From 1st October 2017 all babies born on or after 1st August 2017 will become eligible for a hexavalent vaccine which includes protection against HepB. The hexavalent vaccine will be offered in the routine childhood immunisation schedule at 8, 12 and 16 weeks of age. See [CMO letter](#) for more details.

The hexavalent vaccine, Infanrix hexa®, will replace the pentavalent infant vaccines, Infanrix®-IPV+Hib and Pediacel®, currently used in the routine childhood programme. This will mean babies continue to receive protection against diphtheria, tetanus, pertussis (whooping cough), polio and Haemophilus influenzae type b (Hib) as well as protection against HepB.

### Changes to routine and selective immunisation schedules

There is no change to the timing of the routine childhood immunisation schedule with the introduction of the hexavalent vaccine but babies born on or after 1 August 2017 will be offered Infanrix hexa® (DTaP/IPV/Hib/HepB) in place of pentavalent vaccine (DTaP/IPV/Hib) at 8, 12 and 16 weeks of age.

The schedule has changed for the selective neonatal hepatitis B immunisation programme for babies born to hepatitis B infected mothers. These babies will still require a dose of monovalent vaccine immediately after birth and at 4 weeks of age and then follow the routine schedule with hexavalent vaccine (at 8, 12 and 16 weeks of age). They will require a further dose of monovalent hepatitis B vaccine at age 12 months and should be tested to exclude infection at the same time (see table one below). A further dose of hepatitis B-containing vaccine at 3 years and 4 months is no longer recommended for those children who have completed their routine primary immunisations with the hexavalent hepatitis B-containing vaccine.

The table below shows hepatitis B doses in the immunisation schedule for routine childhood and selective neonatal hepatitis B programmes.

<table>
<thead>
<tr>
<th>Age</th>
<th>Routine childhood</th>
<th>Babies born to Hep B infected mothers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Birth</td>
<td>x</td>
<td>√</td>
</tr>
<tr>
<td>4</td>
<td>x</td>
<td>√</td>
</tr>
<tr>
<td>8</td>
<td>√ Infanrix Hexa®</td>
<td>√ Infanrix Hexa®</td>
</tr>
<tr>
<td>12</td>
<td>√ Infanrix Hexa®</td>
<td>√ Infanrix Hexa®</td>
</tr>
<tr>
<td>16</td>
<td>√ Infanrix Hexa®</td>
<td>√ Infanrix Hexa®</td>
</tr>
<tr>
<td>1 year</td>
<td>x</td>
<td>√</td>
</tr>
</tbody>
</table>

Monovalent Hep B
**Hexavalent vaccine – presentation**

Infanrix hexa® is presented in two parts, a pre-filled syringe and a separate vial containing the powdered Hib component. The vaccine must be reconstituted by adding the contents of the pre-filled syringe to the vial containing the powder. Further details can be found in the Infanrix hexa® Summary of Product Characteristics [here](#).

**Vaccine ordering and minimising wastage**

Infanrix hexa® is expected to be made available for NHS board vaccine holding centres to order from the beginning of September 2017 in readiness for the planned switch over in late September/early October 2017. NHS board vaccine holding centres will distribute Infanrix hexa® for use in the routine childhood programme in the normal way.

In order to avoid potential wastage, NHS boards and GP practices should aim to run down the volume of Pediacel® and Infanrix-IPV+Hib® vaccines held in stock and only order the minimum volume to complete vaccination of babies born before 1 August 2017. Babies born before 1 August 2017 should only be given Infanrix hexa® if there is no locally held vaccine stock, no further Pediacel® or Infanrix-IPV+Hib® can be ordered from NHS board vaccine holding centres. Click on the [link](#) to see the new vaccine requisition form.

**The Green Book – updated Hep B vaccine chapter**

The hepatitis B chapter of the Green Book has been updated and is available [here](#). The new revised chapter sits alongside the current chapter. This chapter has been revised to include the introduction of the combination hexavalent vaccine into the routine childhood immunisation programme for babies born on or after 1st August 2017.

The older chapter includes vaccine recommendations for babies born up to and including 31 July 2017, but for indications other than babies, we recommend that you consult the new chapter that contains the most recent advice.

**Training materials for healthcare professionals**

This year’s Immunisation Update Seminars will present a section of the introduction of the hexavalent vaccine. For dates and to register please see [June's PHPU Newsletter](#) for further details.

Training materials, including FAQs, have been produced for healthcare professionals by NES in partnership with Health Protection Scotland. These include guidance on the use of hexavalent vaccine in the routine childhood programme, its use in the neonatal selective immunisation programme for babies at risk of maternal to child transmission of hepatitis B and are available on the [NES website](#).

**Global shortage of Hep B vaccine**

There is a global shortage of Hep B vaccine which is having an impact on the UK supply. To ensure that stock is available for those individuals at highest and most immediate risk of exposure to hepatitis B, Public Health England (PHE) has developed temporary recommendations to support clinicians undertaking an individual risk assessment. See recent [HPS letter](#) with advice for occupational health departments and also [HPS guidance](#) for clinic/hospital staff on prioritising use of restricted stock.

**Adult and Childhood Flu vaccine arrangements 2017/18**

Please note recent CMO letters outlining this year’s arrangements for flu vaccine for [adults](#) and [children](#).

**Shingles vaccine programme 2017/18**

The recent [CMO letter](#) of the 8th August 2017 outlines the eligibility groups for this year’s shingles vaccine programme. Practices are reminded that Zostavax® has a relatively short expiry date. The latest expiry date of distributed stock is Dec 2017 and practices should use existing stocks to avoid wastage of this expensive vaccine.

If you would like to comment on any aspect of this newsletter please contact Marie Laurie on 0141 201 4917 or email marie.laurie@ggc.scot.nhs.uk