Module 1
Population

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Population

1.1 WHAT ARE THE TOOLS USED FOR DATA COLLECTION?

UNHCR collects population data in support of its activities to protect and assist refugees. This entails the ongoing monitoring of arrivals, departures, births and deaths within each camp.

In most countries, there is no single tool which can be used to collect population figures. Population data is often collected from a number of overlapping and duplicating sources. Between them, these sources need to track arrivals, departures, births and deaths to ensure the population figure is continually kept up-to-date.

Refugee population data are often computerised in a UNHCR registration database (called proGres). Birth and death registers may be maintained by health partner, government and UN agency sources. Voluntary repatriation and resettlement data may also be managed by separate government agencies or implementing partners.

1.2 WHO IS RESPONSIBLE FOR COLLECTING THE DATA?

A combination of sources is generally required to obtain a comprehensive population figure. Responsibility is likely to be shared between a number of agencies working to collect population data for different purposes and ends.

It is important that all health agencies agree upon and use the same population figures. Partners should reach consensus on which data sources to use and request updated figures each month.

The recommended source of camp population data is the UNHCR proGres database, which is continuously updated with arrivals, departures, births and deaths. In most refugee settings this represents the most accurate and authoritative source of population data.

In settings where proGres data is not available, or is deemed to be inaccurate, it is possible for partners to use other sources of population data. Alternatives include percentage estimates, community-based figures and survey/census data. The source used should be clearly indicated on the Excel Reporting Form (see 1.5 How should data be interpreted and used)

1.3 WHAT DATA SHOULD BE COLLECTED AND HOW?

Population data serves a number of critical functions within the HIS. It is used to determine the:

- size of the target population*;
- size of selected sub-groups;
- denominators for mortality, morbidity and other rates;
- resource needs for health interventions.

* Note the local population should not be included in this figure. Reliable estimates are often not available and the use of host data to calculate indicators within the HIS is fraught with difficulties.

To ensure the accurate calculation of any rate it is necessary to first define the population at risk and then determine the number of events of interest found in that population. The denominator (population at risk) must relate to the same time period and the same population as the numerator (or event of interest). For example, in looking at gynaecological problems, we cannot include men in the denominator (population at risk) because men are not eligible to included in the numerator (number of events).

The population data requirements for the HIS are shown below (see Country Considerations Box). The task of defining the population at risk within each indicator is undertaken automatically within the computer. A prerequisite is reliable population data, broken down by age-group and sex according to the needs of the indicators.

Ideally the population of each sub-group should be updated in an ongoing fashion using 'real time' figures that are revised each month with recent birth, death, arrival and departure information. However, in some countries, this information will not be available from regular sources such as the UNHCR proGres database. They may only be collected through surveys and/or verification campaigns. In such cases the age breakdown within each population sub-group can be calculated using standard age distribution estimates. These estimates should be derived from country-specific data sets, where available, or from regional and/or other internationally accepted values (see Country Considerations Box).

The most important principle is for all partners to reach consensus on which age distribution criteria to use and to apply these consistently to a population figure which is collected from an authoritative data source.

1.4 HOW AND WHEN SHOULD THE DATA BE REPORTED?

Each month the Health Coordinator from each NGO partner should request the most up-to-date population figures from the UNHCR and enter them into the Excel Reporting Form. In the event that the population fluctuates widely within the reporting period, the mid-month value should be used. If weekly data entry into the computer is performed then the same mid-month value should be entered into each of the weekly reports.

1.5 HOW SHOULD THE DATA BE INTERPRETED AND USED?

The accurate estimation of population figures in refugee settings can be difficult. Challenges include:

a. Rapid in and out-migration (e.g. influx following recent displacement, outflux during repatriation or resettlement);
b. Presence of non-registered refugees in a camp who are not recorded in UNHCR population figures but are entitled to receive health care; and
c. Difficulties distinguishing between nationals and refugees at the point when beneficiaries access health services.

Users of HIS should recognise these biases and be able to predict how they influence the final expression of rates, proportions and ratios. Vaccination coverage rates presented in the HIS, for example, can exceed 100% in some countries if calculated using inaccurate population estimates. However, this does not mean that they should be disregarded. Assuming that they are subject to a systematic bias the monitoring of trends in these values can still be useful.

To allow users to see what population data was used and to interpret the results accordingly, the source of population data should be clearly indicated on the Excel Reporting Form using the pull-down menu on Sheet 1.0 Population. For more information on using the Excel Sheet see Part 3 of the manual.

Country Considerations

What is the standard age distribution?

The reliable and complete calculation of rates within the HIS demands population figures that are disaggregated by specific age and sex criteria (see table 1). In some countries, this information will not be available from regular sources. Standard age distribution estimates will therefore need to be applied to the total population estimate to derive the population size within each sub-group.

Depending on the context and the stage of the emergency, the age structure of displaced populations can be heavily distorted, with excess numbers of children, women and the elderly. Therefore, where available, the age distribution estimates should be derived from country-specific values.

A recommended age distribution for the population groups within developing countries is shown in table 2 (note this specifies population groups only of relevance to the HIS). This breakdown should be adapted according to the needs of each country.

Table 1. Population (denominator) figures required within the HIS

Age Group	Disaggregation
Total population	Male, Female
Population < 1 year	Male, Female
Population < 5 years	Male, Female
Pregnant and Lactating Women	-
Women 15-49 years	-

Table 2. Recommended age distribution in developing countries

Age group	Proportion of total population
0 - 1 year	4%
0 - 4 years	20%
Total	100%
Male population	49%
Female population	51%
Pregnant and Lactating Women	6%
Women 15-49 years	20%