

## Note to users of the ASSA2008 model

The purpose of this note is to explain to prospective users of the ASSA2008 model the differences between the various versions of the model that are available for download.

There are two ASSA2008 models that can be downloaded: the 'full' model and the 'lite' model. The full model projects the growth of each of the four population groups (race groups) in South Africa and presents aggregated results as well as results for each population group. The lite model, on the other hand, does not divide the population according to population group. The lite model is therefore a smaller model which is quicker to download and quicker to run. Although the lite and full models have been designed to produce very similar results, the full model is more detailed and is therefore expected to be the more realistic of the two models.

Both the full model and the lite model have been used to simulate the whole South African population, but only the full model is used to simulate the epidemic in each of the country's nine provinces. Different parameters are used for each province and for the country as a whole, and these assumptions are contained in the 'AssumptionsProv' workbook. To run the full model and obtain the results for a particular province:

- Download the full version of the model.
- Download the 'AssumptionsProv' workbook.
- In the 'Initializer' sheet of the workbook, select the province for which you want to obtain results, in the first drop-down box. If you want to run the model for the country as a whole, select 'SA'.
- In the 'Initializer' sheet of the workbook, select the name of the full model into which you will be copying the parameters (make sure that the model is open before doing this).
- Click on the 'Copy from active workbook' button. This will copy the relevant parameters to the full model.
- You have now created the full version to model the chosen province and this can be run to produce the results you seek.

For a more detailed explanation of how to run the full or lite model and how to interpret the outputs, see the ASSA2008 user guide (also available on the website).



In order to assist those interested only in the standard model outputs, these have already been generated for each province using the full model. These outputs can be downloaded directly from the website if you do not want to go through the process of downloading and running the model. The 'ProvOutput\_110216' file contains these results, and also allows one to compare results across provinces. Note that the results in the 'Sum' sheet in this file are the aggregation of the model results for each province, and these are not exactly the same as the results in the 'SA' sheet (generated using the national full model), though the two sets of results are close. More detailed outputs than are available in the 'ProvOutput\_110216' file can be generated by downloading the models and running the models oneself.

Because of significant provincial boundary changes between 2006 and 2007, some of the provincial model estimates change substantially between these two years. These 'kinks' in the time trends are particularly noticeable for the North West and Northern Cape provinces.

The 'OrphansProv\_110216' file contains detailed orphan outputs generated for each province, using the full version of the model. These model outputs have been generated in parallel with a separate Orphans model, which is not currently available on the ASSA website. 'Maternal orphans' are defined as children under the age of 18 who have lost their mother or both parents. 'Paternal orphans' are similarly defined as children under the age of 18 who have lost their father or both parents, and 'dual orphans' are defined as children under the age of 18 who have lost both parents. More detailed explanations of the orphan outputs are provided in the 'Notes' sheet of the 'OrphansProv\_110216' file.

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