Fact Sheet

Serological testing for immunity to vaccine-preventable diseases: ready reference

The SA Health *Immunisation for Health Care Workers in South Australia Policy Directive* was released in October 2017. General practitioners and other immunisation providers may see health care workers (current or prospective SA Health employees, and student, locum/contract or volunteer health care workers) requesting an assessment of their immune status to comply with the Policy Directive. To support doctors in making this assessment, a combined Screening Questionnaire and Certificate of Compliance (with details of acceptable evidence of immunity) is available from the SA Health website.

Information on serology testing for immunity to selected vaccine preventable diseases (VPDs) is summarised here as a ready reference with links to detailed sections in the *Australian Immunisation Handbook*.

**Chickenpox (varicella infection)**

- Consider serology only if there is no documented evidence of age-appropriate vaccination and no history of varicella infection.
- An alternative to serology is to give varicella vaccine (unless contraindicated).
- Post vaccination serology is not required.

**Measles, mumps and rubella**

- Consider serology only if there is no documented evidence of two-doses of MMR vaccine or other acceptable evidence of immunity (born before 1966, previous laboratory evidence of immunity).
- An alternative to serology is to give MMR vaccine (unless contraindicated).
- Post vaccination serology is not required.

**Hepatitis B**

- Documented serology is essential
  - documented hepatitis B surface antibody ≥10mIU/ml at least 1 month following a completed age appropriate course of hepatitis B vaccine as evidence of immunity OR
  - documented evidence of previous resolved hepatitis B infection (core antibody positive, surface antigen negative).
- If acute or chronic hepatitis B infection is documented (surface antigen positive) the health care worker cannot be considered immune.
- Health care workers who have lived in a hepatitis B endemic country for at least 3 months should have serology to assess their immune status prior to vaccination: request hepatitis B surface antigen, hepatitis B surface antibody and hepatitis B core antibody.

**Hepatitis A**

- Documented evidence of two-doses of hepatitis A vaccine at least 6 months apart, or documented hepatitis A IgG is acceptable evidence of immunity.
- In unvaccinated persons, consider serology in those born before 1950, those who spent their early childhood in an endemic area, and those with an unexplained previous episode of hepatitis or jaundice, all of whom may have immunity from previous infection.
- An alternative is to give hepatitis A vaccine (unless contraindicated).
- Post vaccination serology is not required.
Diphtheria, pertussis, tetanus

- Serology is of no value as there is no commercially available serological test which can detect immunity to these diseases.
- Documented evidence of booster vaccination within the last 10 years is acceptable evidence of immunity.

Poliomyelitis

- Serology is of no value as there is no commercially available serological test which can determine immunity to polio.
- A history of a completed primary course of polio vaccine provides acceptable evidence of immunity.