

# Considerations for COVID-19 surveillance for vulnerable populations

Interim guidance

17 September 2021



## 1. Introduction

### 1.1 Background

In response to the coronavirus disease 2019 (COVID-19) pandemic, countries around the world have taken significant actions to establish and strengthen surveillance systems for monitoring outbreaks and their impact. The evolving complexity of COVID-19 has emphasized the need to collect and analyse different types of data to enable decision-making of higher confidence. This includes collecting and analysing data on different population groups, including those living in vulnerable situations.

Population groups living in vulnerable situations (referred to in this guidance note as “vulnerable populations”) are groups and communities at a higher risk for poor health as a result of structural and societal factors such as systemic marginalization, discrimination, stigma, poverty and other intersecting determinants, such as gender, age, immigration status and disability that shape health inequities between and within communities (1). These conditions create challenging settings that directly and indirectly impact health. For instance, migrants may experience higher levels of stress due to their living conditions and face barriers in accessing health, social and legal services as a result of their migration status (2). The combination of these factors may increase their risk of contracting COVID-19 and experiencing poorer health outcomes.

It is therefore critical to identify and consider the needs of vulnerable populations during COVID-19 preparedness and response planning, particularly including them in routine surveillance and

enhanced surveillance systems. Doing so will help provide the necessary information to inform strategies and actions to prevent and rapidly contain or stop COVID-19 transmission.

### 1.2 Purpose

This document outlines considerations for implementation of COVID-19 surveillance for vulnerable populations.

Vulnerable populations differ between and within Member States, and individuals or groups may experience multiple vulnerabilities that compound the barriers and impacts they face. It is recommended that Member States adapt surveillance considerations outlined in this document based on their identified vulnerable populations and the local context.

### 1.3 Vulnerable populations of focus

In alignment with interim guidance on *Actions for consideration in the care and protection of vulnerable population groups for COVID-19*, the vulnerable populations considered in detail in this document are: people experiencing homelessness; people living in overcrowded housing, collective sites and slums; refugees and migrants; people with disabilities; people living in closed facilities, including prisons and detention centres; people living in remote locations, including highlands and island provinces; and people living in poverty and extreme poverty (3).

It is recognized that there are other groups living in vulnerable situations not mentioned in this guidance, including: ethnic minorities; indigenous populations; gender and sexual minorities, including lesbian, gay, bisexual, transgender, queer and intersex (LGBTQI) individuals; and sex

workers. Surveillance of these populations may require further considerations. In addition, members within vulnerable populations who have underlying comorbidities or who are older may be at further risk and should be carefully monitored.

## 1.4 Intended audience

This guidance note is intended for decision-makers and relevant stakeholders involved in planning, establishing and managing COVID-19 surveillance at the national and subnational levels.

## 2. Objectives and guiding principles

### 2.1 Objectives

The objectives of including vulnerable populations within routine and enhanced surveillance systems are to:

- Prevent transmission among these populations who are at higher risk
- Detect transmission early
- Identify gaps in health service delivery
- Identify COVID-19 risk factors and determine morbidity and mortality in these populations along with corresponding contributions to the overall outbreak epidemiology
- Inform appropriate strategies to rapidly contain or stop transmission to reduce the impact on morbidity and mortality.

### 2.2 Guiding principles

It is recommended that COVID-19 surveillance for vulnerable populations be guided by the four key principles outlined below to ensure systems are inclusive and to maximize effectiveness and enhance sustainability of surveillance. This will be of benefit for surveillance of other conditions among vulnerable populations.

#### Country-led inclusive action

Commitment and country action to protect all individuals is essential and is demonstrated through ensuring the inclusion of vulnerable populations in established surveillance systems, or while establishing such systems. All due consideration should be given to ensuring context-appropriate systems are developed and strengthened to capture information on and from

these populations with an understanding that transmission can differ between and within populations due to social and economic circumstances, environmental considerations, and differing barriers to health-care access.

Mapping the vulnerable populations is an important first step in public health surveillance to identify areas that have higher proportions of populations living in vulnerable situations. This can include economic, cultural and social factors that affect these populations such as constrained access to health care, negative health-seeking behaviours and other anthropological aspects.

Any actions recommended must be effective, accessible and acceptable to all vulnerable populations covered. This may mean, for example, more targeted approaches to detect vulnerable populations.

#### Evidence-informed decision-making

The overall aim of surveillance of vulnerable populations is to drive evidence-informed decision-making. The quality of data generated and confidence in the data used for decision-making can be enhanced by drawing on multi-source information and identifying a minimum set of data disaggregation variables.

Drawing on different sources and types of surveillance data will help to better understand the unique risk factors of vulnerable populations. This will also help better understand how these population groups are affected by COVID-19 outbreaks, while minimizing limitations and biases arising from relying on only one or few sources of data that may not capture complexities at the community level.

Identifying a minimum set of disaggregation categories for surveillance data helps to understand transmission trends and impact on vulnerable populations. Variables for disaggregating data include: age, sex, socioeconomic status, geographical location, ethnicity, immigration status and disability. Data collection on these characteristics needs to be included within all steps of surveillance, including contact tracing and case investigation forms.

Data also need to be collected and reported for: (a) tested individuals, (b) confirmed cases, (c) severity of disease, (d) hospitalization, (e) underlying comorbidities, (f) mortality, (g) recovery and (h) vaccination status. This would also allow targeted interventions to meet the special needs of vulnerable populations to improve outcomes. However, collecting these data from people from vulnerable groups may be difficult since they may not trust local authorities with sensitive information. Working with trusted community partners to gather disaggregated data could facilitate this process.

### **Coordination, collaboration and partnerships**

The health sector has a crucial role in identifying and evaluating COVID-19 transmission trends and their impacts among vulnerable populations. It is important to recognize, however, that the risks associated with the pandemic go beyond the health sector and therefore must be addressed using a whole-of-government and whole-of-society approach. Engaging individuals from diverse and representative communities and organizations is essential in surveillance efforts. Ministries, community organizations, and community and religious leaders who work with vulnerable populations should be involved in identifying populations and supporting COVID-19 surveillance efforts.

Further, encouraging cross-sector collaboration for sharing and harmonization of COVID-19 data collection, analysis and reporting efforts can lead to sustainable changes, prevent wasting of resources and duplication of efforts, and allow for optimization of synergies.

### **Engagement and empowerment of vulnerable populations**

COVID-19 surveillance for vulnerable populations must be carried out in a manner that respects human rights and is culturally appropriate, with necessary safeguards implemented to address any fears or concerns (e.g. fear of stigma or incarceration). As such, leaders and community members from vulnerable populations should be engaged in all steps of surveillance starting from development of policies and strategies to collection and reporting, analysis and action. This will help to ensure that all surveillance

approaches and guidance disseminated at locations most frequented by community members are contextually appropriate, facilitate identifying communities that are most affected, and leverage existing community networks to respond rapidly through trusted mechanisms.

## **3. Considerations and actions for establishing and strengthening COVID-19 surveillance systems for vulnerable populations**

Vulnerable populations who are at higher risk for morbidity and mortality should be prioritized for tailored prevention initiatives, early detection, assessment and rapid containment of outbreaks. However, many routine surveillance systems do not adequately capture these populations. Factors such as population behaviour, human resources, funding, accessibility to the population or to the setting, and reporting challenges can reduce surveillance coverage of a population. Routine surveillance systems used to detect SARS-CoV-2, the virus that causes COVID-19, should be mapped to understand which vulnerable populations are likely to be included and which may be excluded.

For example, influenza-like illness sentinel surveillance systems are often used to detect SARS-CoV-2. However, these systems may not be representative, and the actual coverage may show only some sites are functioning, while other areas or specific populations are not represented.

To determine gaps in coverage of surveillance systems, it is necessary to identify the size and characteristics of populations that are likely not covered, considering characteristics such as geographical residence, socioeconomic status, age, sex, employment status, immigration status, as well as health-care seeking and risk behaviours.

Existing surveillance systems should be strengthened to capture data on these populations. In the case that surveillance systems are unable to be expanded to adequately cover vulnerable populations, new systems specific to these populations should be established and linked to the main national and subnational COVID-19 systems (4). Further, if community-level

surveillance systems are in place in certain areas, existing or new surveillance systems should link to these.

In settings that lack representativeness, different surveillance and screening strategies should be considered. Given the variations between and within Member States, there is no single screening strategy for early detection that fits all settings and populations. Screening and testing strategies for early detection need to be tailored to the risk profile of each population, including an understanding of vulnerable groups at higher risk of exposure and spread and of the available resources. Annex 1 explores different testing strategies that can be implemented based on the setting.

The following steps are recommended in establishing or strengthening surveillance systems to capture vulnerable populations:

1. Identify, map and register vulnerable populations in an area, working with trusted community partners.
2. Determine the health-seeking behaviours of the vulnerable populations (both formal and informal care).
3. List, sensitize and orient (who to report, where and how to report) the health-care providers/facilities (both formal and informal) that cater to each group.
4. Enhance or establish community-based surveillance systems for early reporting.
5. Strengthen active and/or passive surveillance systems and networks to

capture COVID-19 cases. Examples include:

- a. COVID-19 notifiable disease surveillance,
  - b. influenza-like illness sentinel surveillance,
  - c. severe infectious illness hospital surveillance,
  - d. workplace absenteeism surveillance,
  - e. facility-based event reporting,
  - f. rumour surveillance, and
  - g. all-cause mortality surveillance.
6. Organize robust referral and trigger mechanisms to respond to any signals (using both indicator- and event-based surveillance).  
Integrate COVID-19 case definitions into the list of acute conditions under surveillance by already established information systems and within the national list of notifiable or immediately notifiable diseases (4).

See Annex 1 for further details on detecting cases in vulnerable populations and places of focus for surveillance.

#### 4. Special considerations for COVID-19 surveillance by type of vulnerable population\*

Population	Factors enhancing vulnerability to COVID-19 and impacting the design of surveillance approaches	Special considerations for COVID-19 surveillance
<p>People experiencing homelessness (5–9)</p>	<ul style="list-style-type: none"> <li>• Unemployment, poverty and poor living conditions</li> <li>• Limited or no access to health and social protection services</li> <li>• Limited access to basic necessities including water, sanitation and hygiene facilities</li> <li>• Disproportionate health challenges and barriers to seeking care</li> <li>• Intersecting barriers related to language, culture and disability</li> <li>• May not be reached by mass communication efforts</li> <li>• Reduced trust in authorities requiring alternative contact channels</li> <li>• Highly mobile population and so may not be registered with local health systems</li> <li>• Lack of a clear definition of homelessness hindering efforts to identify and measure these populations</li> <li>• Monitoring and evaluation tools are not worded or structured appropriately for people experiencing homelessness</li> </ul>	<ul style="list-style-type: none"> <li>• Establish definitions for homelessness including for both visible and invisible experiences of homelessness and for subgroups, such as homeless families.</li> <li>• Validate health screening tools for sensitivity and appropriateness to the specific circumstances of people experiencing homelessness, and ensure data collection respects these circumstances.</li> <li>• Conduct site-specific risk assessments using language, items and constructs relevant to homelessness.</li> <li>• Conduct community-based surveillance using a comprehensive set of systems, including cluster investigations and immediate case notification systems.</li> <li>• Enhance surveillance for residential facilities or shelters through approaches such as active case finding.</li> <li>• If available, use established homeless management information systems and/or other data collection systems to identify the travel history of confirmed COVID-19 cases during their infectious period.</li> <li>• As feasible, use bed maps, social groups and job involvement to identify contacts of cases.</li> <li>• Engage: (a) local government leadership; (b) outreach teams and street medicine providers; (c) law enforcement; (d) housing authorities; (e) homeless service providers and continuum of care leadership; (f) support services, such as emergency food programmes, syringe service programmes and behavioural health support; and (g) community partners, such as civil society organizations.</li> <li>• Engage persons with lived experience of homelessness who can serve as peer navigators to strengthen outreach and engagement efforts and help overcome potential language, cultural and disability barriers.</li> </ul>

Population	Factors enhancing vulnerability to COVID-19 and impacting the design of surveillance approaches	Special considerations for COVID-19 surveillance
People living in overcrowded housing, collective sites and slums (10,11)	<ul style="list-style-type: none"> <li>• Unemployment, poverty and poor living conditions</li> <li>• Limited or no access to health and social security services</li> <li>• Engagement in the informal labour sector</li> <li>• Limited access to basic necessities including water, sanitation and hygiene facilities</li> <li>• Poor living conditions, ventilation and infrastructure</li> <li>• Inability to physically distance, quarantine or isolate</li> <li>• Limited health literacy and awareness of COVID-19 risk and protective factors</li> <li>• Often hidden in national data sets or overlooked during data collection exercises, such as censuses or health surveys that do not track spatial distinctions of populations</li> </ul>	<ul style="list-style-type: none"> <li>• Conduct site-specific risk assessments in overcrowded housing areas, collective sites and slums.</li> <li>• Make available or rapidly deploy outbreak rapid response team in collective sites for investigation and referrals.</li> <li>• Use multiple sources of information, including traditional surveillance systems and informal information, to identify cases, contacts, clusters and high-risk settings, and monitor transmission.</li> <li>• Validate health screening tools for sensitivity and appropriateness to the specific circumstances of these populations, and ensure data collection respects these circumstances and their rights.</li> <li>• Develop and enhance community surveillance systems for direct reporting of events requiring investigation.</li> <li>• Forge and strengthen relationships with community-based organizations to identify and address population needs and concerns.</li> </ul>
Refugees and migrants (12–14)	<ul style="list-style-type: none"> <li>• Legal status</li> <li>• Unemployment, poverty and poor living conditions</li> <li>• Limited or no access to health and social protection services</li> <li>• Engagement in the informal labour sector</li> <li>• Limited access to basic necessities including water, sanitation and hygiene facilities</li> <li>• Inability to physically distance, quarantine or isolate</li> <li>• Socio-cultural and language barriers</li> <li>• Neglect and stigma</li> <li>• Limited health literacy and access to culturally appropriate health information</li> <li>• Modalities of assistance provision involving large crowds</li> </ul>	<ul style="list-style-type: none"> <li>• Identify and map populations as well as the health and isolation facilities available for refugees and migrants.</li> <li>• Make available or rapidly deploy outbreak rapid response team in collective sites for investigation and referrals.</li> <li>• Conduct site-specific risk assessments using language, items and constructs that are relevant to specific refugee and migrant groups.</li> <li>• Use community-based surveillance, where feasible.</li> <li>• Develop or use an existing system to facilitate tracking of movement of this population, who may be highly mobile.</li> <li>• Engage with relevant organizations, such as civil society organizations, working with refugees and migrants.</li> <li>• Engage with community and religious leaders, and local and diaspora networks/groups who interact with refugee and migrant communities.</li> <li>• Engage with sectors beyond health who interact with refugees and migrants.</li> </ul>

Population	Factors enhancing vulnerability to COVID-19 and impacting the design of surveillance approaches	Special considerations for COVID-19 surveillance
	<ul style="list-style-type: none"> <li>• Disproportionate health challenges and barriers to seeking care</li> <li>• May not be reached by mass communication efforts</li> <li>• Reduced trust and fear in authorities requiring alternative contact channels</li> </ul>	<ul style="list-style-type: none"> <li>• Enhance cross-border collaboration to ensure people crossing borders are captured in surveillance and screened at points of entry</li> </ul>
People with disabilities (15,16)	<ul style="list-style-type: none"> <li>• Challenges in accessing and/or implementing basic hygiene measures</li> <li>• Barriers to physical distancing because of additional support needs or being institutionalized</li> <li>• Difficulty accessing public health information and services</li> <li>• Disproportionate health challenges and comorbidities</li> <li>• Differing operational definitions on people with disabilities</li> <li>• Difficulties in reporting symptoms or accessing care as services do not consider their circumstances, which may be compounded by additional physical, financial, cultural and language barriers</li> <li>• Difficulties with disrupted access to routine health-care services during health emergencies</li> </ul>	<ul style="list-style-type: none"> <li>• Establish an operational definition including physical and intellectual disabilities to ensure that all people with disabilities are included.</li> <li>• Identify people with disabilities in closed facilities such as prisons and correctional facilities.</li> <li>• Ensure risk assessments use relevant communication strategies to ensure that all people with disabilities can communicate their symptoms and illness.</li> <li>• Strengthen surveillance systems to accurately report disability status in incidence, mortality rates and death certificates including for people with disabilities in residential facilities through the use of active case finding.</li> <li>• Enhance mortality surveillance by validating the role of disability in the cause of death.</li> <li>• Engage with agencies providing services to people with disabilities.</li> <li>• Engage with relevant organizations, such as civil society organizations, working with people with disabilities.</li> <li>• Ensure access to routine health-care services.</li> </ul>
People living in closed facilities, including prisons and detention centres (17–19)	<ul style="list-style-type: none"> <li>• Legal status, stigma, neglect, violence, institutional barriers and discrimination</li> <li>• Poor living conditions, ventilation and infrastructure</li> <li>• Inability to physically distance, quarantine or isolate</li> <li>• Challenges to case detection, diagnosis and care in closed facilities</li> </ul>	<ul style="list-style-type: none"> <li>• Identify and map people living in closed facilities.</li> <li>• Conduct area-specific risk assessments.</li> <li>• Engage individuals living in the facility to lead surveillance efforts.</li> <li>• Establish entry-screening procedures for visitors and staff including completion of case investigation form and temperature checks.</li> <li>• Enhance existing surveillance systems by integrating COVID-19 data.</li> </ul>

Population	Factors enhancing vulnerability to COVID-19 and impacting the design of surveillance approaches	Special considerations for COVID-19 surveillance
	<ul style="list-style-type: none"> <li>• Individuals in closed facilities may have fewer known exposures to COVID-19, and therefore are not always suspected</li> <li>• Limited access to health-care services and resources</li> <li>• Barriers to accessing up-to-date information</li> <li>• Prisons, detention centres, long-term care facilities are outside of the health sector, creating challenges for engagement on policies and procedures for prevention, detection and containment</li> </ul>	<ul style="list-style-type: none"> <li>• Ensure effective collaborations between the health sector and other relevant sectors responsible for these facilities.</li> </ul>
<p>People living in remote locations (remoteness may also have a protective effect)</p>	<ul style="list-style-type: none"> <li>• Limited access to health-care services and resources</li> <li>• Barriers accessing up-to-date health information</li> <li>• Challenges in exercising basic protective measures and accessing health-care facilities</li> <li>• Lack of infrastructure, such as reliable roads and handwashing facilities</li> <li>• Physical, financial and language barriers</li> </ul>	<ul style="list-style-type: none"> <li>• Identify and map areas that have suboptimal health-care infrastructure and hard-to-reach areas.</li> <li>• Conduct area-specific risk assessments.</li> <li>• Establish and strengthen current surveillance systems to include this population, including community-based surveillance.</li> <li>• Establish community health facility referral and communication channels</li> </ul>

\*There are overlapping considerations among the different vulnerable populations

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