

Guidance on model inputs: coverage and demographic data

Guidance for touchstone 202310

Input data sources

Both coverage and demographic datasets to be used in the 2023 full model runs are available for download through Montagu. Please download and use these datasets, rather than your own datasets, to ensure consistency of estimates across the Consortium.

Coverage

There are a few coverage scenarios and these will vary by disease area: no-vaccination, default, blue-sky, and ia2030.

There are generally no coverage sets included in the no vaccination scenario, and therefore this coverage file does not contain any data apart from the header row (this differs for YF and measles).

gavi_support can be ignored. All column values are 'total'; this means either Gavi-funded or not Gavi-funded.

age_range_verbatim is a description of the age range. We have used this to infer **age_first** and **age_last**. Where age_range_verbatim is 'NA', this indicates the default age_first and age_last value for that vaccine.

coverage shows the level of vaccination coverage, ranging from 0 (0%) to 1 (100%).

Coverage and target population are now always specified at a national level. For example, where a campaign targets all ages in Region A (population 1,000,000) and achieves 90% coverage, and where the population of the whole country is 5,000,000, the coverage would appear on Montagu as 0.18 (18%) and the target population as 5,000,000. This way of specifying coverage and target population applies in both past and future years.

target is the number of individuals in the target population. This is always shown for campaigns, and is now specified at a national level. (See 'coverage' section above.) For routine, target is shown as **NA**, which means you should assume the target population matches the population shown in the demographic data downloads for the corresponding ages (age_first and age_last). HPV modellers should also filter the demographic downloads by gender=female.

pop_at_risk: This only applies to MenA and describes the proportion of the population to be targeted.

Demography

Q. What is the source of the demographic data provided via Montagu for the 2023 full model run touchstone?

A. Most of the demographic data is based on the UN World Population Prospects (UNWPP) 2022 Revision. (This is the latest available UNWPP revision.) Some datasets were augmented to fill particular gaps; descriptions for how we created these can be found here:

- [Kosovo](#) - using most recent population estimate from Kosovo Agency of Statistics
- [Marshall Islands](#)
- [Tuvalu](#)
- [Back-projection to birth for cohorts alive in 1950](#)

Q. Can I use a different set of demographic data, rather than the set provided on Montagu?

A. No. In order to ensure consistency between all models, you must use the demographic data provided via Montagu.

Q. Why does male + female not equal the total population?

A. This is a property of the UNWPP data; they provide separate data for male, female, and total, and we provide the same data.

Q. Why is population at birth (age 0) not the same as the number of births?

A. In UNWPP data, age '0-0' refers to all people under 1 year old on a particular reference day. This will differ from the number of births into this cohort during the year due to the timing, and the effects of infant mortality and migration.

Q. I require demographic data that isn't available on Montagu. What should I do?

A. Please contact us at montagu-help@imperial.ac.uk.

Q. Can I download all demographic data in one download?

A. We are still working on this functionality. For now, you will need to download each demographic dataset separately.