### Appendix 3: Prevention and assessment of Hepatitis B infection in refugees and migrants

#### Rationale

The prevalence of HBsAg, the surface antigen of the hepatitis B virus (HBV), is low (<2%) in France, Hungary, Italy, The Netherlands, Portugal, Spain, and the UK, lower intermediate (2 to 4.99%) in Turkey, Romania, and Serbia, and high intermediate (5-7.99%) in Albania and Iran. Available data suggest that migrants are now the major caseload of CHB in low prevalence European countries. In 2005 of the half million CHB patients in Germany 43% were migrants when migrants only comprise 13% of the population. Screening and treatment of hepatitis B in the general population varies by country across Europe. A public health consultation for the UK reported that people from countries with a prevalence of more than 2.0% of chronic hepatitis B will be at increased risk for hepatitis B. However, no guidelines exist for migrants to the European Union.

Objective: To determine if migrants arriving or living in Europe should be screened for Hepatitis B.

### Key Questions:

- 1. In migrants, does screening for hepatitis B infection reduce the incidence morbidity, mortality, and transmission of hepatitis B?
  - a. At what prevalence of hepatitis B virus in country of origin should migrants receive routine screening? What is the cost effectiveness of screening (differing screening options will be outlined)? Does this vary according to disease prevalence in the receiving country?
- 2. In migrants does screening for non-immunized status and subsequent vaccination decrease disease transmission, morbidity, and mortality?
  - a. Of non-immune migrants who should be vaccinated? What is the most cost effective method of vaccination (vaccinate all migrants on entry, screen and vaccinate only susceptible migrants)?
- 3. In migrants who are screened for and have chronic hepatitis B infection does subsequent monitoring and treatment impact morbidity, mortality, and rates of transmission?
  - a. Which migrants with CHB should be treated? What is the cost effectiveness of treatment of CHB?

## Population important outcomes:

- 1. Mortality
- 2. Chronic liver disease and cirrhosis
- 3. Hepatocellular carcinoma
- 4. Quality of life
- 5. Resource use and cost-effectiveness
- 6. Harms related to therapy (tolerance)
- 7. Household transmission
- 8. Number of unvaccinated individuals found / vaccinated
- 9. Disease prevalence

# Appendix 3 - Figure 1: Logic model, Hepatitis B

