

# HNO 2021: A WASH Sectoral Guidance on COVID-19

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## List of Abbreviations

ACAPS	Assessment Capacities Project
GWC	Global WASH Clusters
HNO	Humanitarian Needs Overview
HPC	Humanitarian Program Cycle
HRP	Humanitarian Response Plan
IASC	Inter-Agency Standing Committee
IDP	Internally Displaced Populations
IM	Information Management
IOM-DTM	International Organization for Migration - Displacement Tracking Matrix
JIAF	Joint Inter-Agency Framework
JMP	WHO/UNICEF Joint Monitoring Programme for Water Supply, Sanitation and Hygiene
MSNA	Multi-Sectoral Needs Assessment
NGO	Non-governmental organisation
OCHA	United Nations Office for the Coordination of Humanitarian Affairs
PIN	People in Need
SAG	Strategic Advisory Group
SDR	Secondary Data Review
TWiG	Technical Working Group
UN	United Nations
UNDP	United Nations Development Programme
UNICEF	United Nations Children's Fund
WASH	Water, Sanitation and Hygiene
WHO	World Health Organization

The following recommendations have been developed in order to guide national WASH clusters in preparing for the Humanitarian Needs Overview (HNO) and sector level response plans, in light of the COVID-19 outbreak and the subsequent response preparations. Given the potential negative impact on access to WASH items and services as a result of COVID-19, there are certain additional factors that need to be taken into consideration when preparing for the HNO and calculating the WASH people in need (PIN) figures. This document aims to provide national WASH clusters with guidance on how to include these factors.

In protracted or complex emergencies, the HNO is a process which presents a comprehensive analysis of the overall situation and associated needs. Its main aim is to inform response planning and to ensure that the Humanitarian Response Plan (HRP) is based on and prioritised through solid evidence of needs. As such, the HNO is the output of a consolidated effort of secondary data review and coordinated assessments carried out by humanitarian actors and led by OCHA.

The general OCHA HNO Guidance document, alongside templates and subsequent products, can be found [here](#),<sup>1</sup> while this guidance produced by the Global WASH Cluster (GWC) will focus on the expected contribution of the national WASH Coordination Platforms in the framework for COVID-19.<sup>2,3</sup> Typically, OCHA at the country level will lead the process and provide clusters with an HNO template, expecting them to provide inputs in the form of narrative and key needs indicators that can feed an inter-cluster prioritisation process as well as present the sectoral WASH situation.<sup>4</sup> The first section relates to data consolidation, during which the sector should collect and gather WASH needs data representative of the whole crisis. The second one is about data analysis, when the WASH platform analyses its data to estimate the number of people in need of WASH assistance (WASH PIN), and works on WASH severity mapping. This in turn will be used to contribute to the joint analysis, during which the WASH sector will work with other sectors and the HNO team to calculate response level PIN and needs prioritization. Currently the Joint Inter-Agency Framework (JIAF) is being developed with the plan to have it inform the joint inter-sectoral HNO analysis at global level. If OCHA in country decides to follow the global HNO guidance that is likely based on the JIAF guidance, then sector PINs will be compared to JIAF inter-sectoral PIN during final stages of analysis to identify the HNO PIN. This guidance will provide two suggested methodologies on how to calculate the WASH PIN. Each of the main components of this whole process are summarized in a [checklist](#) located at the end of the document (Annex 1).

## 1. HNO Planning and Data Consolidation: A Continuous Process all Year Long

The WASH Coordination Platforms need to set up a system to receive and consolidate harmonised data from WASH partners and other assessment actors (such as other clusters, IOM Displacement Tracking Matrix (DTM), REACH, government ministries and other relevant assessment actors) that collect WASH data on a regular basis in order to align with the HNO/HRP.<sup>5</sup> To do so, they need to identify core indicators and collect information on those through primary data collection and secondary data review. Those three elements are explained in more details below.

### 1.1. Identify and Mainstream Core Indicators and Questions

The cornerstone of a system of harmonized data are the core indicators, i.e. a list of standard WASH indicators and questions that WASH partners, as well as multi-sectoral initiatives, will integrate into their respective data collection tools. Without core indicators, the different assessments will collect data that is incomparable, difficult to consolidate and of mixed quality, resulting in limited coverage of usable data, duplication of efforts, squandering of resources, etc.

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<sup>1</sup> These guidance documents are from the 2020 HNO as the updated guidelines for 2021 are still being developed.

<sup>2</sup> The terms sector, cluster and coordination platform will be used interchangeably throughout the document.

<sup>3</sup> Please keep in mind that this document is not considered an introduction to the HNO and is targeted towards WASH Cluster Coordinators and Information Managers who are familiar with (and preferably have been involved in) the Humanitarian Programme Cycle (HPC).

<sup>4</sup> If there is an up-to-date strategic objective framework (SOF) this will feed straight into the HNO process.

<sup>5</sup> See '[Step-by-Step Practical Guide for Humanitarian Needs Overviews, Humanitarian Response Plans and Updates](#)', HPC, April 2020 on how to prepare for joint inter-sectoral needs analysis.

## Defining your objectives, research questions, indicators and questionnaire questions

Before you start any data collection (primary as secondary), common objectives and research questions (for instance, how many people are in need of WASH assistance, what are the priority areas, what are the key WASH interventions that need to be implemented given the context, etc.) need to be identified. The best way to go about this is to convene a meeting together with the WASH Cluster partners. Besides ensuring your assessment stays focused on what you are trying to obtain, this process will avoid duplicating assessment efforts in the early phase of an emergency and prevent assessment fatigue within affected populations

### Key features of core indicators

Once you have defined your objectives and research questions, you can start developing your core indicators both at household and community/site levels. The GWC has developed an indicator bank<sup>6</sup> of relevant WASH indicators, questionnaire questions and choice options. This is an exhaustive list of tested and validated indicators, which should be applied to the greatest extent possible in order to ensure, best possible data quality, proper harmonization and that research questions are answered. However, some alterations are possible to adapt to the context. In addition, the WASH HNO process would also need to take into account indicators from other sectors that are relevant to calculate the final WASH PIN. For example health indicators such as prevalence of waterborne diseases as well as nutrition indicators such as GAM and SAM. Other sectors should be consulted in regards to indicators that indirectly measure WASH needs in order to ensure that they adhere to the relevant sectoral standards and eventually measures what they intend to.

The purpose of the core indicator system is to collect the basic crucial WASH data, covering the largest possible part of the affected population, at the highest frequency and with the minimum effort. For the system to succeed and be adopted by the different organizations, the core indicators need to be:

- **Few:** The list of core indicators and questions should be short and concise - preferably around 5 indicators measured by no more than 10 questions, because there is limited space in multi-sector data collection initiatives and WASH agencies that run their unilateral sectorial assessments may need to ask agency-specific questions, which reduces the space for core indicators.
- **Flexible:** Core indicators and questions should be developed both at community and household level, so that data collected through assessments that use different unit of measurement is still comparable.
- **Consensual:** The process of developing the core indicators and questions should be as participatory as possible to develop a sense of ownership among the different organizations that will be keener to adopt them.
- **SMART:** Specific indicators should also be SMART – that is, specific, measurable, achievable, relevant and time-bound.

The table below shows the most commonly used core indicators for needs assessment. These indicators can be considered the bare minimum of WASH indicators that should be used in any household or community level needs assessment.

Theme	Indicator at household-level	Proxy indicator at community-level
Water	Proportion of households having access to an improved water source	Proportion of communities where people have access to an improved water source
Water	Proportion of households accessing an adequate/sufficient quantity of water (or calculation or litres/person/day)	Proportion of communities where people access an adequate/sufficient quantity of water
Hygiene	Proportion of households having soap at home	Proportion of communities where people have access to soap
Sanitation	Proportion of households using a sanitation facility – by type of sanitation facility used	Proportion of communities where people have access to functioning sanitation facilities – by type of sanitation facility most commonly used

<sup>6</sup> Find link to the [GWC Assessment Indicator Bank here](#)

See Annex 2 for JIAF indicator and specific COVID-19 indicators. Note that if the JIAF methodology is to be used then it is recommended to only use those indicators. If other indicators are to be used, it is better to focus on the binary PIN methodology (see section 2.1 on sectoral analysis).

Once all indicators have been developed you need to identify the critical indicators (ideally 1 or 2) which would immediately put a household or an area in an acute PIN category, i.e. indicators that are immediately life threatening. Some of the indicators listed above could be used as critical indicators. However, they need to be contextualised and aligned with sectoral standards.

When the first draft of your research questions and indicators are finalised, if you have a strategic advisory group (SAG) then have them review and approve the final version after which you circulate it among the WASH partners to collect their feedback before proceeding with formal approval at a coordination platform’s meeting. The key to a successful core indicators harmonization is buy-in from partners, and so their inclusion in the design process is crucial to ensure they will actively seek to collect and share those indicators.

The next step is to proceed in developing the associated questions, both at household and community levels. It is advisable to in particular engage key local partners in regards to cultural and language considerations when designing questionnaires. A workshop or discussion can be arranged to ensure their feedback is taken into consideration. Find below an example of questionnaire question development for one core indicator:

Indicator	Questions at household-level	Proxy questions at community-level
Proportion of households/communities by type of primary source of drinking water	What is the main source of water used by your household for drinking?	What is the main source of water used by people in the community for drinking?

### Mainstreaming core indicators

As explained previously, core indicators and questions need to be mainstreamed across as many data collection initiatives as possible. For this, map down the assessment eco-system (who collects what, when and how), including WASH partners and other assessment actors (such as other clusters, IOM-DTM, REACH, etc.) collecting WASH data on a regular or ad-hoc (for example rapid assessments in the aftermath of a shock) basis.

Get in touch with each of them, and request to embed core questions in their data collection tools. In addition, ask them to share their data on a regular basis, for you to maintain a common dataset with all data collected through core indicators and questions by the different organisations.

## 1.2. Conducting a Secondary Data Mapping and Review

Whether in the aftermath of a sudden-onset or during a protracted crisis, a large amount of data is usually available to WASH Coordination Platforms. This data, collected by actors such as national governments, NGOs, UN agencies, development organizations, plays a crucial role in humanitarian needs assessments but is often challenging to analyse and process because the amount is overwhelming, the quality is uneven and the coverage partial. To make sense of existing data, a helpful tool is an assessment registry<sup>7</sup> and a Secondary Data Review (SDR), that will allow you to collect, collate and analyse all the available data. This exercise will also permit to identify critical information gaps and determine if field assessments are necessary to collect primary data, as well as provide contextualisation of findings from a potential primary data exercise. A good detailed and generic guideline to doing SDR in sudden-onset emergencies can be found [here](#).

The secondary data mapping and SDR should ideally be ongoing throughout the year, making it a continuous and iterative activity.

<sup>7</sup> The assessment registry is a good resource to use to identify secondary data to be included in a SDR.

The HNO period provides a great opportunity to make use of the secondary data mapping and help determine what is and isn't known (information gaps), the scope and scale of the crisis, the response gaps and WASH priorities, etc. It also allows the opportunity to conduct a more in-depth SDR that can help inform WASH strategic planning, priority areas or groups, indicative or minimum activities, and appropriate metrics to track the impact of the response.

In terms of outputs, the secondary data mapping provides a matrix or a registry (generally in excel), as well as an organised folder structure containing the reviewed documents. You can find WASH-specific templates and examples [here](#). If time and capacity allows, a full SDR should be conducted, where the data is analysed and findings produced, along any primary data that would have been collected, to produce a report that can assist in developing the HNO. The findings from the SDR can, if good enough household or area level data, be used to directly support the WASH PIN calculations - more details on data analysis can be found in a separate chapter below.

When building your database, is important to take into consideration all types of data types and sources, from other sectors and inter-sectoral, that could contribute to answering your research questions. However, some of the priority WASH-related data you should seek to include in your SDR, at any time of the HPC, can be found in the table below as well as in the WASH section of this [UNICEF Guidance Note](#):

Information	Source	Purpose
Statistics from the health surveillance system Info should be as specific as possible (For example, endemic diseases in area, recent outbreaks) and follow admin boundaries if possible	Ministry of Health or Health Cluster	Helps to identify the scope and scale of the crisis, notably by flagging underlying that factors that may exacerbate the crisis
Estimates of general access and coverage for water and sanitation at community level as well as at key institutions (hospitals, health centres, etc.	Municipalities/ Service Provider MICS (UNICEF), WHO JMP	Should be used as a baseline to understand the results of the assessments
WASH setup/ structure in the government, about service delivery at all levels	UNICEF, UNDP or WHO, Ministry of Water; Structure running water services	Should help facilitate the organisation of assessments and logistics. Use to identify key informants
Mapping of private sector and market, specifically relating to water and access/storage/availability of hygiene NFIs	UNDP; Municipalities in more developed countries; Service providers (ex: (water trucking)	Estimate alternative ways to supply safe water/ depending on the situation possibly an indication on coping mechanisms. Map the market for availability of hygiene items
Multi-sectoral needs assessments (MSNAs)	Often REACH Initiatives in country and relevant coordination body.	Provides standardized set of core sectoral indicators, allowing for cross-sectoral analysis
Functioning of solid waste management and disposal as well as desludging	Municipalities UNICEF/UNDP programs	Should help facilitate the organisation of assessments and logistics; baseline
Mapping of existing water and wastewater infrastructure (water sources, treatment plants, distribution networks, etc.)	Municipalities, water authorities	Get an overview of existing solution to understand type of intervention needed
Shelter connections to water and sewage system	Shelter Cluster (for building damage)	Should help facilitate the organisation of assessments and logistics; baseline
Quantity, frequency, quality, and other information about water provision	Water providers/municipalities. SDR (REACH, ACAPS, etc.)	Baseline
Functioning of water treatment units (for piped water system)	Municipalities	Should help facilitate the organisation of ongoing assessments and logistics; baseline
Info related to hygiene: type and numbers of community health workers, availability of IEC materials, radio stations or other broadcasting methods	Municipalities, communities, radio	Prepare response
Maps (administrative, land use, hydro/ geological, social, etc.)	Logistics Cluster, IM NGOs (REACH, ACAPS, MapAction), OCHA	Visualisation, baseline, facilitate the organisation of assessments and logistics

### Recommendations for the SDR matrix document

- **Use scroll-down menus as much as possible (excel):** They will ensure that all entries are written in the same way, and will greatly facilitate the analysis of the data. Use the “options dropdown” tab to enter your choices of answer

- **Include a reliability score for the data:** You can follow the scale proposed in the SDR template, or adapt to your context. Regardless of your choice of scale, it is crucial that you rank the different pieces of information. If, for example, you have 2 sources stating different findings for a same location, you will be able to identify which source is more reliable.
- **Make sure you keep all your documents in one, easily accessible folder:** Dropbox is generally the preferred option, but in locations with limited internet access, a common server or external drive are also valid options.
- **Summarize datasets to integrate into your SDR:** When compiling your secondary data, you will often come across very useful information that may be difficult to enter into the SDR tool because the information is part of a larger dataset. Rather than trying to bring all data directly into your SDR tool, it may be easiest to do a small analysis or summary of the relevant information first and then record the summarized information into your SDR tool.
- **Use the SDR to improve Cluster buy-in and harmonization of assessments:** Share your SDR data and findings regularly with Cluster members. If done correctly and kept up-to-date, the SDR information will prove to be an invaluable source of information for Cluster members who can also be good sources of secondary information themselves. Should partners wish to collect their own primary data, the SDR findings should inform their questions and methodology and lead ideally, through leadership and coordination from the Cluster team, to an increase of harmonization of assessments.

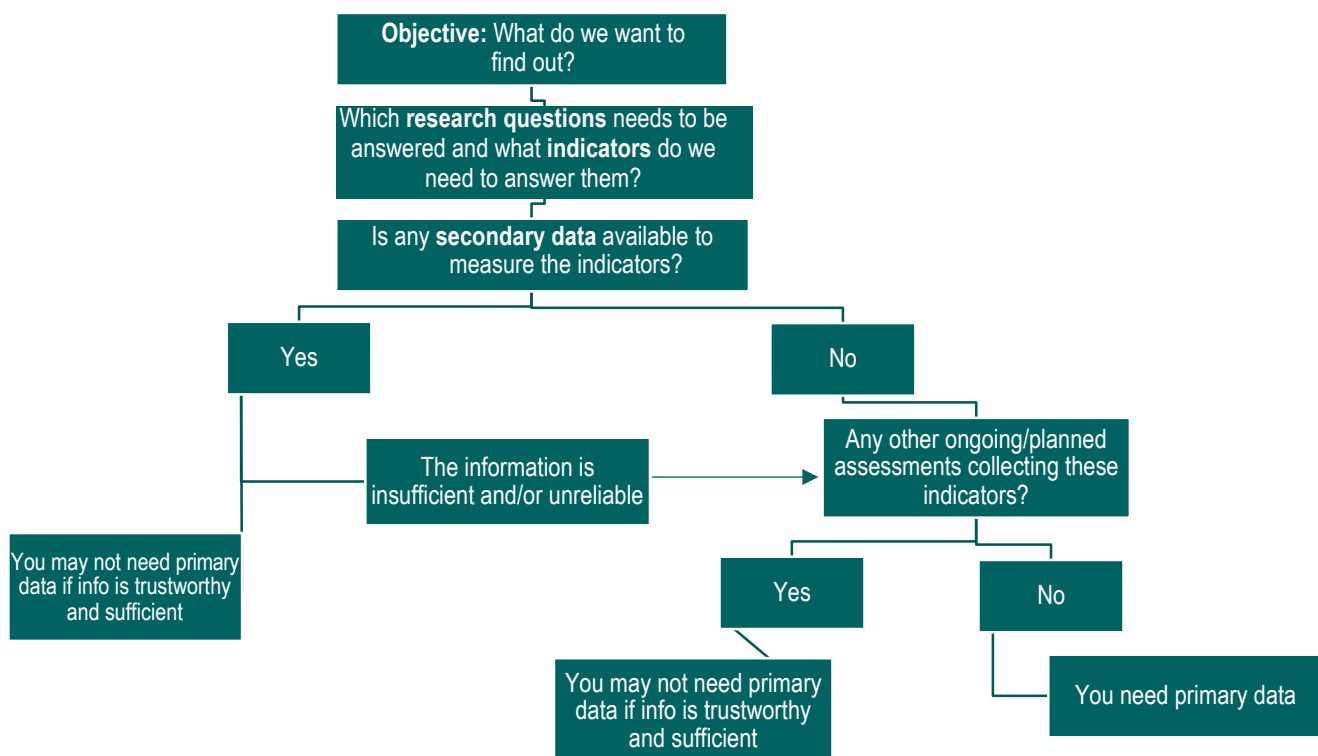
### 1.3. Collecting Primary Data

Once the SDR has been done, it may be necessary to collect primary data to fill the information gaps. Ensuring a good coverage of WASH primary data collection will allow the WASH Cluster Teams to:

- Verify emergency WASH coverage assumptions and conduct gap analysis;
- Define a response plan;
- Establish a baseline and method for monitoring & evaluation.

It is important to keep in mind that data for HNO can be collected all year long, and so monitoring activities, emergency response initiatives, such as the Rapid Response Mechanisms (RRM) or assessments from other sectors (ex: SMART surveys) can represent great sources of data and often contain indicators that will be of use to the WASH platforms. When resources for specific cluster assessments are not available, the WASH Cluster may have to rely on assessment data collected by partners for their program during the year, and provide them in advance with a harmonized assessment framework.

The decision tree below can and help you assessing whether there is a need for primary data collection:



If primary data is needed, you can select the priority area to be covered by the assessment to be conducted by answering the following questions, keeping in mind the key humanitarian priorities and what other key clusters WASH will need to support in terms of both needs evaluation and response:

- Where are the greatest needs? (Most affected and most vulnerable)
- Where can the cluster have the greatest impact? (Think response planning)
- Where is the response gap/ a lack of assistance? (Coordinate with other actors to see who is responding where)

In addition to the above, given the restrictions in place in many countries to combat the spread of COVID-19 (e.g. physical distancing measures, lockdowns, curfews etc.) you will also need to consider what data collection methods you are going to use or access and which ones are safe to use (both for data collection teams and communities where data is to be collected). If face-to-face household level data collection is not possible, then this might affect the level of granularity you are going to be able to produce, or you might have to consider alternative remote data collection methods for household data.<sup>8, 9</sup>

When it comes to primary data collection specifically aimed at informing the HNO, there are two main types of assessments that commonly feed the HNO process: multi-sector needs assessments (MSNAs) and sector-specific assessments, including the WASH ones.

### ***Multi-sector needs assessments (MSNAs)***

MSNAs are usually coordinated by an Assessment or IM technical working group (TWiG), facilitated by REACH and supported by other agencies specialised in assessments such as IOM-DTM. The methodology, tools and timelines are often the result of consultations with the different coordination platforms in the framework of the TWiG. The WASH Coordination Platform should be actively involved in these discussions to make sure that the WASH data that is collected meet the platform's information needs. Another key thing to consider during the TWiG discussions is the inclusion of the WASH core indicators and questions to ensure the data collected is harmonised with data coming from other sources.

### ***Sector-specific WASH assessments***

Given the limited space for WASH indicators in MSNAs, the WASH Coordination Platform may want to complement this with an in-depth sectoral assessment. Sectoral assessments are carried out when a more detailed understanding of needs and vulnerabilities is required to inform strategic planning and operations design, and when resources and capacity are available. Given their scale and scope, those assessments take time<sup>10</sup>, require resource mobilization, and are often carried out in partnership with multiple WASH agencies and the coordination platform should play an active role to ensure a high degree of coordination. To facilitate this, a time-bound sectoral assessment TWiG can be established.

Depending on the degree of the coordination, the sectoral assessment will be harmonised or joint. In harmonised assessments, data collection and analysis are undertaken separately, however the data is sufficiently comparable to be compiled into a single database, and to serve as the subject of a shared analysis. To ensure a harmonised approach, it is important that the cluster push for the use of common operational datasets and key indicators, as well as facilitate the geographical and temporal synchronization of data collection. Failing to coordinate geographical coverage and using common indicators / time-frame of data collection leads to data being incomparable and parts of the affected population missing from the data (often those that are harder to access and most vulnerable, i.e. where agencies aren't providing assistance). More coordination with result in a joint assessment, i.e. an assessment in which every component, from data collection to analysis, form one single process among WASH partners, leading to a single report. In a joint assessment scenario, the WASH Coordination Platform is much more involved as it needs to lead the entire process, from methodology design to the final analysis. Given the resources that this requires, coordination platforms often request support from agencies specialised in assessments.

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<sup>8</sup> See REACH [SOP for data collection during COVID-19](#)

<sup>9</sup> See [section 2](#) for different scenarios when calculating the PIN

<sup>10</sup> If the sector-specific WASH assessments are intended to inform the HNO, then the planning needs to start at least 6 months in advance

## 2. The HNO Process Itself and the Data Analysis

Once all the available data has been compiled, the WASH platforms will produce a sectoral analysis based on key indicators for measuring WASH-related needs, estimate the number of people in need PIN of WASH assistance and work on a WASH severity mapping. Once this is complete, the sectoral PINs should be used as a source by the HNO team when developing the inter-sectoral, response level PIN and needs prioritization. In protracted crisis, OCHA gives the clusters the total number of affected people and then clusters need to develop their own PIN. This is intended to harmonize the PINs from the clusters and to make sure that the clusters stay within the bounds of the total affected population. This figure usually comes from large data sets such as displacement data or IPC data.

### 2.1. Sectoral Analysis

It is important that the WASH sectoral analysis process be closely aligned with inter-sectoral guidance. For example, to determine the WASH PIN, the sectors will first need to reach an inter-cluster consensus on the targeted geographic resolution and affected population (i.e. the administrative level / population to be included in the PIN) to ensure proper integration.

#### Estimate WASH People in need (PIN) figures

When facing a disaster, people have different levels of needs based on their location and profile, amongst other factors. Some communities are more affected than others, some are more resilient than others, and they also face variable risks for human life. For example, acutely malnourished children are more at risk of dying from diarrhoea than adults displaced by flooding. In addition, areas with poor access to clean water and handwashing facilities might be more at risk of more severe COVID-19 and other disease outbreaks. As a response cannot reach all affected population, WASH coordination platforms must prioritize the WASH needs by defining the PIN, to know which areas should be targeted in priority for response analysis. Of course, prioritising intervention is never an easy or simple process, and although there are many ways to do it, one should always ensure each step of the process is documented and justified; an in-depth look into approaches, practices and pitfalls can be found in the technical note [Severity Measures in Humanitarian Needs Assessments](#).

The IASC IM Working Group, in their [Humanitarian Profile Support Guidance: Humanitarian Population Figures](#), define people in need (PIN) as “all the people affected by a crisis and in need of a humanitarian intervention to cover their basic needs”. It is important for WASH Clusters to clearly define which people should be considered in need of WASH assistance, and to understand that not all people affected will be in need, while not all people in need can be targeted. The guidance cited above explains these complex concepts and should be referred to as needed throughout the PIN estimation process.

As part of the HNO analysis, WASH Clusters will be required to estimate the number of people in need at the (lowest possible) established administrative level, generally distinguishing between people in “acute need” (PIN severity 4-5) and “moderate need” (PIN severity 3). Clusters have multiple options from which to calculate the PIN.

Often, general vulnerabilities (ex: refugee or IDP status) or conditions related to other sectors (ex: famine, cholera) will play an important role in determining the WASH PIN. As health and food/nutrition often occupy a key role in crisis, they will have a heavy influence, either directly by providing other sectors with their PIN, from which WASH would select a sub-section, or by having one or multiple indicators within the WASH PIN calculation. It is therefore important to be aware that while sectoral analysis must take place, it should not be done in a vacuum and must be strongly aligned with multi-sectoral guidance.

When deciding on the method for defining the WASH PIN, it is important to take into consideration which data scenarios that fit your context, there are two: one in which you have a good amount of WASH data generally with a substantial amount of generalizable household-level data (data-rich), and one where you don't (data-poor) and where your data source is at the area level. This will heavily influence how you will proceed to calculate your PIN.

In order to obtain a percentage breakdown of the population in need by severity class (which is useful to guide prioritisation and determination of PIN and may be requested by OCHA to support the inter-sectoral HNO analysis), one of two aggregation methods



can be used, depending on whether a severity scale exists for the indicators that will be aggregated:

- A. Pre-defined / tested severity scale (1-5) does NOT exist for each indicator: Use a binary “MPI-like”<sup>11</sup> approach, where indicators are aggregated based on 1) percentage of indicators where a household or area has been identified to have a need and 2) occurrence of “critical” indicators.
- B. Severity scale exists for each indicator: WASH (and other cluster) indicators in the JIAF indicator list have defined severity classes ranging from 1-5. If these are the only indicators you want to use to determine your PIN, you can instead use the current JIAF aggregation method to obtain the percentage breakdown by severity class.

Scenario A is recommended as it provides a more straightforward way of calculating the PIN. The main steps for each situation are as follows:

### 1) Rich-data areas (generally with household-level data, at least in some areas)

Household-level data allows you to calculate the PiN / severity at the lowest unit of analysis (i.e. the household) based on the pre-agreed definition of needs, and then aggregated up. This means “links” between indicators for each households are known, i.e. we know which households lack access to an improved water source AND access to sanitation. Hence it can more precisely define PIN.

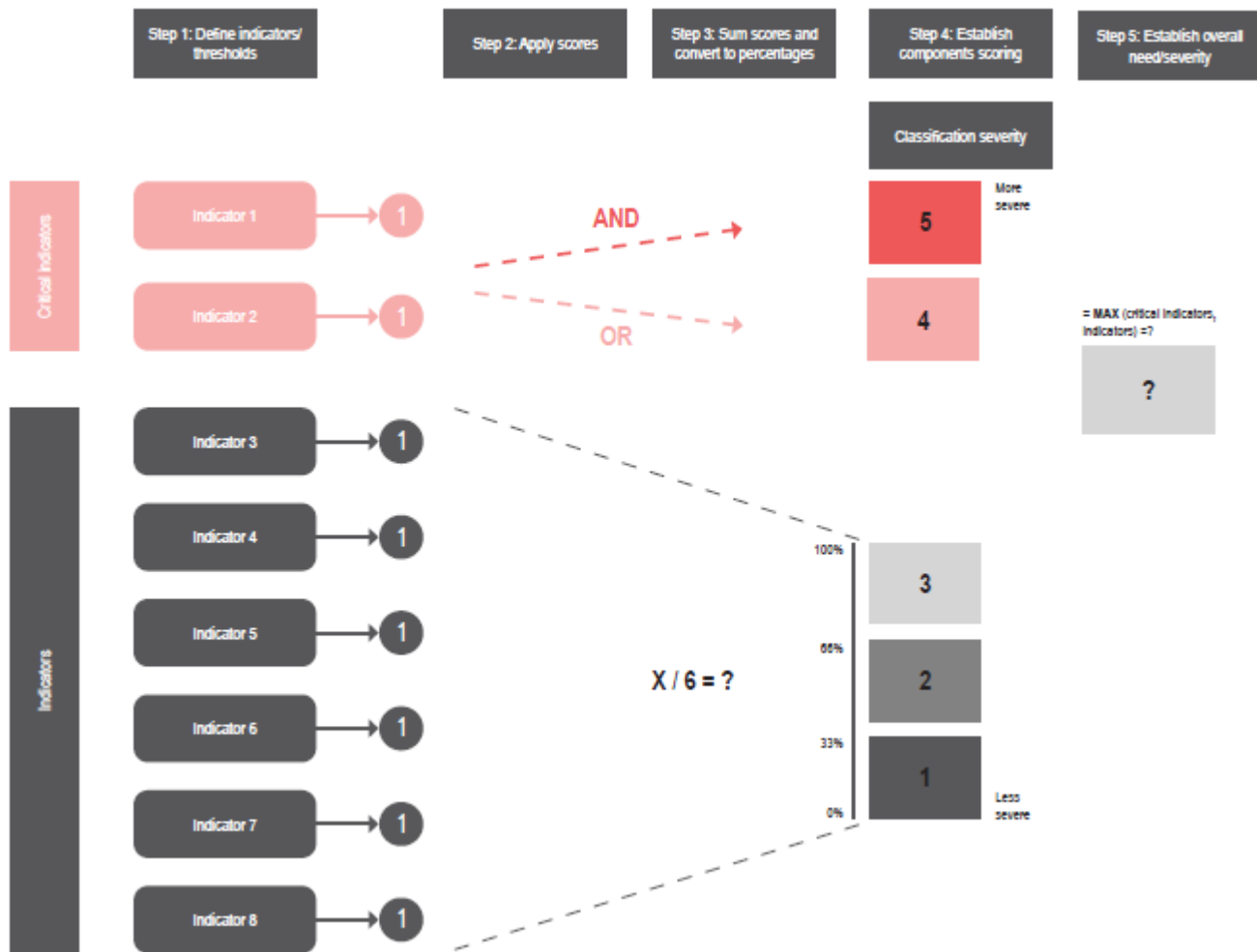
**For scenario A** an example of this process is the following:

- Identify the critical indicators and the compounding indicators (e.g. less than 15 litre of water per day per person) as mentioned in section 1.1 above
- Apply binary scores for each indicator. For example, “does the household have access to less than 15 litre of water per person per day?” where Yes = 1 and No = 0
- If a given household score is 1 in any of the critical indicators, the household will be classified as more severe (4 or 5). It is therefore important to really think through the critical indicators beforehand, to make sure not all households end up in the highest severities.
- For all the other households the score will be based on the remaining indicators, i.e. the percentage of indicators that have a score of “1”
- If you have area level data for the indirect indicators from other sources (other cluster data and SDR), then calculate the score for each indicator for all the areas/population groups and apply the score to the household data.
- Establish overall needs/severity for each household by looking at the maximum score given by the compounding indicators and the critical indicators
- Establish the severity score for the area by aggregating all the individual household scores and calculate the percentage of households in each severity phase. Then add up, from right (severity five) to left, the percentage of households in each severity phase until you reach 25%
- Establish the PIN number by projecting the percentage of households in severity 3-5 on the affected population figures

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<sup>11</sup> [Multi-dimensional Poverty Index](#)

The below describes the process of arriving at the overall need/severity by following scenario A – binary indicators:



For scenario B the following process should be followed<sup>12</sup>:

- Identify key indicators (up to five/six) - If data for JIAF indicators, or pre-tested indicators with severity thresholds from 1-5, exist then use those and the related severity scores.
- Classify the indicator values along a five-point scale to determine the indicator severity, where indicator values of 3 represent moderate need, 4-5 acute need while 2 or less signifies not being in need<sup>13</sup>
- Prepare the household and area level datasets by coding each indicator value to represent the severity score in both data sets.
- Merge the household and area level indicators adding all the area level indicators to the household level data set.
- Aggregate the indicator severities using the "Mean of Max 50% of indicators",<sup>14</sup> if there are more than four indicators, or calculating the mean if there are less than four indicators, to determine the WASH severity score.
- Confirm if any critical indicators (as discussed in section 1.1) have a severity higher than the final WASH severity score. If that is the case, then replace the WASH severity score in that area with the score for the critical indicator.
- Calculate the percentage of households that are falling under each severity class.
- Establish the severity score for the area by adding up, from right (severity five) to left, the percentage of households in each severity phase until you reach 25%

<sup>12</sup> An example of this scenario will be added once the JIAF guideline is finalised

<sup>13</sup> JIAF indicators and severity scale will be shared once finalised.

<sup>14</sup> The "Mean of Max 50%" means that if you will calculate the mean of 50% of the indicators with the highest scores and that will determine your final aggregated severity score.

- Sum the percentage of people/HHs with a severity score of 3-5 to determine the number of People in Need (PIN) for each geographical area (district, region, nation) and affected groups (residents, returnees, IDPs), by projecting the percentage on the affected population figures.

## 2) Data-poor areas (area-level data only, no household-level data)

This is the most likely scenario during COVID-19 as it is more difficult to conduct face-to-face household level data collection and key informant data is more likely to only provide settlement/area-level data. You also have two data-poor scenarios that requires different methods of analysis; 1) you have access to only area level data in all target areas, and 2) you have area level or household level data in some target areas but no data at all in others. In the latter scenario, you would need to use extrapolation methods, informed and confirmed by expert judgement. Below is an example of the process to follow for scenario A and B:

**Scenario A:** follow the same approach as for data-rich areas but use community level indicators instead of household level indicators.

### Scenario B:

- Identify key indicators (up to five/six) - If data for JIAF indicators exist then use those and the related severity scores.
- Build a severity 5-scale for each indicator
- Summarise all indicators for each area / population group, by percentage per severity class in each data set and add into one dataset.
- Aggregate the geographical area/population group and indicator in the aggregation dataset by applying a “25% rule” i.e. adding up the cumulative sum from right to left, until reaching at least 25% of the population, to obtain the overall area indicator severity class
- For each area and population group calculate the “Mean of Max 50%”<sup>13</sup> of all the area indicator's severity class scores, if there are more than four indicators, or calculating the mean if there are less than four indicators
- Estimate the minimum number of people falling under each severity class by multiplying the total population with 25%. For example, if your final area severity class is 4 in a given area, and the total population is 50,000, your estimated number of people in severity class 4 would be (50,000 \* 25%) 12,500.
- As a final step, review the critical indicators and report separately if any percentage of the population has been found to have a moderate to acute severity class (3-5).

While the above scenarios are recommended, there are other available options and ways proposed to proceed to calculate the PIN, for example the [2018 Yemen HNO Guidance](#), proposed by OCHA, and the [2020 Whole of Syria \(WoS\) HNO](#), developed by the WoS sector and WoS hub-level WASH coordination teams.

It is critical that the Cluster Team leads on having a clear and well documented methodology for calculating the PIN. As outlined in this document, there are numerous methodologies and strategies for undertaking this process and experience shows that what is important is a transparent and well-defined PIN methodology that will allow for stakeholders to understand how the needs are being framed. The [WASH PIN Methodology Note from the Northeast Nigeria](#) WASH Sector from 2017 as well as the [WASH PIN Methodology Note from the Somalia from 2019](#) are good examples of documenting a WASH PIN methodology. The WASH PIN methodology should have strong input from WASH partners and be endorsed by the SAG.

### Establish WASH severity scale and mapping

A severity map is used to show concentration of needs based on geographic locations. There are no consolidated ways of implementing a WASH severity mapping as it depends on the level of information and time available. Once you have established WASH PIN in each of the regions of a country affected by a crisis, i.e. the output you have from the aggregation above, you can map out the % of PIN as compared to the whole population. An example of what a WASH severity map looks like can be found [here](#).

In addition, if you also have access to information on what type of needs and associated risks that are predominant in each region. (ex: some regions may be at risk of disease outbreak, and others more at risk of food insecurity), then you can classify the regions by crossing PIN numbers with estimated risks for human life (people at risk of outbreak are prioritized, as they may quickly die without intervention). Similarly, if you have access to information on local capacities (ex: in region A, there is a well-equipped hospital where people affected by cholera can be treated), then you can also use that information to do your mapping.

When there are a lot of geographical areas to be mapped, it is impossible to cross several indicators with a qualitative approach. In that case, analytical tools to integrate several indicators must be used. Two available software are INFORM, as well as 1000minds which has been used in multiple settings. 1000Minds software is a simple and transparent method to identify vulnerable populations, without the need to shape available data to fit pre-defined weights, is to use multi-criteria analysis on the data that is available at the time of the emergency. It also allows a participatory approach on how the sector defines weighting of datasets which can be done by as many stakeholders/partners as needed. In the [WASH Prioritization Tool folder](#), you will find a WASH-specific step-by-step manual to use 1000Minds to calculate the needs/priorities of the affected population, as well as example datasets, results and lessons learnt from the Horn of Africa.

Regardless of the approach taken, the process and results of the exercise should be documented and available to other Clusters and WASH partners. The best available datasets at the time should be used; the model can be re-run when better data becomes available and should be repeated periodically in an ongoing response.

## Annex 1: HNO Checklist for WASH Coordination Practitioners

### Core Indicators and Questions Design

Develop core indicators, preferably around 5, and corresponding questions
Convene a SAG/partners/TWiG meeting to finalize the core indicators
Design questionnaire based on core indicators
Have the Cluster partners review and approve tool
Train partners on WASH assessment methodologies
Establish standard assessment tools and guidelines
Define and translate key assessment terms and general definitions, to ensure these are used similarly across the board (ex: what is considered an improved water source in your context)
Mainstream and disseminate core indicators/questions to partners, other clusters as well as multi-sectoral data collection initiatives (harmonization)

### Secondary Data Collection

Create a list of decisions/questions/information needs, i.e. your analysis framework. Use the <a href="#">Guidance Note</a> to assist you
Contextualize your <a href="#">SDR template</a> (or relevant compilation tool). When contextualizing, be sure to create various tags you will use based on how you wish to be able to sort, filter and analyze your information once compiled (for example: geographic locations, thematic issues, etc.)
Compile all relevant sources of information (documents, websites, datasets, etc.) into a shared location, such as shared Dropbox or Box folders. This will be an ongoing process as more information sources are found. If several people contribute to the SDR, make sure there is one person taking the lead and ensuring there is a common understanding of how to use the matrix and how to tag information.
Divide the information to be entered amongst the team and record who will be responsible for reading and entering data for each source.
Read the sources, enter relevant information into your SDR tool and tag the information accordingly.
Note: As you enter data into the SDR tool, you will most likely see the need for additional tags (and perhaps removal of others that are not needed). You should update the SDR tool accordingly, communicating all changes with other team members
Compile entered data into a single database. If your team chooses to use online tools such as Excel Online, no compilation is needed. If working individually offline, select one person to be responsible for merging the different SDRs into a single database.
Clean the compiled secondary data to ensure data has been entered and tagged correctly.
Analyze the secondary data. This should be done per your pre-defined tags and analysis questions and should aim to identify your information gaps.
If you need more than a matrix, draft a SDR report (you can use the <a href="#">WASH Cluster SDR Report template for this</a> ); this can be either a formal report that is shared with partners or a simple, informal running list of key findings and information gaps that is used internally.
Plan for how to ensure the SDR remains up-to-date with regular analysis updates once the initial round of SDR entry and analysis is completed. Assign one SDR focal point to manage this process.
Disseminate your Secondary Data Review findings

### Sectoral Primary Data Collection

Convene a time-bound assessment TWiG
Define collectively the scope and scale of the assessment
Draft common TOR, including methodology, coverage, timeline
Prepare Kobo/ODK questionnaire based on common indicators and questions
Train partners' enumerators on data collection
Coordinate data collection among partners
Perform centralized data follow-up/cleaning
Consolidate into a single dataset data collated from partners
Provide a registry of completed and planned assessments, as well as information gaps, to OCHA.

### Analysis

Analyze data at a joint analysis workshop
Define WASH PIN Methodology
Estimate WASH PIN figures
Implement WASH severity mapping
Provide narrative analysis and key figures and caseloads
Approving jointly-defined cluster or inter-cluster priority humanitarian needs
Convene meetings with partners and other stakeholders to validate and get agreement on findings and priority needs
Determine initial response planning and whether further assessment will be required
Produce joint information products

## Annex 2: Core Indicators

### COVID-19 specific indicators that should be used in addition to the core indicators

Theme	Indicators at household-level
Water	Proportion of households by type of primary source of drinking water
Hygiene	Proportion of households having bleach or equivalent at home
Hygiene	Proportion of households disinfecting regularly latrines
Hygiene	Proportion of households disinfecting regularly their homes
Sanitation	Proportion of households sharing sanitation facility - by number of HH per sanitation facility
COVID-19 Measures	Proportion of households that are aware of COVID-19 risks to health and vulnerable groups?
COVID-19 Measures	Proportion of households putting in place measures to protect themselves against COVID-19
COVID-19 Measures	Proportion of households reporting they are aware of protection measures such as physical distancing related to COVID-19/the current case of coronavirus
IEC	Proportion of households reporting having received information on COVID-19/the current case of coronavirus
IEC	Proportion of households by preferred means to receive information on COVID-19/the current case of coronavirus , by type of means
IEC	Proportion of households by most trusted means to receive information on COVID-19/the current case of coronavirus , by type of means
Theme	Indicator at area/community-level
Water	Proportion of communities by type of primary source of drinking water
Hygiene	Proportion of communities having bleach or equivalent at home
Hygiene	Proportion of communities disinfecting regularly latrines
Hygiene	Proportion of communities disinfecting regularly their homes
Sanitation	Proportion of communities sharing sanitation facility - by number of HH per sanitation facility

<b>COVID-19 Measures</b>	Proportion of communities that are aware of COVID-19 risks to health and vulnerable groups?
<b>COVID-19 Measures</b>	Proportion of communities putting in place measures to protect themselves against COVID-19
<b>COVID-19 Measures</b>	Proportion of communities reporting they are aware of protection measures such as physical distancing related to COVID-19/the current case of coronavirus
<b>IEC</b>	Proportion of communities reporting having received information on COVID-19/the current case of coronavirus
<b>IEC</b>	Proportion of communities by preferred means to receive information on COVID-19/the current case of coronavirus , by type of means
<b>IEC</b>	Proportion of communities by most trusted means to receive information on COVID-19/the current case of coronavirus, by type of means

**JIAF indicators:**

<b>Theme</b>	<b>Indicator at household-level</b>	<b>Proxy indicator at community-level</b>
Water	Proportion of households having access to a sufficient quantity of water for drinking, cooking, bathing, washing or other domestic use	Proportion of communities where people are having access to a sufficient quantity of water for drinking, cooking, bathing, washing or other domestic use
Water	Proportion of households having access to water sources of sufficient quality and availability	Proportion of communities where people are having access to water sources of sufficient quality and availability
Hygiene	Proportion of households having access to sufficient handwashing facilities	Proportion of communities where people have access to an sufficient handwashing facilities
Sanitation	Proportion of households facing environmental sanitation problems (living in areas where solid waste, water waste, open defecation was visible around their accommodation - 30 meters or less)	Proportion of communities facing sanitation problems
Sanitation	Proportion of households having sufficient access to a functional and improved sanitation facility	Proportion of communities where people have sufficient access to a functional and improved sanitation facility
Sanitation	Proportion of households using a sanitation facility – by type of sanitation facility used	Proportion of communities where people are using a sanitation facility – by type of sanitation facilities used