be infected. Thus, some prevention measures have to still be kept.

As the long-term impacts of this pandemic are still to be known, the important role of preventive measures in the containment of infections is unquestionable, as they are the most effective tools to avoid the collapse of health systems and the maintenance of the economic activities.

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[23] "Low exposure risk - jobs or work tasks without frequent, close contact with the general public and other co-workers, visitors, clients or customers, or contractors, and that do not require contact with people known to be or suspected of being infected with COVID-19.

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Workers in this category have minimal occupational contact with the public and other co-workers.

Medium exposure risk: jobs or work tasks with close, frequent contact with the general public, or other co-workers, visitors, clients or customers, or contractors, but that do not require contact with people known to be or suspected of being infected with COVID-19. In areas where COVID-19 cases continue to be reported, this risk level may be applicable to workers who have work-related frequent and close contact with the general public, visitors, or customers in high-population-density work environments (e.g. food markets, bus stations, public transport, and other work activities where physical distancing of at least 1 metre may be difficult to observe), or work tasks that require close and frequent contact between co-workers. In areas without community transmission of COVID-19, this scenario may include frequent contact with persons returning from areas with community transmission.

High exposure risk: jobs or work tasks with high potential for close contact with people who are known or suspected of having COVID-19, as well as contact with objects and surfaces possibly contaminated with the virus. Examples of such exposure scenarios outside of health facilities include the transportation of persons known or suspected to have COVID-19 in enclosed vehicles without separation between the driver and the passenger, providing domestic services or home care for people with COVID-19, and contact with dead bodies of persons who were known or suspected of having COVID-19 at the time of their death". Source: Apps.who.int. (2021) [online] Available at: <https://apps.who.int/iris/bitstream/handle/10665/332050/WHO-2019-nCoV-Adjusting_PH_measures-Workplaces-2020.1-eng.pdf?sequence=1&isAllowed=y> [Accessed 26 August 2021].

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