

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

Report 18, 05/11/2020



**GIG**  
CYMRU  
**NHS**  
WALES

Iechyd Cyhoeddus  
Cymru  
Public Health  
Wales

World Health Organization  
Collaborating Centre on  
Investment for Health and Well-being



## 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, and 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.

**Disclaimer:** The reports provide high-level summary of emerging evidence from country experience and epidemiology; research papers (peer-reviewed/not); and key organisations' guidance / reports, including sources of information to allow further exploration. The reports don't provide detailed or in-depth data/evidence analysis. Due to the novelty of COVID-19 virus/disease, and dynamic change in situation, studies and evidence can be conflicting, inconclusive or depending on country/other context.

## In focus this week

-  **Approaches to COVID-19 during autumn and winter across Europe**
-  **Disruption to essential health services: impact and mitigation**

## Contents

<b>At a glance: summary of international learning on COVID-19 .....</b>	<b>3</b>
<b>Approaches to COVID-19 during autumn and winter across Europe .....</b>	<b>4</b>
<b>Disruption to essential health services: impact and mitigation.....</b>	<b>10</b>

## At a glance: summary of international learning on COVID-19

*“...while some countries are putting in place measures to ease the pressure on the health system, there is also now an opportunity to build stronger systems”*

*Dr Tedros Adhanom Ghebreyesus, WHO Director-General*

### Approaches to COVID-19 during autumn and winter across Europe

- ✚ The current epidemiological situation in Europe requires decisive public health measures:
  1. **To reduce transmission** of the infection through:
    - ✓ **upscaling and targeting of non-pharmaceutical interventions**
    - ✓ **testing, isolation and contact tracing**
  2. **To protect individuals at higher risk and ensure access to healthcare for all** by:
    - ✓ **protecting individuals at higher risk of severe disease**
    - ✓ **protecting healthcare workers**
    - ✓ **ensuring access to health services**
- ✚ Many European countries have introduced a **stratified risk approach** (e.g. a traffic light system) **to facilitate and communicate decision-making** about introducing more strict measures and limiting cross-border travel
- ✚ COVID-19 risk assessment is done **on local/regional and on national levels**
- ✚ Countries base their **COVID-19 risk assessment** on surveillance indicators; as well as on hospital/ICUs bed occupancy data; effectiveness of test-track-trace systems; vulnerability of local populations; and compliance with existing measures
- ✚ The measures are **intended to safeguard the health of citizens**, however, they also have **serious consequences for the economies and citizens' rights** across Europe

More information is summarised **on pp. 4 – 9**

### Disruption to essential health services: impact and mitigation

- ✚ **Delivery of health care services for all conditions has been disrupted**, compounded by **fear, stigma, misinformation and limitations on movement**
- ✚ Disruption of health services has impacted those living with **non-communicable diseases (NCDs) the most**, particularly, with **cancer, heart disease and mental health**
- ✚ Countries across the globe reported significant disruption of NCDs services with **dental care, rehabilitation and palliative care** most likely to be completely disrupted
- ✚ COVID-19 and NCDs have a **reciprocal effect**, with NCDs increasing vulnerability to transmission and severe outcomes; and COVID-19 exacerbating chronic conditions
- ✚ The **more severe the COVID-19 transmission phase**, the more services are disrupted
- ✚ COVID-19 has **disrupted or stopped critical mental health services** in 93% of 130 countries worldwide, including **life-saving emergency and essential services**
- ✚ Countries reported high percentage **disruptions to mental health services for vulnerable people**, including **children and adolescents, older adults and women**
- ✚ **Low-income countries** are more likely to report disrupted services
- ✚ Mitigation measures to address health services disruption should be implemented according to **ethical principles**, such as **equity, respect for dignity and human rights**
- ✚ The **use of tele-medicine should be encouraged** to improve access to health services

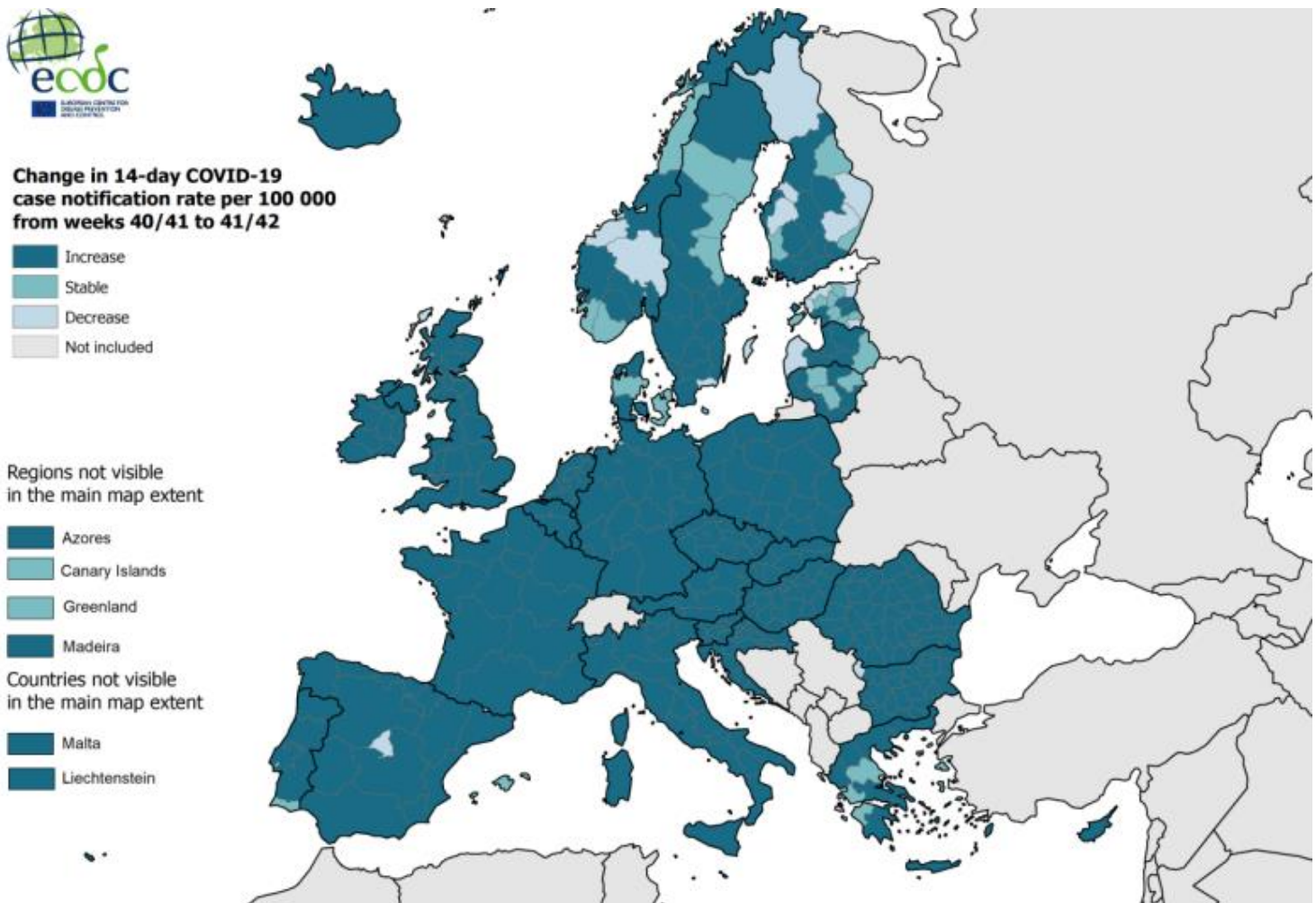
More information is summarised **on pp. 10 – 13**

## Approaches to COVID-19 during autumn and winter across Europe

### Overview<sup>12</sup>

- The current epidemiological situation in the European Union / European Economic Area (EU/EEA) and the UK requires strong and decisive public health measures in order to:
  3. **Reduce transmission** of the infection through:
    - ✓ **upscaling and targeting of non-pharmaceutical interventions**
    - ✓ **testing, isolation and contact tracing**
  4. **Protect individuals at higher risk and ensure access to healthcare for all** by:
    - ✓ protecting **individuals at higher risk of severe disease**
    - ✓ protecting **healthcare workers**
    - ✓ ensuring **access to health services**
- Countries categorised as ‘**of serious concern**’ (with increasing infection rates) include: Austria, Belgium, Bulgaria, Croatia, Czechia, Denmark, France, Germany, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Poland, Portugal, Romania, Slovenia, Slovakia, Spain, Sweden, the United Kingdom (*Figure 1*)
- Six countries are categorised as ‘**stable**’, including: Cyprus, Estonia, Finland, Greece, Liechtenstein and Norway (*Figure 1*)

**Figure 1. EU/EEA and the UK: change in 14-day COVID-19 case notification rate at sub-national level between weeks 40/41 and weeks 41/42, 2020<sup>1</sup>**



<sup>1</sup> <https://www.ecdc.europa.eu/sites/default/files/documents/RRA-COVID-19-EU-EEA-UK-thirteenth-update-23-Oct-2020.pdf>

<sup>2</sup> [https://www.who.int/docs/default-source/coronaviruse/covid-strategy-update-14april2020.pdf?sfvrsn=29da3ba0\\_19&download=true](https://www.who.int/docs/default-source/coronaviruse/covid-strategy-update-14april2020.pdf?sfvrsn=29da3ba0_19&download=true)

## Traffic light approach to European travel measures<sup>34</sup> (Figure 2)

- A coordinated traffic light approach to the restriction of free movement in response to the COVID-19 pandemic was adopted by the EU Member States
- A combined indicator map is published weekly
- EU/EEA regions are categorised as **green, orange or red**, based on the **risk level** associated with COVID-19, according to **agreed criteria**, such as 14-day cumulative incidence rate, testing rates and testing positivity rates
- **Measures for travellers coming from red/orange areas** can be applied by countries, such as quarantine/self-isolation, testing prior to/after arrival
- The measures are intended to **safeguard the health of citizens**, however, they also have **serious consequences for the economies and citizens' rights** across Europe

Figure 2. A common traffic light approach on COVID-19 travel measures in the EU/EEA<sup>5</sup>

## A common approach on COVID-19 travel measures

EU countries agreed on a coordinated approach to travel measures and developed common criteria for mapping risk.

### Common criteria

#### Testing rate

Number of tests per 100 000 population during the last week

#### Test positivity rate

% of positive tests during the last week

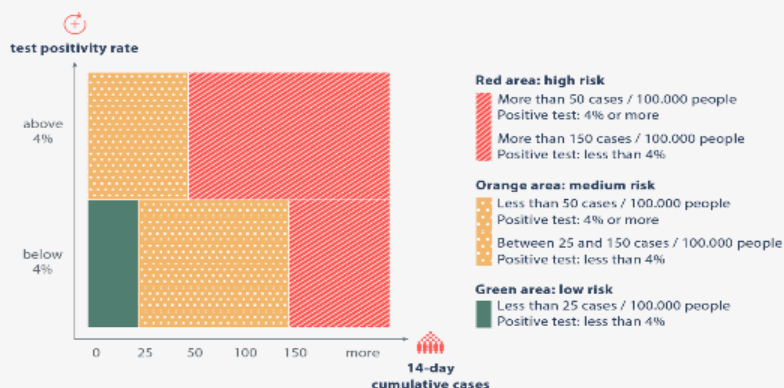
#### 14-day cumulative cases

Number of new cases per 100 000 population in the last 14-day

### Comparable data



### Common colour codes: mapping of risk areas



### Common framework for COVID-19 travel measures

- Green areas**
  - No restriction of free movement of persons should be applied
- Orange and red areas**
  - Measures should be proportionate and respect differences in the epidemiological situation of orange and red areas
  - In principle, entry should not be refused to travellers from orange/red areas but requirements could be applied
  - Possible requirements for travellers coming from orange/red areas: quarantine/self-isolation, COVID-19 testing prior to/after arrival
  - Measures should take into account the epidemiological situation in their own territory
  - Inform other affected EU countries 48 hours before applying measures
- Travellers could be asked to submit passenger locator forms
- Exceptions:** no quarantine requirement for travellers with essential function or need while performing that function

### Why is it essential to coordinate COVID-19 measures?

- Ensure freedom of movement
- Increase transparency for citizens and businesses
- Avoid fragmentation and disruption of services



### Communication on new measures

- inform the public at least 24 hours in advance

All information and updates are available on the EU website [reopen.europa.eu](https://reopen.europa.eu)

<sup>3</sup> <https://ec.europa.eu/info/live-work-travel-eu/health/coronavirus-response/travel-during-coronavirus-pandemic/common-approach-travel-measures-en>  
<sup>4</sup> <https://www.ecdc.europa.eu/en/covid-19/situation-updates/weekly-maps-coordinated-restriction-free-movement>  
<sup>5</sup> <https://www.consilium.europa.eu/en/infographics/a-common-approach-on-covid-19-measures/>

## Examples of enhanced national measures

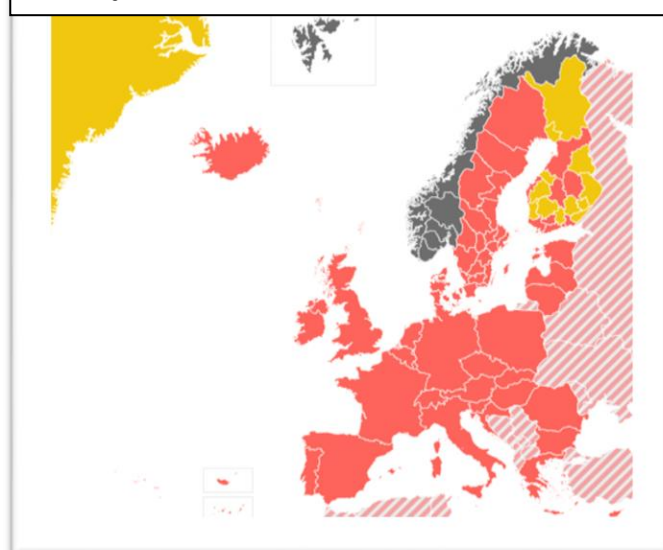
In response to rising infection rates, in line with the recent European Centre for Disease Prevention and Control (ECDC) public health intervention advice, several countries have:

- adopted **traffic light or tiered alert systems** (charts for the progression of measures), based on COVID-19 indicators, such as incidence rate (per 100,000); and occupancy rate of hospital beds and intensive care units (ICUs)
- imposed **night-time curfews on travel and early closing times** for restaurants and bars

### Norway<sup>67</sup> (Figure 3)

- National measures imposed from 28<sup>th</sup> October 2020
- Countries are categorised using a traffic light system
- Those entering Norway from abroad, with the exception of areas with a low spread of infection, must be in home quarantine for 10 days (red – mandatory quarantine; yellow – no quarantine)
- Unnecessary travel abroad is not recommended
- All trips abroad are associated with infection risk, so no country has green categorisation (though, it may not require quarantine)

**Figure 3. Map, indicating countries/areas, which require quarantine (in red) when entering Norway from 31 October 2020<sup>1</sup>**



### Spain<sup>89</sup>

- Initial **state of alarm** for 15 days, which can be extended to six months, announced on 22<sup>nd</sup> October 2020
- Measures include a **general curfew between the hours of 11pm and 6am**, with **flexibility for each region** between the hours of 10pm-12am and 5am-7am
- **Risk levels** for COVID-19 indicators are defined and outlined in *Table 1*
- Measures, according to estimated risk level, can be applied as a whole (nationally) or partially (in different regions) (*Table 2*)

**Table 1. Risk levels for COVID-19 indicators**

Indicator	New Normal	Low	Medium	High	Extreme
14-day cumulative incidence	< 25	25 – 50	50 – 150	150 – 250	> 250
7-day cumulative incidence	< 10	10 – 25	25 – 75	75 – 125	> 125
14-day cumulative incidence among over-65 population	< 20	20 – 50	50 – 100	100 – 150	> 150
7-day cumulative incidence among over-65 population	< 10	10 – 25	25 – 50	50 – 75	> 75
Positivity rate	< 4%	4% – 7%	7% – 10%	10% – 15%	> 15%
Percentage of traceable cases	> 80%	80% – 56%	65% – 50%	50% – 30%	< 30%
Occupation rate of hospital beds	< 2%	2% - 5%	5% - 10%	10% - 15%	>15%
Occupation rate of ICUs	< 5%	5% - 10%	10% - 15%	15% - 25%	>25%

<sup>6</sup> <https://www.regjeringen.no/no/aktuelt/nve-nasjonale-innstramminger/id2776995/>

<sup>7</sup> <https://www.regjeringen.no/no/aktuelt/alle-gronne-land-blir-qule--unnga-alle-unodvendige-reiser-til-utlandet/id2724440/>

<sup>8</sup> <https://www.lamoncloa.gob.es/presidente/actividades/Paginas/2020/251020estado-alarma.aspx>

<sup>9</sup> [https://www.lamoncloa.gob.es/serviciosdeprensa/notasprensa/sanidad14/Documents/2020/221020\\_ActuacionesrespuestaCOVID.pdf](https://www.lamoncloa.gob.es/serviciosdeprensa/notasprensa/sanidad14/Documents/2020/221020_ActuacionesrespuestaCOVID.pdf)

**Table 2. Example of measures in response to COVID-19 risk level**

Measures	Alert level 1	Alert level 2	Alert level 3
<b>Social and family contacts</b>	<ul style="list-style-type: none"> <li>Stable social groups or bubbles</li> <li>Gatherings of 15 people maximum, maintaining hygiene and social distancing</li> </ul>	<ul style="list-style-type: none"> <li>Stable social groups or bubbles</li> <li>Gatherings of 10 people maximum, maintaining hygiene and social distancing</li> <li>Recommendation to stay at home</li> </ul>	<ul style="list-style-type: none"> <li>Limit social contacts outside of established group / bubble</li> <li>Gatherings of 6 people maximum, with an exception for social bubbles</li> <li>Recommendation to stay at home</li> <li>A curfew of 23:00 for non-essential services</li> </ul>
<b>Hospitality</b>	<ul style="list-style-type: none"> <li>75% capacity indoors</li> <li>Maximum of 10 people per table</li> <li>2 metre distance between the chairs of different tables</li> </ul>	<ul style="list-style-type: none"> <li>50% capacity indoors</li> <li>Maximum of 6 people per table</li> <li>2 metre distance between the chairs of different tables</li> <li>Ban on consuming alcohol at the bar</li> </ul>	<ul style="list-style-type: none"> <li>Consider closure or reducing capacity to a minimum</li> <li>Take-away, home delivery or vehicle collection is recommended</li> </ul>
<b>Student residences</b>	<ul style="list-style-type: none"> <li>Communal areas at 75% capacity</li> </ul>	<ul style="list-style-type: none"> <li>Communal areas at 50% capacity</li> <li>Scheduled use of dining areas</li> </ul>	<ul style="list-style-type: none"> <li>Communal areas at 30% capacity</li> <li>Ban on visitors</li> </ul>

### Greece<sup>10</sup>

- Targeted regional/local measures implemented to mitigate rising infection rates (*Table 3*)
- Risk level is determined by the trend in epidemiological indicators, such as incidence rate per 100,000 people; availability of hospital beds and beds in ICUs; etc.

**Table 3. Example restrictions in Greece**

Restrictions	Level 1 Preparedness	Level 2 Surveillance	Level 3 Increased surveillance	Level 4 Increased risk
<b>Movement</b>	<ul style="list-style-type: none"> <li>No restrictions</li> </ul>	<ul style="list-style-type: none"> <li>No restrictions</li> </ul>	<ul style="list-style-type: none"> <li>Traffic ban between 00:30am to 05:00am</li> <li>Some exemptions</li> </ul>	<ul style="list-style-type: none"> <li>Traffic ban between 00:30 to 05:00am</li> <li>Some exemptions</li> </ul>
<b>Number of people allowed to meet</b>	<ul style="list-style-type: none"> <li>Up to 100 people with masks</li> <li>Keeping distance of 1.5 metres</li> </ul>	<ul style="list-style-type: none"> <li>Up to 50 people with masks</li> <li>Keeping distance of 1.5 metres</li> </ul>	<ul style="list-style-type: none"> <li>Up to 9 people with masks</li> <li>Keeping distance of 1.5 metres</li> <li>Limiting visits by people from different households</li> </ul>	<ul style="list-style-type: none"> <li>Suspension</li> </ul>
<b>Face coverings</b>	<ul style="list-style-type: none"> <li>Indoor workplaces</li> <li>Outdoor areas with scheduling</li> </ul>	<ul style="list-style-type: none"> <li>No change</li> </ul>	<ul style="list-style-type: none"> <li>Mandatory face coverings in all indoor and outdoor areas</li> </ul>	<ul style="list-style-type: none"> <li>No change</li> </ul>
<b>Essential shops (e.g. supermarkets, food stores)</b>	<ul style="list-style-type: none"> <li>1 person per 10 sqm</li> </ul>	<ul style="list-style-type: none"> <li>1 person per 10 sq.m</li> </ul>	<ul style="list-style-type: none"> <li>1 person per 10 sqm</li> </ul>	<ul style="list-style-type: none"> <li>1 person per 10 sqm</li> <li>Disinfection of trolleys and baskets</li> </ul>
<b>Places of worship</b>	<ul style="list-style-type: none"> <li>1 person per 5 sqm</li> <li>Up to 200 people seated</li> </ul>	<ul style="list-style-type: none"> <li>1 person per 10 sqm</li> <li>Up to 100 people seated</li> </ul>	<ul style="list-style-type: none"> <li>1 person per 15 sqm</li> <li>Up to 50 people seated</li> </ul>	<ul style="list-style-type: none"> <li>Up to 9 people for all ceremonies and functions</li> </ul>
<b>Higher Education Institutions</b>	<ul style="list-style-type: none"> <li>Face coverings for up to 50 students sitting in amphitheatres</li> <li>Distance education</li> </ul>	<ul style="list-style-type: none"> <li>No change</li> </ul>	<ul style="list-style-type: none"> <li>No change</li> </ul>	<ul style="list-style-type: none"> <li>Distance education</li> </ul>

<sup>10</sup> <https://covid19.gov.gr/covid-map/>

### The Netherlands<sup>11</sup><sup>12</sup><sup>13</sup> (Tables 4 and 5)

- **COVID-19 risk levels** across the country are **published weekly**, continuously informed by regional assessments, including surveillance, measures and compliance
- If the categorisation is **‘severe’ in multiple regions, a whole country approach** is implemented, for example, a partial lockdown for the whole country was announced on 14<sup>th</sup> October

**Table 4. Weekly COVID-19 risk level assessment in the Netherlands**

Key Aspects	Risk Level 1: Caution	Risk Level 2: Concern	Risk Level 3: Serious	Risk Level 4: Severe
<b>What is the current situation?</b>	The situation is manageable	The situation is moving in a negative direction	Severe measures are needed to prevent further escalation and return to a manageable situation.	More severe national measures are needed to prevent further escalation and return to a manageable situation.
<b>How quickly is the number of new infections rising?</b>	Positive tests per 100,000 people per week less than 50	Number of new infections increasing  Positive tests per 100,000 people per week: 50 to 150	Number of new infections increasing rapidly  Positive tests per 100,000 people per week: 150 to 250	Very large number of people infectious and number of new infections is high  Positive tests per 100,000 people per week more than 250
<b>Are additional measures needed for vulnerable groups?</b>	Vulnerable groups must remain alert	A tailored approach is needed to protect vulnerable groups	An intensive tailored approach is needed to protect vulnerable groups	An intensive tailored approach is needed to protect vulnerable groups
<b>How effective is contact tracing?</b>	Contact tracing is largely effective	If the situation continues, contact tracing will become ineffective	Contact tracing is no longer effective, making it more difficult to keep track of how the virus is spreading	Contact tracing is no longer effective, meaning there is limited insight into how the virus is spreading
<b>How well are the measures being complied with?</b>	Measures are being sufficiently complied with and are enforceable	Measures are not being sufficiently complied with	Measures are not being sufficiently complied with	Measures are not being sufficiently complied with
<b>Is there still sufficient healthcare capacity?</b>	There is sufficient healthcare capacity	Pressure on healthcare capacity is increasing	There is insufficient healthcare capacity	Regional healthcare capacity is insufficient and some kinds of regular healthcare have already been scaled down
<b>What measures are being taken?</b>	Additional measures designed to make the existing approach more effective	Strengthen existing approach through additional measures to get the virus under control and return to a manageable situation	Measures to be taken are designed to prevent regional healthcare from becoming overburdened and to be able to track the spread of the virus	Measures to be taken are designed to prevent national and regional healthcare from becoming overburdened and to regain maximum control of the virus

<sup>11</sup> <https://www.government.nl/topics/coronavirus-covid-19/tackling-new-coronavirus-in-the-netherlands/public-life>

<sup>12</sup> <https://coronadashboard.government.nl/>

<sup>13</sup> <https://www.government.nl/topics/coronavirus-covid-19/documents/publications/2020/10/15/coronavirus-measures-per-risk-level>



**Table 5. Extract of COVID-19 response measures per risk level**

	risk level: <b>caution</b>	risk level: <b>concern</b>	risk level: <b>serious</b>	risk level: <b>severe</b>	<b>lockdown</b>
<b>Going out</b>	✓ No restrictions	✓ No restrictions	Maximum of 4, including yourself	Maximum of 4, including yourself	Maximum of 2, including yourself
<b>At home with family and friends</b>	✓ No restrictions	Maximum of 6 visitors	Maximum of 3 visitors	Maximum of 3 visitors Maximum of 1 visit per day	No visitors
<b>Gatherings and events</b>	Reservations are mandatory for events	With reservations and assigned seating: Maximum of 60 indoors Maximum of 80 outdoors	With reservations and assigned seating: Maximum of 30 indoors Maximum of 40 outdoors	Certain gatherings allowed, with reservations and assigned seating: Maximum of 30 indoors No events	No gatherings No events
<b>Weddings</b>	✓ No restrictions	Maximum of 60 indoors Maximum of 80 outdoors	Maximum of 30	Maximum of 30	Maximum of 30
<b>Nursing homes</b>	Depending on the nursing home's situation, different measures may apply. E.g. visits by reservation only health check, face masks, or limits on visits				
<b>Restaurants, cafés and bars</b>	Mandatory reservations, assigned seating and health check	Closing time 01.00 No new guests after 00.00	Closing time 22.00 No new guests after 21.00	Restaurants, cafés and bars closed Cannabis cafés: pick-up only, closing time 20.00	Restaurants, cafés and bars closed Cannabis cafés: pick-up only, closing time 20.00
<b>Sports and exercise</b>	✓ No restrictions	✓ No restrictions	No spectators at matches or competitions	No matches or competitions Maximum of 4 people can train together, 1.5 metres apart (restrictions do not apply to children under 18) Changing rooms, sports canteens and clubhouses closed	Indoor sports activities prohibited Maximum of 2 people can train together outdoors, 1.5 metres apart Changing rooms, sports canteens and clubhouses closed

### Czech Republic<sup>1415161718</sup>

A 4-tiered traffic light alert system introduced in July:

0	1	2	3
None or negligible risk of transmission	Infection incidence without community transmission	Beginning community transmission	Increasing or persisting community transmission

Currently, **all 14 regions of the Czech Republic are on alert level 3** with increasing or persisting community transmission, resulting in the implementation of stricter measures on the 22<sup>nd</sup> October, such as:

- Ban on retail sales and the sale and provision of services, apart from food, fuel, medicines
- Closure of hotels/hospitality (with some exceptions) and food courts in shopping centres
- Restricted operation of public authorities/ administrative bodies to the essential minimum
- Ban on school and university attendance (with some exceptions, such as medicine)
- Prohibition of accommodation provision for students who have another residence

<sup>14</sup> <https://www.garda.com/crisis24/news-alerts/323016/czech-republic-government-announces-nationwide-travel-restrictions-march-16-24-update-5>

<sup>15</sup> [https://koronavirus.mzcr.cz/wp-content/uploads/2020/04/35\\_EM\\_free-movement-of-persons\\_230320.pdf](https://koronavirus.mzcr.cz/wp-content/uploads/2020/04/35_EM_free-movement-of-persons_230320.pdf)

<sup>16</sup> <https://www.covid19healthsystem.org/countries/czechrepublic/livinghit.aspx?Section=1.2%20Physical%20distancing&Type=Section>

<sup>17</sup> <https://koronavirus.mzcr.cz/en/government-decides-to-further-tighten-preventive-measures-against-the-spread-of-covid-19>

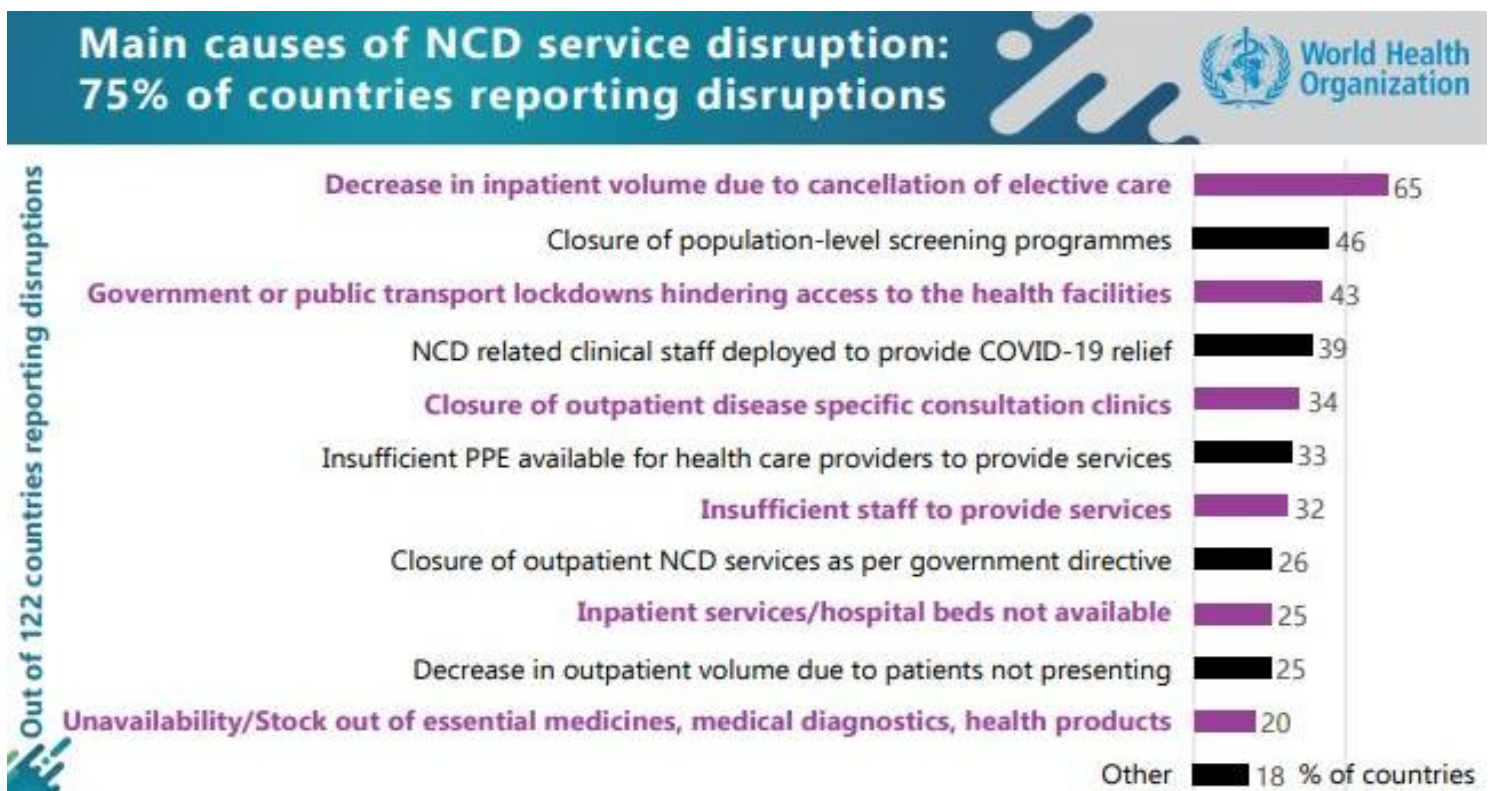
<sup>18</sup> [https://koronavirus.mzcr.cz/wp-content/uploads/2020/10/09\\_R\\_schools\\_12102020.pdf](https://koronavirus.mzcr.cz/wp-content/uploads/2020/10/09_R_schools_12102020.pdf)

## Disruption to essential health services: impact and mitigation

### Impact of COVID-19 on non-communicable diseases (NCDs)<sup>1920212223</sup>

- **Health systems around the world are being challenged** by increasing demand for care from people with COVID-19
- **Delivery of health care for all conditions has been disrupted**, compounded by **fear, stigma, misinformation and limitations on movement**
- The disruption of health services has been **particularly problematic for those living with NCDs** who need continuous care
- Pre-COVID there has been a **chronic underinvestment** in the prevention, early diagnosis, screening, treatment and rehabilitation for NCDs
- **COVID-19 and NCDs have a reciprocal effect**, with NCDs increasing vulnerability to transmission and severe outcomes; and COVID-19 exacerbating chronic conditions
- **75% of 122 countries across the globe** reported a considerable degree of **disruption of NCDs services** with urgent dental care, rehabilitation and palliative care services being most likely to be completely disrupted (*Figure 4*)
- The more **severe** the transmission phase of the COVID-19 pandemic, the **more NCDs services are disrupted** (*Figure 5*)
- **Rehabilitation services** are the **most likely to be impacted**, with 50% of countries reporting partial disruption and an additional 12% reporting complete disruption (*Figure 6*)
- During **community transmission** phases, **56% of countries reported disrupted services to treat cancer** (*Table 6*)

*Figure 4. Main causes of NCDs service disruptions, WHO rapid review, including 122 countries*



<sup>19</sup> <https://www.who.int/publications/i/item/WHO-2019-nCoV-essential-health-services-2020.1>

<sup>20</sup> <https://apps.who.int/iris/bitstream/handle/10665/334136/9789240010291-eng.pdf>

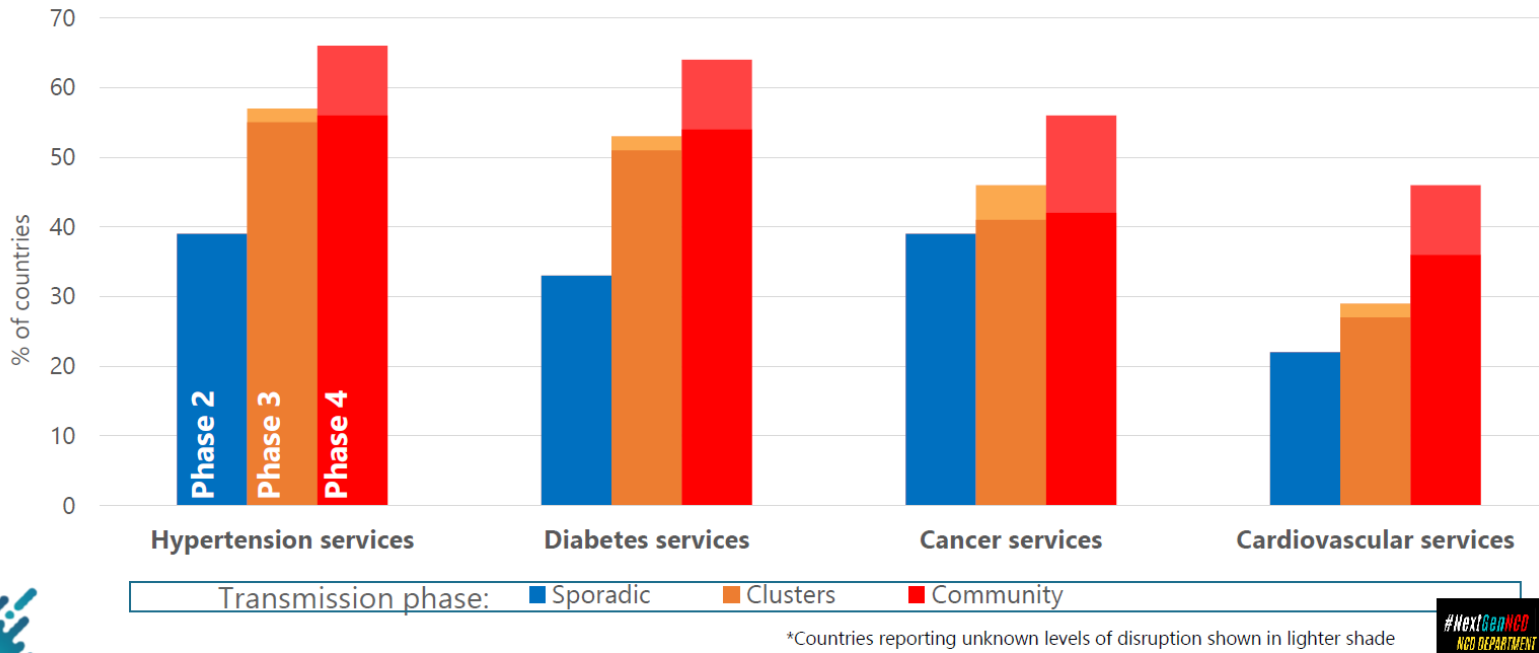
<sup>21</sup> <https://www.cdc.gov/coronavirus/2019-ncov/global-covid-19/essential-health-services.html>

<sup>22</sup> <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7545493/>

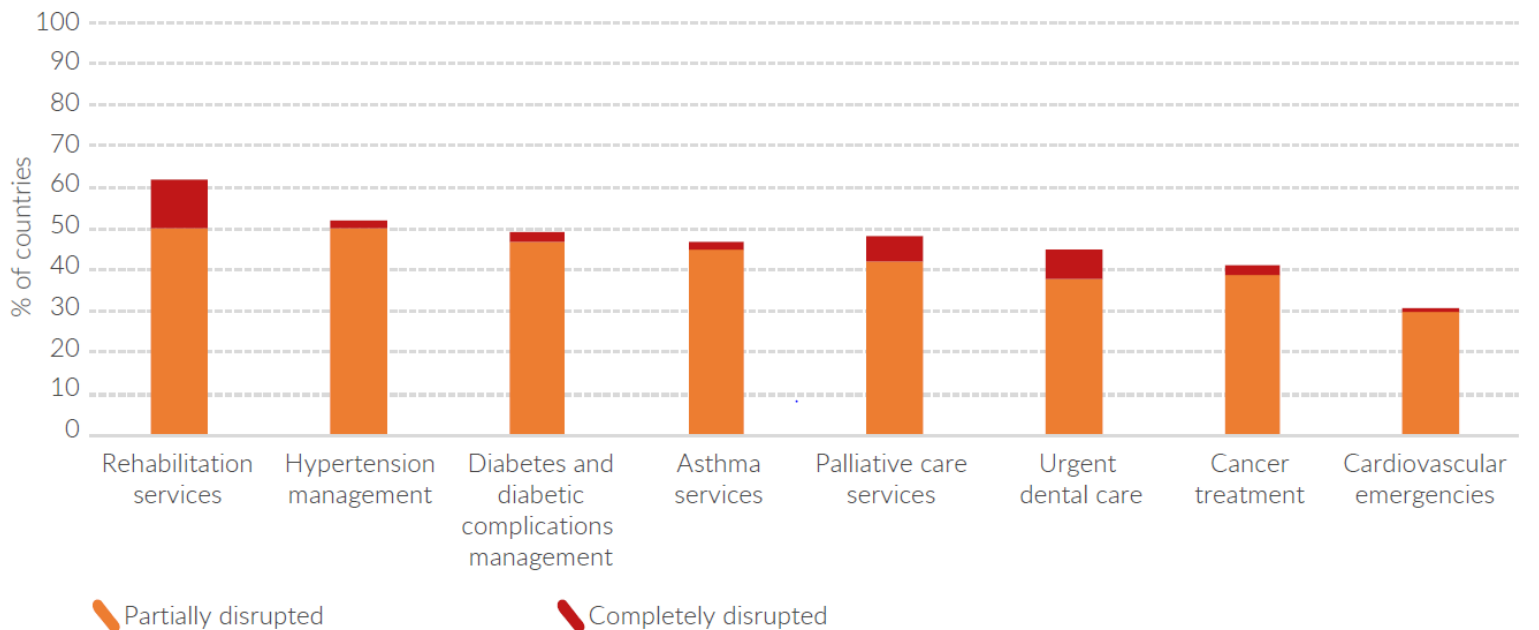
<sup>23</sup> <https://www.who.int/publications/m/item/rapid-assessment-of-service-delivery-for-ncds-during-the-covid-19-pandemic>

- **Low-income countries** are more likely to report disrupted services:
  - ✓ 50% of low-income countries reported disruption to services for **cardiovascular emergencies**, compared to 17% of high-income countries
  - ✓ 58% of low-income countries reported disruption to **cancer treatment services**, compared to 26% of high-income countries

**Figure 5 Countries with completely or partially disrupted services by COVID-19 phase (countries =163\*)**



**Figure 6. Percentage of countries reporting disruptions to NCD-related services (countries = 163)**



**Table 6. Country examples of the impact of COVID-19 on cancer services**

Country	Impact and mitigation of essential health services disruption
UK <sup>24</sup>	<ul style="list-style-type: none"> <li>- During lockdown, referrals via the 2-week-wait urgent pathway for suspected cancer are reported to have <b>decreased by up to 84%</b></li> <li>- It is estimated that changes in health-seeking behaviour, and the availability of and access to essential diagnostic <b>may result in additional deaths</b> from breast, colorectal, lung, and oesophageal cancer in the medium (1 year) and longer term (5 years)</li> <li>- Depending on the referrals backlog, months in lockdown and diagnostic capacity, it has been estimated that COVID-19 may have caused <b>361 – 1231 additional lives lost due to delayed cancer screening</b></li> </ul>
Italy <sup>2526</sup>	<ul style="list-style-type: none"> <li>- Concerns that reduced access to care may cause delays in <b>childhood cancer care</b> with delays in diagnosis, chemotherapy, and treatment of chemotherapy complications, which may be worse than those posed by the disease itself</li> <li>- In patients with colorectal cancer, 3- to 10-year survival is lower if treatment is started &gt;90 days from diagnosis</li> </ul>
The Netherlands <sup>2728</sup>	<ul style="list-style-type: none"> <li>- Patients newly diagnosed with cancer dropped by <b>25% as a result of the lockdown</b></li> <li>- In May 2020 a representative sample of the Dutch population found: <ul style="list-style-type: none"> <li>✓ 24% had appointments that were cancelled</li> <li>✓ 13% did not receive the care requested</li> <li>✓ 45% had avoided an appointment with a GP</li> <li>✓ 15% experienced problems with the delivery of medicines</li> </ul> </li> </ul>
Australia <sup>293031</sup>	<ul style="list-style-type: none"> <li>- Telehealth comprised <b>of between 32% and 35% of services</b> processed between April and June</li> <li>- The switch to telemedicine in Australia has been associated with <b>reduced pathology and radiology requests, reduced referrals for suspected cancer</b>, and early evidence of reduced cancer incidence</li> <li>- Imaging procedures for <b>detection of breast cancer decreased by 37% from March to April</b></li> </ul>

### Impact of COVID-19 on mental health services<sup>32</sup>

- COVID-19 has **disrupted or stopped critical mental health services in 93% of 130 countries worldwide**, while the demand for mental health support/services is increasing
- **Life-saving emergency and essential mental health services** were disrupted:
  - ✓ 35% of countries reported disruption of management of emergency mental health manifestations, including status epilepticus, delirium and severe substance withdrawal syndromes
  - ✓ 30% reported disruption in supply of medication for people with mental health disorders
- Over 60% of countries reported disruptions to mental health services for **vulnerable people**, including **children and adolescents (72%)**, **older adults (70%)**, and **women requiring antenatal or postnatal services (61%)**
- Countries have implemented a **broad variety of mitigation measures** to continue mental health services and address the increased demand (*Table 7*)

<sup>24</sup> <https://pubmed.ncbi.nlm.nih.gov/32702311/>

<sup>25</sup> <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7300556/>

<sup>26</sup> <https://pubmed.ncbi.nlm.nih.gov/33009170/>

<sup>27</sup> <https://www.who.int/publications/m/item/rapid-assessment-of-service-delivery-for-ncds-during-the-covid-19-pandemic>

<sup>28</sup> [https://www.rivm.nl/sites/default/files/2020-09/Kort\\_cyclische%20rapportage%20indirecte%20effecten%20COVID-19%20op%20zorg%20en%20gezondheid%20%2814%20september%202020%29.pdf](https://www.rivm.nl/sites/default/files/2020-09/Kort_cyclische%20rapportage%20indirecte%20effecten%20COVID-19%20op%20zorg%20en%20gezondheid%20%2814%20september%202020%29.pdf)

<sup>29</sup> <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7361158/>

<sup>30</sup> <https://www.canceraustralia.gov.au/sites/default/files/publications/review-impact-covid-19-medical-services-and-procedures-australia-utilising-mbs-data-skin-breast-and/pdf/review-of-the-impact-of-covid-19-on-medical-services-and-procedures-in-australia-utilising-mbs-data.pdf>

<sup>31</sup> [https://www.google.com/url?sa=t&rlz=1&q=&esrc=s&source=web&cd=&ved=2ahUKEwiR37SP\\_NvsAhXNURUIHT4OBq8QFjABegQIAhAC&url=https%3A%2F%2Fressea.rch.monash.edu%2Ffiles%2F314462277%2F313547526\\_oa.pdf&usq=AOvVaw19hViv7fqZ0WTGI\\_VBKwu](https://www.google.com/url?sa=t&rlz=1&q=&esrc=s&source=web&cd=&ved=2ahUKEwiR37SP_NvsAhXNURUIHT4OBq8QFjABegQIAhAC&url=https%3A%2F%2Fressea.rch.monash.edu%2Ffiles%2F314462277%2F313547526_oa.pdf&usq=AOvVaw19hViv7fqZ0WTGI_VBKwu)

<sup>32</sup> <https://www.who.int/publications/i/item/978924012455>

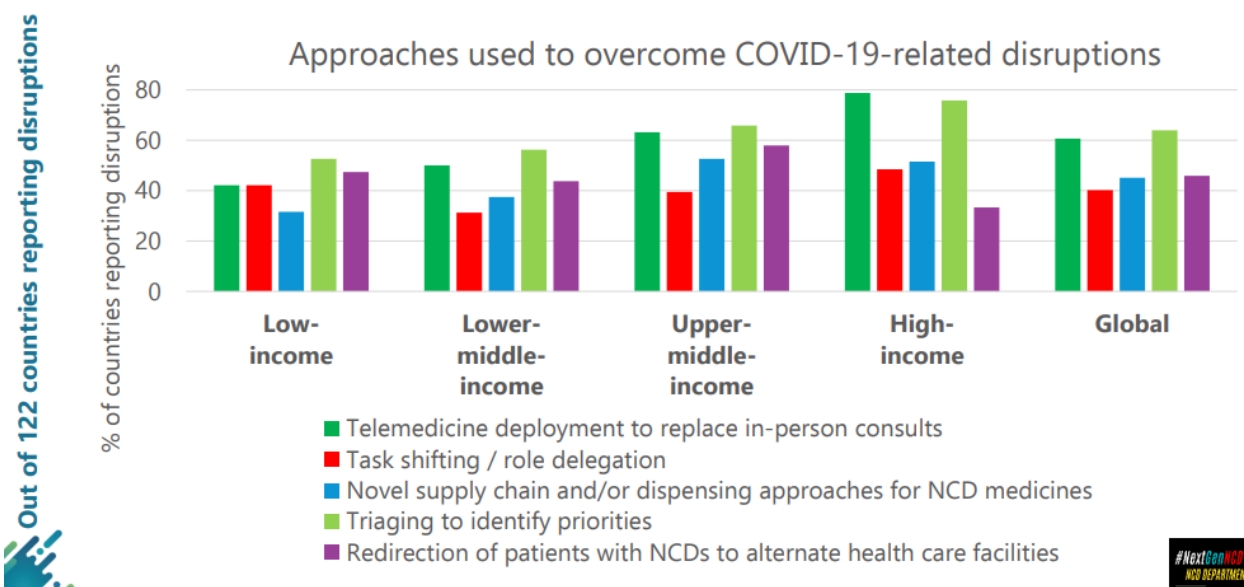
### Mitigation measures<sup>333435</sup>

- All adaptations in providing health services should be made **according to ethical principles**, such as **equity** in the allocation of resources and access, **self-determination, non-abandonment, and respect for dignity and human rights**
- **Designate and prioritise locations for targeted interventions** to reduce the impact of COVID-19 on other services and diseases
- **Involve the focal point for essential services** in the Incident Management Team (IMT) or a similar body and act as a liaison with essential health service programmes
- In cases where a patient faces hardships in gaining access to services/medication, the **use of tele-medicine should be encouraged** (Figure 7)

**Table 7: WHO country approaches to overcome disruptions in mental health related interventions and services (countries = 130)**

Approaches	Percentage of countries (n=130)
Tele-medicine /tele-therapy deployment to replace in person consultations	70.0
Helplines established for mental health and psychosocial support	67.7
Specific measures for infection prevention and control in mental health services	65.4
Self-help or digital format of psychological interventions	53.8
Triaging to identify priorities	49.2
COVID-19 health care providers trained in basic psychosocial skills	44.6
Discharge or redirection of patients to alternate health care facilities	44.6
Task shifting / role delegation	37.7
Home or community outreach services	33.1
Novel supply chain / dispensing approaches for medicines for MNS disorders	32.3
Recruitment of additional counsellors	20.8

**Figure 7. Use of telemedicine to mitigate the impacts on NCD services (countries = 122)**



<sup>33</sup> <https://www.who.int/publications/i/item/WHO-2019-nCoV-essential-health-services-2020.1>

<sup>34</sup> <https://www.cdc.gov/coronavirus/2019-ncov/global-covid-19/essential-health-services.html>

<sup>35</sup> <https://www.europeanpharmaceuticalreview.com/article/122690/effect-of-covid-19-on-treatment-of-non-communicable-diseases/>

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](mailto:mariana.dyakova@wales.nhs.uk))

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



**GIG**  
CYMRU  
**NHS**  
WALES

Iechyd Cyhoeddus  
Cymru  
Public Health  
Wales

**World Health Organization**  
**Collaborating Centre on**  
**Investment for Health and Well-being**

