International Horizon Scanning and Learning to Inform Wales’ COVID-19 Public Health Response and Recovery

Report 7, 04/06/2020
Overview

The International Horizon Scanning and Learning work stream was initiated following and informing the evolving coronavirus (COVID-19) public health response and recovery plans in Wales. It focuses on COVID-19 international evidence, experience, measures, transition and recovery approaches, to understand and explore solutions for addressing the on-going and emerging health, wellbeing, social and economic impacts (potential harms and benefits).

The learning and intelligence is summarised in weekly reports to inform decision-making. These may vary in focus and scope, depending on the evolving COVID-19 situation and public health / policy needs.

This work is aligned with and feeding into the Welsh Government Office for Science and into Public Health Wales Gold Command. It is part of a wider Public Health Wales’ systematic approach to intelligence gathering to inform comprehensive, coherent, inclusive and evidence-informed policy action, which supports the Wellbeing of Future Generations (Wales) Act and the Prosperity for All national strategy towards a healthier, more equal, resilient, prosperous and globally responsible Wales.

In focus this week

- Outdoor transmission of COVID-19
- Long-term impacts of lockdown
- Country insight: Greece

Contents

At a glance: summary of international learning on COVID-19 ........................................ 3
Outdoor transmission of COVID-19 .................................................................................. 5
Long-term impacts of lockdown ......................................................................................... 11
Country insight: Greece ..................................................................................................... 16
At a glance: summary of international learning on COVID-19

“COVID-19 has highlighted a fundamental truth: when one of us lacks health and care, we are all at risk. No one is safe until everyone is safe.”

Dr Hans Kluge, WHO Regional Director for Europe

Outdoor transmission of COVID-19

When deciding to ease restrictions, the following should be considered:

a) declining or stabilising of new cases and deaths
b) low rates of COVID-19 related hospital admissions
c) sufficient supply of personal protective equipment (PPE) and ventilators in hospitals
d) the likelihood of a ‘second wave’ of COVID-19

Many countries are easing lockdown and allowing social gatherings to take place, mainly outdoors, in open air. Social gathering strategies address the following:

a) number of people and households that are allowed to gather outdoors
b) distance they need to keep while gathering
c) distance they can travel away from home to gather

A risk assessment and categorisation of different settings/activities can be helpful

The transmission of COVID-19 is far less likely in outdoor environments, in comparison to indoors

Meteorological impacts on the COVID-19 transmission have been explored, with the spread of the virus peaking in temperate regions with a mean temperature of 5°C

Direct transmission of the virus via swimming and bathing water is highly unlikely

More information is summarised on pp. 5-10

Long-term impact of lockdown

Decisions around easing/removal of restrictions needs to be aligned with societal needs

COVID-19 response and recovery is likely to exacerbate inequalities and deprivation, mental health problems, and lack of societal cohesion

The vulnerable people in society, such as socially disadvantaged, living in/close to poverty, those in informal work, single parents, etc., are disproportionately hit hardest and have become more vulnerable, widening the health gap

There are significant socio-economic implications of school closures, leading to increasing educational challenges and inequalities with long-term consequences

There is a significant impact on mental health. Employers need to manage the psychological effects of the lockdown on their workforce, including low morale, hyper-stress, and general fear. Mental health services needs to be enhanced and strengthened within the pandemic context

COVID-19 can negatively impact non-communicable (chronic) disease outcomes through several pathways and increase levels of unmet need


3
Disruption in immunisation services, even for a brief period, results in increased numbers of susceptible individuals, increased risk of outbreaks and deaths from vaccine-preventable diseases.

COVID-19 pandemic outbreak is having an enormous economic impact, including on employment and working practices.

COVID-19 measures can have detrimental impact on the health, social and financial situation of individuals and families and can destabilise communities over generations.

The impact on youth employment is likely to be severe.

Rises in unemployment are associated with significant short-term increases in premature deaths from intentional violence, while reducing traffic fatalities.

A double burden (health and financial) will disproportionately affect those from low-income backgrounds.

Active labour market programmes that keep and re integrate workers in jobs could mitigate some adverse health effects of economic downturns.

Essential workers, who are often among the lowest paid, are exposed to higher health risks and have higher death rates.

WHO highlights that a flourishing sustainable economic recovery is possible with COVID-19 transmission under control, giving priority to investing in health and social protection and avoiding austerity as a responsible policy action.

WHO recognises that COVID-19 pandemic provides an opportunity to “build back better, a different economy that is more equal and inclusive” through:

- The best way to protect the economy is to protect people
- COVID-19 impacts all, but some more than others – we cannot afford to leave anyone behind
- Recovery must lead to a different economy - an economy of well-being. This means:
  - An economy that puts people in the centre
  - An economy that provides a safety net for everyone and protects front line workers
  - An economy that contributes to a green climate and environmental sustainability
  - An economy where public health is seen as a driver of jobs in the health sector, particularly for young people and as a safeguard of economy, security and peace

More information is summarised on pp. 11-15.
**Outdoor transmission of COVID-19**

**Overview**
- Coronaviruses are transmitted in most instances through large respiratory droplets and direct human-to-human contact transmission\(^2\).
- Other modes of transmission (e.g. airborne\(^3\), faecal-oral and through aerosol/fomites\(^5\)\(^6\) have also been proposed\(^7\), including through touching a surface/object with the virus on it and then touching your mouth, nose or eyes, however, this these are not the main ways.
- The COVID-19 virus is highly contagious, more infectious than influenza, but less infectious than measles\(^8\).
- Triggers for the decision to ease restrictions include: declining or stabilising of new cases and deaths; low rates of COVID-19 related hospital admissions; and sufficient supply of personal protective equipment and ventilators in hospital settings\(^9\).

**Key messages**
- Activities can be categorised according to the level of perceived risk for each setting\(^10\):

<table>
<thead>
<tr>
<th>LOWEST RISK</th>
<th>MODERATE RISK</th>
<th>HIGHER RISK</th>
<th>HIGHEST RISK</th>
</tr>
</thead>
</table>

- **HOME ALONE OR WITH HOUSEMATES**
  - Stay home as much as possible.
  - Try to allow only people you live with into your home.
  - Wash your hands.
  - If you’re sick, stay home and isolate from housemates.

- **OUTDOOR ACTIVITIES**
  - Wash your hands and don’t touch your face.
  - Stay at least 6 feet from people you don’t live with.
  - Wear a mask.
  - Avoid shared surfaces, like swings or benches.

- **OUTDOOR GATHERINGS**
  - Wash your hands and don’t touch your face.
  - Stay at least 6 feet from people you don’t live with.
  - Wear a mask.
  - Don’t share food, toys, and other items, and avoid shared surfaces.
  - Participate in events like these infrequently.

- **INDOOR GATHERINGS**
  - Wash your hands and don’t touch your face.
  - Stay at least 6 feet from people you don’t live with.
  - Wear a mask.
  - Don’t share food, toys, and other items, and avoid shared surfaces.
  - Open windows for better ventilation.
  - Try to avoid gathering indoors as much as possible.

---


\(^4\) Kakimoto et al (2020) - [https://www.cdc.gov/mmwr/volumes/69/wr/mm6911e2.htm?s_cid=mm6911e2_w](https://www.cdc.gov/mmwr/volumes/69/wr/mm6911e2.htm?s_cid=mm6911e2_w)


- The transmission of the virus is far less likely in outdoor environments in comparison to indoors\textsuperscript{11}
- Meteorological impacts on the transmission have been explored, with the spread of the virus peaking in temperate regions with a mean temperature of 5°C and a mean humidity of 0.6–1.0 kPa, whilst decreasing in warmer and colder regions\textsuperscript{12}. It is not proven yet that high temperature and UV radiation can reduce the transmission of COVID-19\textsuperscript{13}
- Direct transmission of the virus via swimming and bathing water is highly unlikely. The water in outdoor and indoor swimming pools is subject to constant treatment and compliance with generally accepted engineering practice provides extensive protection\textsuperscript{14}

**Comparative country data on social distancing measures**

Many countries are now easing lockdown and allowing social gatherings to take place, mainly outside in open air.

In general, social gathering strategies address the following:
- The number of people and households that are allowed to gather outdoors
- The distance they need to keep while gathering
- The distance they can travel away from home to gather

<table>
<thead>
<tr>
<th>Country</th>
<th>Number of people</th>
<th>Social Distance recommended</th>
<th>Type of setting</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>UK</strong></td>
<td>Up to 6 in England and Northern Ireland, and up to 8 from 2 different households in Scotland</td>
<td>At least 2 meters</td>
<td>Anywhere outdoors (ideally within 5 miles in Scotland)</td>
</tr>
<tr>
<td><strong>Wales</strong></td>
<td>Any number from 2 households</td>
<td>At least 2 meters</td>
<td>Anywhere outdoors, ideally within 5 miles</td>
</tr>
<tr>
<td><strong>Ireland</strong></td>
<td>Up to 4 people</td>
<td>At least 2 meters</td>
<td>Anywhere outdoors, ideally within 5km</td>
</tr>
<tr>
<td><strong>Germany</strong></td>
<td>Any number from 1 other household</td>
<td>At least 1.5 meters</td>
<td>Anywhere outdoors</td>
</tr>
<tr>
<td><strong>Italy</strong></td>
<td>Small number of close relatives</td>
<td>At least 1 meter</td>
<td>Anywhere inside or outside of your region</td>
</tr>
<tr>
<td><strong>France</strong></td>
<td>Up to 10 people</td>
<td>At least 1 meter</td>
<td>Anywhere outdoors</td>
</tr>
<tr>
<td><strong>Spain</strong></td>
<td>Up to 10 people</td>
<td>At least 2 meters</td>
<td>Indoors and outdoors</td>
</tr>
<tr>
<td><strong>Belgium</strong></td>
<td>Up to 4 people from outside of your household</td>
<td>At least 1.5 meters</td>
<td>Indoors and outdoors</td>
</tr>
<tr>
<td><strong>Denmark</strong></td>
<td>Up to 10 people</td>
<td>At least 1 meter</td>
<td>Anywhere outdoors</td>
</tr>
<tr>
<td><strong>Portugal</strong></td>
<td>Up to 10 people</td>
<td>At least 2 meters</td>
<td>Not specified</td>
</tr>
<tr>
<td><strong>Iceland</strong></td>
<td>Up to 50 people</td>
<td>At least 2 meters</td>
<td>Indoors and outdoors</td>
</tr>
<tr>
<td><strong>New Zealand</strong></td>
<td>Up to 100 people</td>
<td>At least 2 meters</td>
<td>Indoors and outdoors</td>
</tr>
<tr>
<td><strong>Singapore</strong></td>
<td>Up to 2 people from another household</td>
<td>At least 2 meters</td>
<td>Not known</td>
</tr>
</tbody>
</table>

\textsuperscript{11}Qian et al (2020) - https://www.medrxiv.org/content/10.1101/2020.04.04.20053058v1
\textsuperscript{12}Ficetola and Rubolini (2020) - https://www.medrxiv.org/content/10.1101/2020.03.23.20040501v3
\textsuperscript{13}Yao et al (2020) - https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7144256
Overview of country guidance, including social distancing measures and sports

<table>
<thead>
<tr>
<th>Country</th>
<th>National guidance and easing lockdown</th>
</tr>
</thead>
</table>
| Ireland¹⁵ | - Groups of up to 4 people who are not from the same household can meet outdoors. This can include a family meeting an individual friend or neighbour, a group of individuals meeting outdoors, and two couples meeting outdoors.  
- Social distancing should be maintained with all people keeping 2 metres apart.  
- Meetings should be within 5 kilometres of the households of those involved.  
- Advised to limit the number of people you meet with outdoors. The more contact you have - the greater you risk getting and spreading the virus.  
- Outdoor public amenities and tourism sites such as parks, beaches, mountain walks, heritage and cultural sites have reopened, as well as outdoor sports facilities, such as pitches, tennis courts and golf courses.  
- You can practice sport or fitness activities in groups of up to 4 but you must maintain social distancing, minimise contact, and not share equipment.  
- You should not travel beyond 5 kilometres from where you live to visit any of the above facilities.  
  <i>Risk Assessment guidelines for the re-opening leisure centres has been published</i> |
| Italy¹⁶ | Phase 2 of national guidance includes:  
- Access to public parks will be allowed respecting social distance and regulating the entrances to the children's play areas. However, Mayors may preclude entry if it is not possible to enforce safety rules.  
- Maintain an interpersonal distance of at least one meter in social contacts  
- Avoid sharing bottles and glasses, especially during sports  
- The Government's technical-scientific committee conducted a close examination of the protocols that will be adhered to in order for the Italian Football Federal to allow Serie A clubs to train for football games, and agreed to commence the football season from 20th June |
| Germany¹⁷ | - In the public space, you should stay within the circle of members of your own household or of another household.  
- Avoid crowds of people and observe the prescribed distance rules of at least 1.5 meters.  
When meeting other people outside your home - e.g. for walking, playing sports or on the playground - applies that this is allowed with people from a maximum of one other household. Here too, strictly adhere to the distance rules.  
- Direct transmission of SARS-CoV-2 via swimming and bathing water is highly unlikely. The water in outdoor and indoor swimming pools is subject to constant treatment. Compliance with the generally accepted engineering practice provides extensive protection, even from unknown organisms and chemical substances.¹⁸ |

¹⁶ http://www.governo.it/it/coronavirus  
¹⁷ https://www.rki.de/EN/Home/homepage_node.html  
The Dresden Palais Sommer, one of Germany's major summer festivals, announced that it would be going ahead with its program of over 100 events from July 17 to August 23. Organizers are expecting up to 1,000 visitors per concert; inspired by similar setups in US parks, circles will be drawn in the park to ensure that guests keep a safe distance to each other.  

| Spain | Spain outlined a four-stage plan on 4 May to start easing one of the strictest lockdowns in Europe, which saw children under 14 confined to their homes for six weeks. Spain moved to the second phase from 1 June for 70% of Spaniards, but Madrid, Barcelona and some other regions were remaining under tighter phase-one restrictions.  
- Face masks are compulsory for anyone aged six and over in public, both inside and outside, if it isn’t possible to maintain social distance  
- Schools partially reopened from 26 May. This allowed for revision classes and state exams but a full reopening is not expected until September  
- From 11 May customers were able to order a beer in a terrace bar, but bars and restaurants will not fully reopen until 10 June, adhering to strict social distancing guidelines and only at 50% capacity  
- Cinemas, theatres and exhibitions began reopening on 26 May, but only at 30% capacity. Outdoor concerts of up to 400 people are permitted if concert-goers remain at a safe distance from each other  
- Spain's renowned La Liga football championship is set to resume on 11 June  
From 1 July people travelling from abroad, including tourists, will no longer have to spend two weeks in quarantine on arrival in Spain |

| France | Most shops and open-air markets are now open, with health measures in place. You must wear a mask if the shopkeeper requires it.  
- You may carry out individual outdoor sports, as long as you respect social distancing rules. Team sports and contact sports remain prohibited; gyms, swimming pools and sport centres remain closed and professional sport will not resume this season.  
- No more than 10 people may gather in any one place at present.  
- Cafés, bars and restaurants in ‘green areas’, where the virus is not circulating widely, are able to reopen on the same date.  
- No more than 10 people will be allowed to sit together, tables must be spaced 1 metre apart, and kitchen and restaurant staff must wear masks.  
From 2nd June, people in the green zone can:  
- access beaches, bodies of water and lakes; resume nautical and pleasure activities, note that the prefect can make it mandatory to wear a mask;  
- go to swimming pools, gymnasiuums, sports halls, leisure parks (mask required except during sports);  
- if I am a high level athlete or professional sports person practiccing a collective or contact sport, I can resume my training and go to the stadiums, arenas, racetracks which remain closed to the general public.  
But still cannot:  
- participate in a gathering of more than 10 people on the public highway or in a public place;  
- access summer camps and other camps  
- practice collective sport or contact sport, or to go to stadiums, arenas, and racetracks.  
People in an orange zone can:  
- access beaches, bodies of water and lakes; resume nautical and pleasure activities - note that the prefect can make it mandatory to wear a mask;  
- from the weekend of May 30-31, access the parks, gardens, green spaces - note that the prefect can make it mandatory to wear a mask; |

resume activity for high level athletes or professional sportsman practicing a collective or contact sport
But still cannot:
- participate in a gathering of more than 10 people on the public highway or in a public place; practice collective sport or contact sport or go to stadiums, arenas, and racetracks.
- go to swimming pools, gymnasiums, sports halls, leisure parks in my territory.
- go to tourist accommodation in my territory - holiday villages, family holiday homes, collective inns, campsites

**Belgium**

- Since 10 May, people in the same household have been allowed to receive visit from a group of up to four people
- Fabric shops reopened on 4 May, as new regulations require all Belgians aged 12 or over to wear masks on public transport
- Other shops reopened on 11 May, with strict social distancing
- Schools resumed classes from 18 May, but no more than 10 children are allowed in each classroom
- Markets, museums and zoos also reopened from 18 May, with social distancing rules
- Hairdressers and beauty salons reopened on 18 May
- Cafes and restaurants will start to open from 8 June
- No public sporting or cultural events can take place before 30 June

**Portugal**

The government announced a three-phase plan, reopening different sectors of the economy every 15 days.
- Small neighbourhood shops, hairdressers, car dealerships and bookshops started opening from 4 May
- Bigger shops, restaurants, museums and coffee shops reopened from 18 May, but at reduced capacity
- Infants and some secondary school students also went back on 18 May, but all other school classes will continue remotely
- Shopping centres, cinemas and theatres to open in June, when office workers might also gradually return

**Denmark**

- Day care centres and primary schools returned on 14 April, parents and visitors are not allowed on school premises and children attend in shifts. Children aged 12-16 returned from 18 May, as well as exam students
- Hairdressers, beauty and massage salons, optometrists, podiatrists and chiropractors reopened on 20 April
- Professional sport is allowed behind closed doors with football’s Super Liga returning on 28 May
- Shopping centres reopened on 11 May with social distancing guidelines
- Social gatherings are limited to 10 people
- Cafes and restaurants reopened on 18 May, with social distancing, then cinemas, theatres, museums and art galleries reopened on 21 May also with social distancing
- Borders remain shut for most people, but reopen for tourists from Norway, Iceland and Germany on 15 June
- Phase 3 starts on 8 June and covers museums, cinemas, indoor sports and colleges
- Phase 4 in early August will include gyms, swimming pools and nightclubs

---

24 https://sum.dk/
Iceland

- Gym facilities may have a number of practitioners equal to half the maximum permitted number under the operating license. Limits of 200 people in the facility along with the two meters rule between individuals is followed, as much as possible. Special attention should be paid to hygiene and hand washing.
- Nightclubs, bars and game rooms. Lottery machines are open if disinfected and limits of 200 people along with the two meters rule between individuals is followed, as much as possible. Sanitation and hand washing are encouraged.
- Public swimming pools are open with restrictions. Children, born in 2015 and earlier, are not included in count of the facilities. Maintain a distance of 2 meters wherever possible.

New Zealand

- From 29 May the limit on social gatherings has changed from 10 to 100 people.
- These include events at home and outside of home such as: Weddings, family events, religious services, funerals and tangihanga, private functions, like a birthday at a hired premises, community club activities and community sport.
- A person in charge of a social gathering, must ensure records are kept for contact tracing purposes, except where every person in a gathering knows each other. This includes in your home, community hall, or other space.
- Community sports are limited to groups of 100 in a defined space. A sports field can have multiple defined spaces by keeping:
  - Groups separate either through consistent 2 metre physical distancing (when outdoors) or barriers.
  - Groups should be prevented from intermingling or sharing common facilities at the same time.
  - Organisers and the person in control of the premises are responsible for collecting contact tracing information.
  - For example, a game of rugby can occur so long as there are no more than 100 people on the field. If that field has a stand on either side, up to 100 people can gather in each stand if they are kept separate from those from the other stand and from players and umpires on the field.

Singapore

- From 1st June:
  - Non-essential activities and social gatherings continue to be prohibited. Each household will be allowed to visit their parents or grandparents staying elsewhere, to allow families to spend time and provide support to one another. Every household should limit such visits to only one per day, and to not more than two persons from the visiting household.
  - Sports and recreation facilities remain closed.

---

25 https://www.government.is/government/covid-19/ https://www.covid.is/data
26 https://www.health.govt.nz/
27 https://www.moh.gov.sg/
Long-term impacts of lockdown

Overview
- The risk of returning to lockdown remains very real if countries do not manage the transition carefully and in a phased approach
- Evidence\(^{28}\) shows, that aligning decisions around easing or removal of restrictions with societal needs, can help to ensure that:
  a) all segments of society are taken into consideration;
  b) the process of incremental easing of restrictions is carried out in a manner that protects those most vulnerable to COVID-19
- \textbf{WHO recommends six criteria} for countries to consider\(^{29}\):
  1. First, that surveillance is strong, cases are declining and transmission is controlled
  2. Second, that health system capacities are in place to detect, isolate, test and treat every case and trace every contact
  3. Third, that outbreak risks are minimized in special settings such as health facilities and nursing homes
  4. Fourth, that preventive measures are in place in workplaces, schools and other places where it is essential for people to go
  5. Fifth, that importation risks can be managed
  6. Sixth, that communities are fully educated, engaged and empowered to adjust to the ‘new norm’
- There is a responsibility to maintain \textbf{commitment to the United Nations 2030 Agenda for Sustainable Development}\(^{30}\), especially \textbf{Goal 3}: Ensure healthy lives, promote wellbeing for all at all ages; \textbf{and Goal 4}: Ensure inclusive, equitable quality education and promote lifelong learning opportunities for all\(^{31}\)

Socio-economic implications of school closures (UK)
Evidence related to home learning activities and available resources in different families, is based on a \textbf{survey}, specially designed by the Institute for Fiscal Studies and the Institute of Education (IoE). The survey was completed online by over 4,000 parents of children aged 4–15 between 29\textsuperscript{th} April and 12\textsuperscript{th} May 2020 across the UK. \textbf{Key findings include}\(^{32}\):
- Higher-income parents are much more likely than the less well-off to report that their child’s school provides online classes and access to online videoconferencing with teachers.
- 64\% of secondary pupils in state schools from the richest households are being offered active help from schools, such as online teaching, compared with 47\% from the poorest fifth of families.
- 82\% of secondary school pupils attending private school are offered active help, with 79\% being provided with online classes
- Fewer than half of parents – 39\% of primary school parents and 45\% of those whose child is in secondary school – were willing to send their child back to school at the time of the

\(^{31}\) https://sustainabledevelopment.un.org/sdg3
\(^{32}\) https://www.ifs.org.uk/publications/14848
survey Figure 1). This is a warning to policymakers: do not assume that the return to school can be implemented as quickly, or as uniformly, as school closures were.

- There are big gaps in the total amount of time that children spend on educational activities. Secondary school children from better-off families (those in the top fifth of the distribution of family earnings) spend, on average, 5.5 hours a day on educational activities. This is over 1 hour more a day than the 4.4 hours a day spent by children in the lowest-income fifth of families. This difference adds up to a difference of 5½ hours of learning per school week. The gaps at primary school are even larger, equivalent to 7½ hours per week (around 1½ hours per day). For both primary school and secondary school children, the biggest gaps are between children in the richest 20% of families and the rest of their peers (figure 2).

- Differences can compound over time; over the 34 school days between the start of school closures on 23 March and the earliest date that (some) children might return to school (currently 1 June), children in the richest fifth of families might have spent an extra 44 hours on home learning – equivalent to over seven full school days.

- If children do not go back to school until September, losing another 37 school days in the second half of the summer term, better-off children will have spent 92 hours more on home learning than those from worse-off households.

- These are meaningful differences – previous research finds that as little as an extra hour of instructional time each week is associated with very substantial increases in test scores over the course of a school year.

*Figure 1. Share of parents who would send their child back to school if given the choice*

*Figure 2. Children’s daily learning time during lockdown: by household income*
Mental health impacts

- COVID-19 pandemic outbreak has direct and indirect impact on mental health conditions, including a range of mental, neurological and substance misuse (MNS) disorders and their associated psychosocial, cognitive and intellectual disabilities.
- Major stressors are potent risk factors for the development, exacerbation and relapse of a range of MNS disorders and unhealthy patterns of behaviour, including the use of alcohol and psychoactive drugs and excessive gaming or gambling.\(^{33}\)
- Early lockdown studies found that up to 37% of adults showed signs of psychological distress; up to 45% of adults felt adverse effects on mental health; and up to 70% felt this period was the most stressful of their careers.
- Most of the adverse effects come from the imposition of a restriction of liberty; voluntary quarantine is associated with less distress and fewer long-term complications.
- A Lancet review\(^{34}\) suggests that the ‘psychological impact of quarantine’ is wide-ranging, substantial and can be long lasting with negative psychological effects, including post-traumatic stress symptoms, confusion and anger. Stressors include longer quarantine duration, infection fears, frustration, boredom, inadequate supplies, inadequate information, financial loss, and stigma.
- WHO recommends\(^{35}\) that mental health services are enhanced and strengthened.

Impact on other disease management and treatment

- COVID-19 can negatively impact non-communicable disease (NCD) outcomes through several pathways, including: higher susceptibility to COVID-19 infection; higher case fatality rates among people with NCDs; delayed diagnosis; delayed, incomplete or interrupted therapy (treatment, rehabilitation, palliation); delayed care-seeking for emergencies; worsened (e.g. cancer) prognosis; and increased behavioural risk factors, such as physical inactivity and increased use of harmful substances.
- Delays in when people choose to seek urgent medical treatment and rising levels of unmet need for care is building up in the social and health care systems. For example, in April attendance at A&E was 57% lower than in April 2019 (in the UK), suggesting the public may be reluctant to use NHS and social care services for fear of infection.\(^{36}\)

Immunisations\(^{37}\)

- Disruptions in immunisation services, even for a brief period, result in increased numbers of susceptible individuals and an increased risk of outbreaks of vaccine-preventable diseases (VPDs), leading to excess morbidity and mortality.
- Lessons from the Ebola and Zika outbreaks show that access to sexual and reproductive health (SRH) services can be severely disrupted, disempowering individuals, particularly women and girls, and exposing them to preventable health risks.
- A recent modelling study suggests that if the COVID-19 pandemic led to a reduction of 25% in expected TB detection for 3 months – a realistic possibility given the levels of disruption in TB services being observed in multiple countries – a 13% increase in TB

---

\(^{33}\) https://www.who.int/publications-detail/10665-332240
\(^{34}\) https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(20)30460-8/fulltext
\(^{37}\) https://www.who.int/publications-detail/10665-332240
deaths would be expected, bringing the levels of TB mortality back to those of 5 years ago. Between 2020 and 2025, an additional 1.4 million TB deaths could be registered as a consequence of the COVID-19 pandemic.

Overview of managing routine vaccinations in the context of the outbreak is outlined below.

<table>
<thead>
<tr>
<th>Programme activities</th>
<th>Modifications for safe delivery of services</th>
<th>Transition towards restoration of activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Routine immunizations:</td>
<td>Maintain routine immunization but modify sessions to eliminate risk of infection transmission as follows.</td>
<td>Resume comprehensive services as soon as supply chains are ensured, sufficient health workers are trained in IPC, and revised operating procedures are in place to accommodate physical distancing.</td>
</tr>
<tr>
<td>fixed services</td>
<td>• Train staff on IPC and delivery protocols.</td>
<td>Catch-up activities should not wait for the lifting of restrictions and should proceed even when other immunization activities are suspended.</td>
</tr>
<tr>
<td>outreach services</td>
<td>• Provide facilities with adequate IPC equipment, including for waste management.</td>
<td>Some countries may need to resume immunization services based on the COVID-19 situation at the subnational (district) level.</td>
</tr>
<tr>
<td>mobile clinics</td>
<td>• Plan several small sessions per day at different times to limit contact.</td>
<td>Consider periodic intensification of routine immunization services to ensure rapid catch up for children and adolescents.</td>
</tr>
<tr>
<td></td>
<td>• Limit the duration of stay in the health facility.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Modify session locations to ensure separation of immunization services from treatment areas, and proactively inform communities about this strategy while reinforcing the value of vaccination.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Establish a screening process before allowing entry to the vaccination area.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• For outreach and mobile services, proactively engage with communities to identify open sites that allow physical distancing.</td>
<td></td>
</tr>
</tbody>
</table>

Specific adaptations for birth doses (78), school-based vaccination, and vaccination of adults, older persons, high-risk individuals and health care workers can be found in the WHO and UNICEF’s frequently asked questions (57).

Economic recovery, unemployment and long-term implications

- COVID-19 pandemic outbreak has had enormous economic impact, including on employment and working practices, with the number of unemployed estimated to be between 5.3 and 24.7 million globally.
- COVID-19 measures may lead to downsizing or closure of large employers, resulting in the loss of a high number of jobs in a localised area, referred to as a Mass Unemployment Event (MUE). MUEs, or the threat of such events, can have detrimental impact on the health, social and financial situation of individuals and families and can destabilise communities over generations.
- Existing literature on the health impacts of business-cycle fluctuations and recessions shows that the resulting economic downturn of the outbreak will have significant consequences on people’s health outcomes in the short and longer term.
- The impact on youth employment is likely to be severe given that young people (15-24 years old) are already three times more likely to be unemployed than adults; and are more likely to be in casual employment with fewer contractual protections.

---

38 https://www.who.int/publications-detail/10665-332240
41 https://www.ifs.org.uk/publications/14799#:~:text=In%20the%20absence%20of%20measures,labour%20market%20(Fujita%20et%20al.
- A double burden (health and financial) will disproportionately affect those from low-income backgrounds due to the combined effect of fewer employment protections and requirement to work in close physical proximity to others.
- Those experiencing the most economic difficulties may not adhere to physical distancing effectively, as they seek to continue working, worsening the risks of virus transmission.
- Low-income workers are more mobile and having to visit densely populated areas, unlike higher-income workers who are more able to work remotely.  
- Rises in unemployment are associated with significant short-term increases in premature deaths from intentional violence, while reducing traffic fatalities.
- Active labour market programmes that keep and reintegrate workers in jobs could mitigate some adverse health effects of economic downturns.
- Essential workers, who are often among the lowest paid, are exposed to higher health risks and have higher death rates.
- Poorer people and those in more socially disadvantaged groups have been disproportionately hit harder by the pandemic.
- The vulnerable people in society - in informal work; close to poverty; mothers living alone with children – have become even more vulnerable as a result of COVID-19.
- It is likely that the groups that suffer the biggest economic losses from this crisis are also those who were more vulnerable to begin with. For example, people with lower incomes are less likely to be able to work from home or have accumulated savings.
- WHO highlights that a flourishing sustainable economic recovery is possible with COVID-19 transmission under control, giving priority to investing in health and social protection and avoiding austerity as a responsible policy action. There is an opportunity to “build back better, a different economy that is more equal and inclusive”.

Impact of COVID-19 on employment and social security levels: a country comparison:

<table>
<thead>
<tr>
<th>Country</th>
<th>Has the number of people seeking Government support increased?</th>
<th>Has unemployment risen?</th>
</tr>
</thead>
<tbody>
<tr>
<td>UK/Wales</td>
<td>Yes, rose by 856,500 in April</td>
<td>Yes</td>
</tr>
<tr>
<td>Ireland</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Germany</td>
<td>Yes</td>
<td>Yes, rose by 373,000 in April</td>
</tr>
<tr>
<td>Italy</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>France</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Spain</td>
<td>Yes, rose by 3 million in April</td>
<td>Yes</td>
</tr>
<tr>
<td>Belgium</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Denmark</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Iceland</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Portugal</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

47. https://www.bbc.co.uk/news/business-52719830
49. https://www.weforum.org/agenda/2020/05/coronavirus-unemployment-jobs-work-impact-g7-pandemic/
Country insight: Greece

Overview
On the 2nd of June, Greece had 2,917 confirmed cases of COVID-19 with 175 deaths. On the 1st of June, Greece counted only 2 new cases and no deaths. These figures are among the lowest in Europe. In comparison, Belgium (with a population size similar to Greece) reported on the same date 58,381 confirmed cases with 9,467 deaths.

The secret of Greece’s success is most likely its early response in cancelling major events and public spaces after the first case was diagnosed in the country. On February 27, just one day after the country’s first COVID-19 case was diagnosed in the second-largest city, Thessaloniki, the Government cancelled the annual Carnival. On March 11 it closed down schools, and within days it limited non-essential travel and bars, cafes, restaurants, malls, cinemas and museums were also shut.

Reopening Greece
On the 4th of May, Greece started to reopen society after 6 weeks in lockdown. While maintaining the mandatory use of masks and maintaining social distance measures, the Greek authorities gradually re-open society, as shown below:

- Churches opened for individual prayer on 4 May and religious services allowed from 17 May
- Schools reopened on 11 May for final-year students only, with special measures including students attending classes on different days
- Shops are now all able to reopen and indoor shopping centres can do so on 1 June
- Cafes and restaurants reopened on 25 May, but with social distancing
- Beaches reopened on 4 May and Greece has declared that the tourist season will start on 15 June, with the opening of seasonal hotels
- Travel to the islands resumed on 25 May for mainland Greeks, but not for foreign tourists; from 1 July Greece is set to lift the two-week quarantine rule for foreigners
- Swimming Pool guidance has been published

<table>
<thead>
<tr>
<th>Area</th>
<th>Easing of measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical activity</td>
<td>Exercise in open spaces was allowed, including on the beach</td>
</tr>
<tr>
<td>Travel</td>
<td>People could travel within their own prefecture with the exception of some islands</td>
</tr>
<tr>
<td>Worship</td>
<td>Individual worship is allowed with gatherings not exceeding 10 people</td>
</tr>
<tr>
<td>Shops</td>
<td>Retail businesses with low congestion levels allowed to open, including shops that sell electronics (computers, etc.); telecommunications equipment (cell phones, etc.); books, newspapers and stationery; sports equipment; flowers, plants, seeds, fertilizers; and house pets and pet food</td>
</tr>
<tr>
<td>Social gatherings</td>
<td>Limited public gatherings of up to 10 people.</td>
</tr>
</tbody>
</table>

---

53 https://covid19.who.int
55 https://www.garda.com/crisis24/country-reports/greece
Public gatherings

General rule\(^{57}\):

✓ **A mask or facial cover** is mandatory in public transportation, taxis, elevators, hospitals, clinics and diagnostic centres. Masks are recommended in supermarkets, hair salons and other enclosed spaces. Violators may be fined 150 Euros.

✓ **Social distancing** measures are in effect until further notice. No information has been found on current restrictions on group sizes for public gatherings.

Addressing COVID-19 in specific settings

✓ **Retail stores** are since 1 June allowed to let up to four customers in shops of up to 20 square metres (215 square feet), four people plus one for each additional 10 square metres in premises up to 100 square metres and 12 people plus one per additional 15 square metres for premises exceeding 100 square metres\(^{58}\).

✓ **Beach** visitors must pre-book their loungers (disinfected between each user) and possibly undergo a temperature test, at the discretion of the beach manager, who can bar anyone with a temperature of more than 37.5°C from entering. Sunbeds are placed at a 10-meter distance from their fellow bathers and social distancing is controlled by drones\(^{59}\).

\(^{57}\) [https://gr.usembassy.gov/covid-19-information/](https://gr.usembassy.gov/covid-19-information/)


\(^{59}\) [https://skift.com/2020/05/18/greece-uses-drones-to-monitor-social-distancing-on-beaches/](https://skift.com/2020/05/18/greece-uses-drones-to-monitor-social-distancing-on-beaches/)
Restaurant tables initially have been placed only in the open air and semi-outdoor areas, with a safe distance between them. Customers allowed in each restaurant will be one per two square meters of available space. Maximum allowed number of table guests will be six, except for families with minor children. It is mandatory for the staff to wear a mask or a face shield, whereas it is highly recommended to customers to do the same. It is claimed, that restaurants will only be able to operate at 35% capacity when they reopen.

Wider Impacts on Travel and Tourism
On 18 March Greece closed its border for all non-EU citizens. Greeks and EU nationals could enter the country, but were strongly advised to remain in voluntary quarantine for 14 days. The latter became quickly obligatory and until 15 June anyone arriving in Greece from abroad will be tested for coronavirus. Arrivals will be required to stay in Government-provided accommodation for the first 24 hours, until test results are available. If the test is negative, accommodation details must be provided of a residence where the person will need to self-isolate for the next 7 days. If the result is positive, the person may be required to remain in Government-provided accommodation for further 14 days.

In both cases, self-isolation is mandatory, and the authorities will enforce it by prosecution and fines. The latter will change from 15 June for 29 countries60, but not for most flights coming from airports in the UK and in other countries that have been identified as high risk of COVID 19 transmission by the EASA – European Union Aviation Safety Agency61. After the 1st of July all travellers will be subject to random tests upon arrival. Additional restrictions regarding certain countries will be announced at a later date.

Economic Impact
With 20 - 25% of the Greek GDP depending on tourism, the country’s economy is expected to be hit hard this summer economically62. Even though hotels opened their doors again on the 01st of June and the tourist season officially starting on 15 June, they are wary about how quickly customers will return.63 The Greek unemployment rate is expected to record the biggest increase in a decade, surpassing the period 2011-2013, despite the fact that government measures managed to contain job losses, the Federation of Hellenic Enterprises (SEV) said in a report released on May 04. The report on employment, based on official numbers, said that the balance of job flows in March dropped to its maximum negative level since 2001 (-41,903 job positions), a figure worse from the 2011-2013 period when the collapse of the Greek economy was at its peak.64

60 Albania, Australia, Austria, Bulgaria, Czech Republic, China, Croatia, Cyprus, Denmark, Estonia, Germany, Hungary, Israel, Japan, Latvia, Lebanon, Lithuania, Malta, Montenegro, New Zealand, North Macedonia, Norway, Romania, Serbia, Slovakia, Slovenia, South Korea, Switzerland, and Finland.
64 Picture Source: European Commission

These projections are reiterated by the The Spring 2020 Economic Forecast published by the European Commission on May 06\(^{65}\). The forecast gives a discouraging picture for Greece in 2020, as it says the country’s GDP is expected to contract by 9.7 percent this year – the highest out of all EU countries – and its unemployment rate may reach 19.9 percent from 17.3 percent in 2019. Moreover, due to the global nature of the crisis, exports in Greece are expected to suffer strong declines in 2020.

The country’s main export markets are expected to be amongst the worst affected countries, leading to a drop in demand for Greek goods and services, also amplified by the large share of tourism and shipping in exports.

There might be a rebound in 2021.

The International Horizon Scanning and Learning reports are developed by the International Health Team (the International Health Coordination Centre, IHCC) at the WHO Collaborating Centre on Investment for Health and Well-being (WHO CC), Public Health Wales.

Executive lead and Director of the WHO CC: Professor Mark A Bellis

International health lead: Dr Mariana Dyakova (mariana.dyakova@wales.nhs.uk)

Senior programme manager: Lauren Couzens (lauren.couzens@wales.nhs.uk)