

# **Catch-up vaccination scenarios**

# Worksheet for child vaccination

Below are two examples of children requiring vaccination catch ups. The examples are taken from recent Outreach Immunisation Service (OIS) visits. Work out the required vaccines and administration schedule using the steps below. The answers are provided at the end of the worksheet.

# CASE 1: LISA IS 8 MONTHS OF AGE

#### AIR record

| Vaccine           | Product name  | Dose# | Age given | Status    |
|-------------------|---------------|-------|-----------|-----------|
| DTaP-IPV-HepB/Hib | Infanrix-hexa | 1     | 6m        | completed |
| PCV13             | Prevenar 13   | 1     | 6m        | completed |

# Step 1: List vaccine history with the age when vaccines were given. Complete the chart below

| Age when given | Antigens already had | Name of vaccine |
|----------------|----------------------|-----------------|
|                |                      |                 |
|                |                      |                 |
| Example:       |                      |                 |
| 8 weeks        | DTaP IPV hepB hib    | Infanrix-hexa   |

# Step 2: What age are they today? What vaccines do they need at this stage?

## Age today: 8 months

From the Immunisation Handbook appendix 2, check which vaccines are due at age 7-11 months: www.tewhatuora.govt.nz/for-health-professionals/clinical-guidance/immunisation- handbook/appendix-2-planning-immunisation-catch-ups/

Table A2.4: Age at presentation - 7-11 months

| What vaccines do they need at this age? Write out list here. |  |  |  |  |  |
|--|--|--|--|--|--|
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |

**Tip:** you can print out these charts and laminate them for quick reference. Use a marker pen to cross out the vaccines already given so you can Tip: you can print out these charts and laminate them for quick reference. Use a marker pen to cross the out the vaccines already given so you can wipe off and reuse.



Step 3: Using the information listed above, cross out those vaccines already received, revealing what vaccines are missing.

Step 4: From the information above, work out which vaccine you will give today and when they should come back for next set of vaccines.

| First dose (today) |  |  |
|--------------------|--|--|
| _ weeks later      |  |  |
| _ weeks later      |  |  |

# CASE 2: BILLY IS 12 MONTHS OF AGE

#### AIR record

| Vaccine           | Product name  | Dose# | Age given | Status |
|-------------------|---------------|-------|-----------|--------|
| PCV13             | Unknown value |       | 7m        |        |
| DTaP-IPV-HepB/Hib | Unknown value |       | 7m        |        |
| DTaP-IPV-HepB/Hib | Unknown value |       | 5m        |        |
| RV1               | Unknown value |       | 5m        |        |
| PCV13             | Unknown value |       | 6w        |        |
| DTaP-IPV-HepB/Hib | Unknown value |       | 6w        |        |
| RV1               | Unknown value |       | 6w        |        |

# Step 1: List vaccine history with the age when vaccines were given.

| Age when given | Antigens already had | Name of vaccine |
|----------------|----------------------|-----------------|
|                |                      |                 |
|                |                      |                 |
|                |                      |                 |
|                |                      |                 |
|                |                      |                 |
|                |                      |                 |
|                |                      |                 |



# Step 2: What age are they today? What vaccines do they need at this stage?

| Age today: 12 months                  |                         |                        |                          |        |
|---------------------------------------|-------------------------|------------------------|--------------------------|--------|
| From IHB appendix 2 A2.5              | : Age at presentation - | 12-13 months           |                          |        |
| What vaccines do they r               | need at this age? Writ  | e out list here, check | for any additional notes | S.     |
|                                       |                         |                        |                          |        |
|                                       |                         |                        |                          |        |
|                                       |                         |                        |                          |        |
|                                       |                         |                        |                          |        |
|                                       |                         |                        |                          |        |
|                                       |                         |                        |                          |        |
| Step 3: Using the received, revealing |                         |                        | those vaccines a         | lready |
| Step 4: From the today and when t     |                         |                        | _                        |        |
| First dose (today)                    |                         |                        |                          |        |
| _ weeks later                         |                         |                        |                          |        |
| (2nd visit) _ weeks later             |                         |                        |                          |        |
| (3rd visit)                           |                         |                        |                          |        |
|                                       |                         |                        |                          |        |
|                                       |                         |                        |                          |        |

Any other relevant notes from chart:



## **ANSWERS**

## CASE 1: LISA - 8 MONTHS OF AGE

| Age when given | Antigens already had | Name of vaccine |  |
|----------------|----------------------|-----------------|--|
| 6 months       | DTaP-IPV-HepB/Hib    | Infanrix-hexa   |  |
| 6 months       | PCV13                | Prevenar 13     |  |

### Table A2.4: Age at presentation: 7-11 months

Note: Subtract previous doses given.

| Dose          |                   | Vaccines         |       |
|---------------|-------------------|------------------|-------|
| First dose    | DTaP-IPV-HepB/Hib | PCV <sup>a</sup> | MenB  |
| 4 weeks later | DTaP-IPV-HepB/Hib |                  |       |
| 4 weeks later | DTaP-IPV-HepB/Hib | PCV              | MenBb |

a. See chapter 16 'Pneumococcal disease' for PCV13 schedules for high-risk children.

### Vaccination administration schedule:

| First dose<br>(today)        | DTaP-IPV-HepB/Hib<br>(Infanrix-hexa) | PCV13<br>(Prevenar 13) | MenB (Bexsero) |
|------------------------------|--------------------------------------|------------------------|----------------|
| 4 weeks later<br>(2nd visit) | DTaP-IPV-HepB/Hib                    |                        |                |
| 4 weeks later<br>(3rd visit) |                                      |                        | MenB           |

Then continue with NIS. Next event: 12 month immunisations (MMR and PCV13)

### See A2.2.1 point

12. For healthy infants commencing PCV vaccination under 12 months of age, a primary course is two doses with a minimum of eight weeks between doses. A booster dose is given eight weeks after the completion of the primary course from age 12 months. It may be given after at least four weeks if that coincides with the 12-month immunisation event, to get them back on to schedule. Unimmunised healthy children aged 12 months to under 5 years require two PCV doses given at least eight weeks apart. For a child who did not complete their primary course when under 12 months of age, do not count doses given prior to age 12 months when determining the number of PCV catch-up doses required—give two doses as for unvaccinated healthy children. Healthy children aged 5 years and older do not need PCV. See chapter 16 'Pneumococcal disease' for PCV13 schedules for high-risk children.

b. Infants commencing Men B immunisation aged under 12 months require 2 doses separated by 8 weeks plus a booster dose at from age 12 months or a minimum of 6 months after second dose, whichever is later. See also Table A2.7.



## CASE 2: BILLY - 12 MONTHS OF AGE

| Age when given | Antigens already had | Name of vaccine |
|----------------|----------------------|-----------------|
|                | DTaP-IPV-HepB/Hib    | Infanrix-hexa   |
| 6 weeks        | RV1                  | Rotarix         |
|                | PCV13                | Prevenar 13     |
| - months       | DTaP-IPV-HepB/Hib    | Infanrix-hexa   |
| 5 months       | RV2                  | Rotarix         |
| 7 months       | DTaP-IPV-HepB/Hib    | Infanrix-hexa   |
| / IIIOIICIIS   | PCV13                | Prevenar 13     |

#### Table A2.5: Age at presentation: 12-23 months

Note: Subtract previous doses given

| Dose  |                                    |                  | Vaccines         |                 |       |
|---|------------------------------------|------------------|------------------|-----------------|-------|
| First dose  | DTaP-IPV-<br>HepB/Hib <sup>a</sup> | PCV <sup>b</sup> | MMR <sup>c</sup> | VV <sup>d</sup> | MenB  |
| 4 weeks later   | DTaP-IPV-<br>HepB/Hib <sup>e</sup> |                  | MMR <sup>c</sup> |                 |       |
| 4 weeks later or at<br>age 15 months,<br>whichever is<br>applicable | DTaP-IPV-<br>HepB/Hib <sup>e</sup> | PCV <sup>b</sup> |                  |                 | MenB  |
| Booster dose given<br>12-24 months later                            |                                    |                  |                  |                 | MenBf |

Once the child has received the appropriate vaccines for their age, continue with the Schedule as usual.  $^{\rm g}$ 

- a. One dose of Hib-PRP is required from age 12 months to under 5 years regardless of previous doses. Children who receive DTaP-IPV-HepB/Hib between 12 months to under 5 years do not require a single antigen Hib-PRP as this is covered by the combination vaccine.
- b. Healthy children commencing immunisation at age 12–23 months require 2 PCV doses, with a minimum interval of 8 weeks between doses. If the child did not complete a primary course of PCV when under 12 months of age, do not count the previously given doses when determining the number of PCV catch-up doses required. If the child completed a primary course of PCV before age 12 months, give a booster dose from 12 months of age, at least 8 weeks after the completion of the primary course. Children who commenced vaccinations with PCV10 should complete the course with PCV13, as appropriate. (See chapter 16 'Pneumococcal disease' for PCV13 schedules for high-risk children.)
- c. The first dose of MMR is scheduled at age 12 months, with a second dose given at 15 months or at least 4 weeks after the first dose.
- d. One dose of varicella vaccine is funded for children born on or after 1 April 2016 at 15 months. Children who received a non-funded varicella vaccine prior to 12 months are still eligible to receive the 15-month varicella vaccine.
- Parents/guardians should be informed that their child will receive extra doses of Hib but there are no safety
  concerns with these extra doses. If the parents/guardians prefer, vaccinators may administer the DTaP-IPV
  and HepB vaccines as 2 separate injections instead of the combination DTaP-IPV-HepB/Hib vaccine.
- fig. Dependent on age of first dose. Infants who commenced MenB immunisation aged under 12 months require 2 doses separated by 8 weeks plus a booster dose at age 12 months or a minimum of 6 months after second dose, whichever is later. Children who start from age 12 to 23 months should receive 2 doses separated by 8 weeks and a booster dose is given 12-24 months after second dose. See also Table A2.7.
- g. If there is a less than 5-month gap between the second and third doses of primary series of DTaP-IPV-HepB/Hib, then a DTaP-IPV-HepB/Hib should be given at age 4 years instead of DTaP-IPV.

### Vaccination administration schedule:

| First dose  | MMR1              | PCV13            | MenB              |
|---|-------------------|------------------|-------------------|
| (today)   | (Priorix)         | (Prevenar 13)    | (Bexsero)         |
| 8 weeks later<br>(2nd visit)<br>at 15 months of age | MMR2<br>(Priorix) | VV<br>(Varilrix) | MenB<br>(Bexsero) |