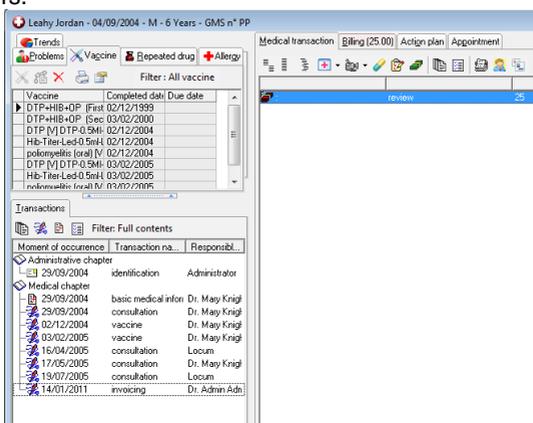


## Vaccination

HEALTHone™ has a number of features which aid the recording and reporting of vaccinations, these include:

- A built in database of vaccines that the user can easily maintain. Allowing batch numbers and expiry dates to be edited as well as new vaccines to be added.
- The Pneumococcus schedule for childhood vaccinations that HEALTHone™ automatically tracks for due dates and received vaccinations from the date of birth.
- Population analysis reports specifically designed to analyse the childhood vaccinations schedule.
- The Patient Information Panel has a tab dedicated to vaccinations. Overdue vaccinations are highlighted and automatically activate this tab causing it to appear in front of the others.



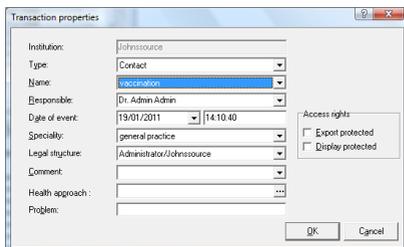
Due dates are automatically calculated from the child's date of birth.

## Recording Non Scheduled Vaccinations

The following method is used to record all vaccinations unless a *childhood vaccination schedule* is being used. In cases where a schedule is being used for childhood vaccinations the method *Childhood Vaccination Schedules*, documented later, should be employed.

### Technique – Recording a Vaccination

1) Open the patient's file and add (click on the stethoscope icon Type equal to **Contact** and the *Name* set to **vaccination**.



- A new medical transaction is inserted into the patients file.

2) Insert the sequence (**Shift + F4** or ) *Vaccine* into the new transaction.

3) Ensure the item *vaccine:* is selected and press **Return**

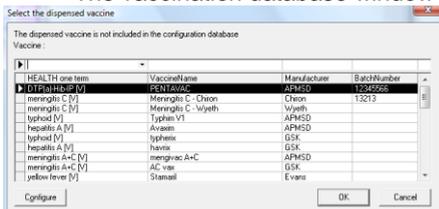
- Item Vaccine: now opens and also its associated list.

4) Close the *Associated List* box.

5) Click on the *Vaccine Button*  to open the vaccination database.

Alternatively use the short cut **Ctrl + Alt + V**

- The vaccination database window opens



6) Enter text into a filter box.

7) Locate the vaccine and select it. Click **OK**

The Vaccine details are entered into the item vaccine PLUS the item attributes are also set to their correct values.

**Note:** The item **vaccine:** values for *Dose*, *Site*, *Manufacturer*, *Batch number* and *Expiry date* are extracted from the vaccine database. They can be adjusted to correct any changes for this particular vaccination.

If the *Batch Number* is amended a prompt will appear to request if the vaccine database should also be updated.

By preference the Batch Number and Expiry Date should be changed by configuring the vaccination database. See the heading *Maintaining the Vaccination Database* later in this section.

**Vaccine Item** – Attributes automatically set the values of the selected vaccine.

8) Correct the item attribute values if required. Click **OK** to close the item.

- The vaccination details are recorded in the current transaction and also appear on the Vaccine tab of the Patient Information Panel.

## Specifying Recall Dates

If childhood schedules are not being used the method of specifying a recall date utilises the item *Plan of action*: If schedules are being used this procedure is NOT required.

The *Vaccine* sequence includes the item *Plan of action*: and this will also be present in the current transaction.

1) If the item *plan of action*: is not present in the current transaction insert it now, by clicking on the *Insert Item Button* on the item panel toolbar.

2) Ensure that *plan of action*: item is selected and press **Return** to activate it.

3) Select **vaccine** from the associated list.

**Note:** The object here is to place the word **vaccine** into the *plan of action*: item – not to re-state the type of vaccine – that has already been done in the item *vaccine*:

4) Cancel the associated list box.

5) In the *plan of action*: item details check the *Date of event* box and enter the RECALL date required.

6) Click **OK** to close the *plane of action*: item.

The recall date has now been specified. This child will now be detected by the population analysis reports designed for childhood vaccination reporting.

Alternatively you can select the item and right click with the mouse to plan the action and set action plan dates.

## **Childhood Vaccination Schedules**

HEALTHone™ has a scheduling feature designed to manage childhood vaccinations. There are two phases involved:

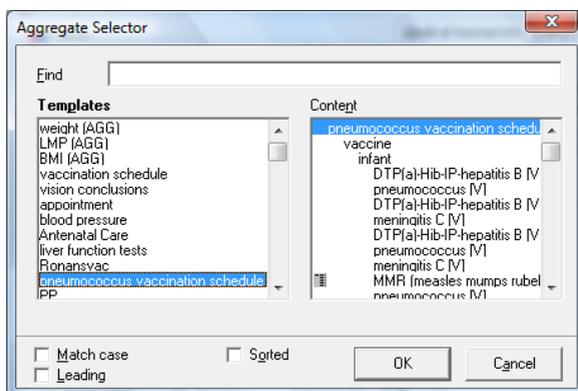
- **Assignment** This phase is repeated once for each child. It places the aggregate item *vaccination schedule*: into the child's file and links the timing schedule to it.
- **Recording** This phase is repeated for each vaccination – its details: *date, vaccination name, batch number, expiry date* etc.

### ***Assignment Phase – Insert the Schedule into the Child's File***

A child being presented for vaccination is assigned a *Schedule* by inserting the aggregate item **vaccination schedule**: into the Basic Medical Information transaction. Once inserted the timing is activated by linking the schedule to a timing set of rules and selecting the child's date of birth.

### **Technique – Insert the Schedule into the Child's File**

- 1) Open the child's patient file.
- 2) Select the Basic Medical Information transaction. 
- 3) Open the aggregate item selector by using the short cut **Shift + F5**. Or press 
- 4) Select the aggregate group Pneumococcus **Vaccination schedule** and click **OK**



- The schedule is inserted into the Basic Medical Information transaction.

### Technique – Activate the Schedule Timing

5) **Right Click** on the **Vaccination Schedule:** item and select *Apply vaccination schedule: Vaccinations* from the popup menu.

A prompt appears with the child's date of birth

6) Click **yes** when the prompt appears.

- The schedule is activated appears in the Vaccine tab of the Patient panel.

### ***Recording Phase – Recording Vaccinations using the Schedule***

This process is repeated for each vaccination a child receives.

The vaccine schedule appears in the Vaccine tab of the Patient Information Panel.

The vaccination schedule lists the type of vaccination required at a given

due date based on the child's date of birth. Each vaccination type is linked to a particular vaccine or vaccines in the vaccination database.

- 1) Create a new medical transaction  *Type* = **Contact** and *Name* = **vaccination**
- 2) Click on the *Vaccine* tab of the Patient Information Panel to bring it into view.
- 3) Click ONCE on the vaccination that is being received this time to select it.
  
- 4) Click on the injection needle icon on the *Vaccine* tab toolbar or use the short cut **Ctrl + Alt + V**

What happens next is dependent upon how many vaccines are in the *Vaccine Database* for the selected vaccination type. If only one vaccine exists this will be issued immediately with its name, today's date, batch number, expiry date etc – Go straight to step 6). If more than one vaccine exists the vaccine database window will open, displaying all matching vaccines

– Go to step 5).

5) When the *Vaccine Database* window opens – choose the vaccine being administered this time. Click **OK**

- A new item vaccine: appears in the current transaction displaying the vaccination details.

6) Check the vaccination details. If necessary amend the details by highlighting the item **vaccine:** and pressing return. Click **OK** to close the details.

**Note:** The item **vaccine:** values for *Dose*, *Site*, *Manufacturer*, *Batch number* and *Expiry date* are extracted from the vaccine database. They can be adjusted to correct any changes for this particular vaccination.

If the *Batch Number* is amended a prompt will appear to request if the vaccine database should also be updated.

By preference the Batch Number and Expiry Date should be changed by configuring the vaccination database. See the heading *Maintaining the Vaccination Database* later in this section.

- The date completed details in the Vaccine tab of the Patient Information Panel is also updated.

7) Repeat actions 2) – 6) for any other vaccinations being administered at this time. Manufacturer Dose Site Batch No. Expiry Date Count

## Changing the Scheduled Due Date of a Vaccination for a Child

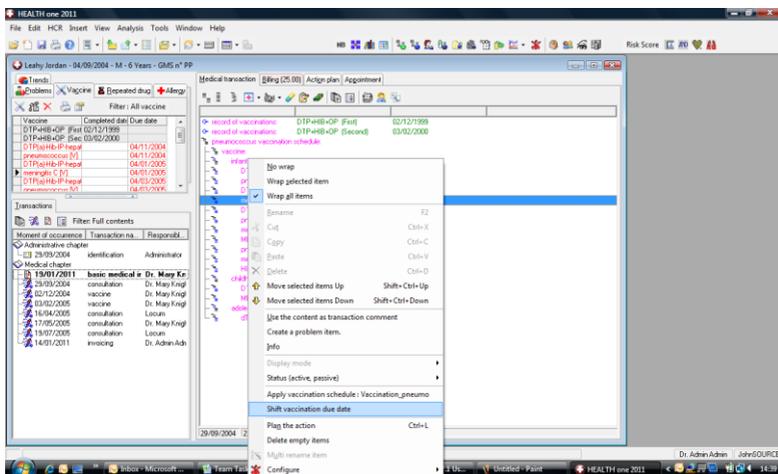
There may be instances where it is known that a due date for a vaccination will be missed, i.e. due to a holiday etc. To prevent HEALTHone™ reporting this as overdue the due date can be altered:

### Technique

1) Locate the vaccination concerned in the *Vaccine* tab of the Patient Information Panel. **Double Click** the vaccination.

The transaction that contains the schedule opens and the selected vaccination is shown in a dotted box.

**2) Right Click** the vaccination in the dotted box and select *Shift Vaccination due date* from the pop-up menu.



- A prompt box appears to request information about the new due date.

3) Complete the prompt box by typing a number and selecting the Day, Week, Month etc from the drop down selection box.

- Due date changes for the selected vaccination.

Note: If a number of vaccinations are to be moved select them all before right clicking. All selected vaccinations will have their due date altered in the one operation.

## Managing Vaccination Refusals

The method of recording a vaccine refusal depends upon how the vaccination is being recorded.

- **Former method** Not using a vaccination schedule and specifying

the refusal directly in the **vaccine:** item.

- **New method** Using the Childhood vaccination schedule.

### **Former Method**

If childhood vaccinations are being individually recorded the technique is:

- 1) Open the patient's file and add a new medical transaction with a *Type* equal to **Contact** and the *Name* set to **vaccination**.
- 2) Insert the sequence (**Shift + F4**) *Vaccine* into the new transaction.
- 3) Ensure the item *vaccine:* is selected and press **Return**

- Item Vaccine: now opens and also its associated list.

- 4) Locate the term **refusal** in the *Associated List* box. Click on the **Insert** button.

- The term refusal now appears in the vaccine content box.

**Note:** DO NOT type anything else in the item content box (i.e. the name of the refused vaccination) because HEALTHone™ only reports those items with a *sole content* of the word *refusal* as being refused. The vaccination name is entered in the item comments box.

- 5) If necessary click the *expand* button to view the item attributes. Check the *Date of event* box and type the name of the vaccination refused in the comment box. Click OK to save item.

- 6) Right click on the item and select **Display / Comments** from the pop up menu.

### **New Method**

If a childhood vaccination schedule is being used:

- 1) Select the refused vaccination in the *Vaccine* tab of the Patient Information Panel.

2) Click on the **Refusal** button  on the Vaccine Tab toolbar

**Refusal Reporting** See next heading *Childhood Vaccination – Recalling/Reporting*.

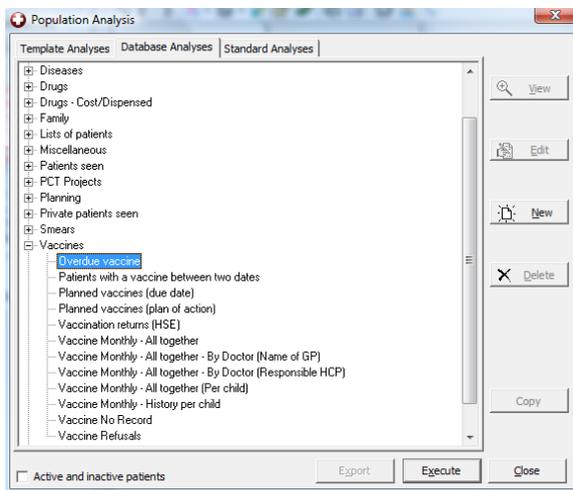
## **Childhood Vaccination – Recalling/Reporting**

The population analysis reporting is used to produce reports regarding childhood vaccinations. The choice of report depends on the method used:

- **Former method** Not using a vaccination schedule and specifying the recall date in the **plan of action:** item.
- **New method** Using the Childhood vaccination schedule.

### **Technique**

- 1) Close and save any open patient files
- 2) Select the menu **Analysis / Population analysis.**  (Short cut **Shift+F7**)
- 3) Click on the *DatabaseAnalysis* tab.
- 4) Expand the *Vaccines* section.
- 5) Select and Execute reports as required



## Reports for the Former method

If you are using the former method of recording childhood vaccines use the following report to list those patients who have an overdue vaccination:

### Planned Vaccines (Plan of Action)

## Reports for the New method

If you are using the new schedule method of recording childhood vaccines use the following report to list those patients who have an overdue vaccination:

### Planned Vaccines (Due Dates) Overdue vaccine

## Reports for the Either Method

Regardless of what method is being used the following reports are

applicable:

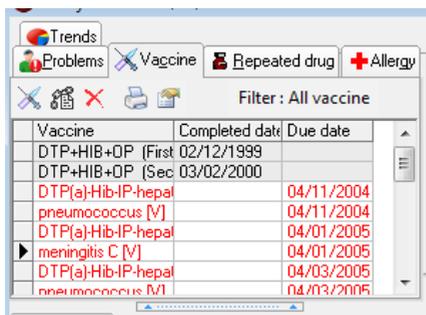
**Patient's with a vaccine between two dates**  
**Vaccines Monthly – All together**  
**Vaccines Monthly – All together (Per child)**  
**Vaccines Monthly – History per child**  
**Vaccines No Record**  
**Vaccines Refusals**

## Maintaining the Vaccine Database

The vaccination database will need to be updated whenever a new batch of vaccines is received or a vaccine is released on to the market.

### *Opening the Vaccine Database*

1) Click on the *Vaccine* tab of the Patient Information Panel for any patient.



Vaccine	Completed date	Due date
DTP+HIB+OP (First	02/12/1999	
DTP+HIB+OP (Sec	03/02/2000	
DTP(a)-Hib-IP-hepaI		04/11/2004
pneumococcus [V]		04/11/2004
DTP(a)-Hib-IP-hepaI		04/01/2005
meningitis C [V]		04/01/2005
DTP(a)-Hib-IP-hepaI		04/03/2005
pneumococcus [V]		04/03/2005

2) Click on the **Configure** button on the tool bar 

## Changing Batch and Expiry Dates

1) Locate the vaccine to be edited by typing its name in the

**VaccineName** filter box, or if known, type the old batch number in the **Batch Number** filter box.

- 2) Once the vaccine has been located edit the old data. i.e. batch number details, expiry date etc.
- 3) Click the tick box to save your changes.
- 4) Click the **Close** button to close the vaccine database window.

## Adding a New Vaccine

- 1) Open the Vaccine database as outlined above



- 2) Click on the *Plus* button

- A new blank line appears at the end of the database.

- 3) Select the vaccine type from the HEALTHOne™ term drop down box that this vaccine belongs to (i.e. Influenza [V]).

- 4) HEALTHOne™ automatically offers the type as the name for the vaccine, simply select this and type the actual name. Complete the other details.

- 5) Click the tick box to save your changes.

- 6) Click the **Close** button to close the vaccine database window.

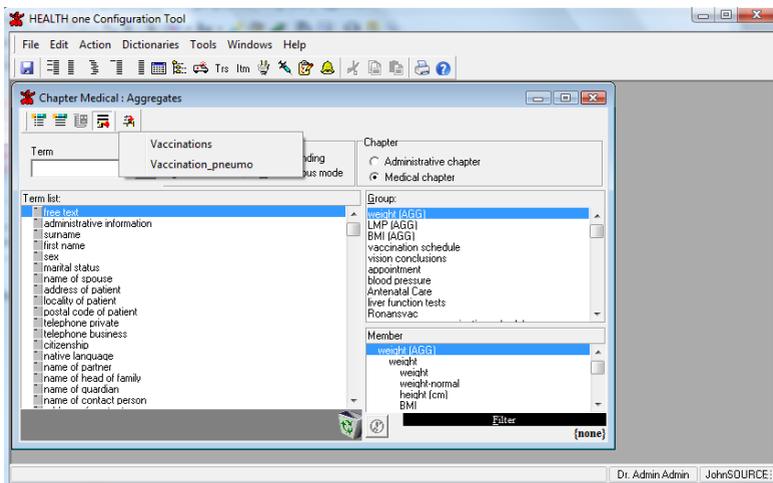
## *Techniques for Upgrading Users*

### Create the aggregate item Vaccination Schedule and Timing Schedule

This action is performed only once and creates the aggregate item *vaccination schedule*:containing the current list of childhood vaccinations. In conjunction with this a *timing schedule* (set of rules) is declared that states when the vaccinations should occur with respect to the child's date of birth.

## Technique – Create the Vaccination Schedule Item

- 1) Click on the configuration tool icon
- 2) Select the menu **File / Open / Aggregate** or use the short cut **Shift + F5**
  - The aggregate item screen appears. This has its own toolbar.
- 3) Click on the last button on the right of the aggregate tool bar and select the vaccination\_pneumo as seen in the screen shot below.



- The aggregate item is now created and also its timing schedule.

- 4) Select the menu **File / Exit** and click **yes** to save changes when prompted.

The Configuration Tool closes.

## Linking Existing Vaccinations to a Schedule

Upgrading users will have a number of child patients that have already received some childhood vaccinations at the time of the upgrade. These vaccinations will appear as independent entries in the *Vaccine* tab of the Patient Information Panel.

If the child is under a year old we recommend that a vaccination schedule is also included, those vaccines already administered will appear as *overdue* as far as the schedule is concerned – because their entry in the schedule will be blank.

This problem is overcome by linking the existing vaccinations received to their corresponding entries in the vaccination schedule.

### Technique

- 1) Insert a schedule as detailed in the procedure *Assignment Phase – Insert the Schedule into the Child's File* above and activate the timing schedule.
  - The Schedule now appears in the Vaccine tab with a number of vaccinations in RED indicating that they are overdue.
- 2) Click on the EXISTING vaccination to be linked to the schedule.
- 3) Ensure the EXISTING vaccination is still selected if not click on it once to select it. Now click on the schedule vaccination, in the *Vaccine* tab, that it is to be linked to.

The link icon on the Vaccine tab will activate.



- 4) Click on the link icon

- The link occurs and the scheduled vaccination is marked as completed and turns black in colour.

5) Repeat for other vaccinations that require linking