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1 Introduction

This guide is designed to provide you with a basic overview of how to use the MBRRACE-UK website to record perinatal deaths. This user guide will show you how to notify perinatal deaths and how to manage your reported cases; it also has a section on entering surveillance data (see the separate support materials for reviewing cases with the PMRT, available at www.npeu.ox.ac.uk/pmrt/). There are also podcasts available to introduce the use of the system for both surveillance and review.

1.1 Minimum specification requirements

The MBRRACE-UK data entry system which has been designed to collect MBRRACE-UK data has very high levels of security in place to meet all the requirements of NHS Information Governance. We are aware that some Units are using computers which are running relatively old software which will not work properly with the MBRRACE-UK data entry system. It is essential that you check that you are using the correct internet browser i.e. the programme that you use to access the internet.

1.2 What you need to do:

Before using the MBRRACE-UK data entry system please check that you are using the correct internet browser i.e. the program that you use to access the internet. Older versions are not able to provide sufficient security and may not work properly with the MBRRACE-UK web-based system.

You must use a computer which has one of the following browsers the access the internet:

For highest security and best performance we strongly recommend the following browsers:

- Google Chrome (latest versions)
- Mozilla Firefox (latest versions)
- Microsoft Edge (80+, latest versions)

The following browsers are also currently supported, but you may encounter performance issues on slower computers (for example the website might run slowly or pages might freeze):

- Microsoft Edge (Version 44)
- Internet Explorer 11

N.B. The versions are the minimum supported. We strongly encourage you to use the latest version wherever possible in order to maintain high standards of security. Please contact your local IT support team if you do not have access to a suitable computer.

If you are not sure how to find out which browser you are using then there are many helpful websites such as: www.whatismybrowser.com/

Or you could ask your local IT support team.

For enquiries about internet access please contact us either by using the ‘contact us’ facility within the surveillance system or by emailing us at mbrrace.support@npeu.ox.ac.uk.
1.3 Changes to the MBRRACE-UK reporting system

A number of changes to the MBRRACE-UK reporting system were introduced in February 2019. The way you start and manage cases is different, but all of the key functions are still available.

1.3.1 Changes to how you report perinatal deaths for surveillance and review

- Deaths are now reported via a central notification containing key information about the mother, baby and care provider(s).
- A death can be notified from either the surveillance or PMRT side of the MBRRACE-UK system. This notification is then shared by both the surveillance system and the PMRT.
- Once a notification is complete you will then be able to complete either the surveillance data, PMRT, or both.
- How you complete surveillance data or the PMRT remain unchanged.

1.3.2 Changes to how ineligible cases are handled

- The case definition is now determined by the MBRRACE-UK system, using the information provided in the notification.
- You are no longer able to add surveillance data for deaths which fall outside the MBRRACE-UK reporting criteria (e.g. post-neonatal deaths).
- For terminations of pregnancy you will only be asked to complete the initial notification.
- The MBRRACE-UK system clearly identifies those cases which require surveillance information, and those where the notification is sufficient.
- Similarly, the PMRT identifies which deaths are supported for review using the tool.

1.3.3 Changes to how you can view and manage your reported cases

- All of your reported cases are now available via the new Case Management screen.
- From the case management screen you can:
  - Start a new notification
  - Search for an existing case
  - View different subsets of cases
  - Perform various actions for each case such as assign to another Trust/Health Board or request the cancellation of a case.
- You can easily switch between the case management screen for either surveillance or PMRT if your user profile allows access to both.
1.4 Logging in for the first time

The MBRRACE-UK website is located at: www.mbrrace.ox.ac.uk. You will arrive at the login screen, where you will be asked to enter the user details that have been sent to your registered email address.

When logging in and registering for the first time, users will need to request a new authentication code.

- This code will be sent to your registered email address.
- This code is a single use temporary password. You will be asked to change this when you log in for the first time.
- This can also be done if you forget your password.

The rules for passwords are:

- Maximum length of 20 and a minimum length of 8
- No dictionary words longer than three characters
- At least 1 number and 4 letters
- The letters must be mixed case
- Special characters from the list $@#+![]
- Special characters are not required but may be included
- Different to the last five passwords
1.5 The home page

Once you have logged in, you will come to the home screen. You are able to check project news, updates and reports as well as accessing the data entry form. A “traffic lights” indicator of key Trust/Health Board counts is also available.

Selecting a traffic light takes you to the main case management screen. The list of cases will be filtered to show the case type selected in the traffic light.

- **Open cases** – surveillance cases which have been started but are not complete and closed
- **Missing cases** – deaths identified in routine data sources which MBRRACE-UK have been unable to match to an existing surveillance case
- **Open notifications** – deaths which have been notified to MBRRACE-UK where the notification is incomplete
- **Complete notifications** – deaths which have been notified to MBRRACE-UK where the notification is complete but the surveillance case has not been started
- **Each Baby Counts** – cases identified as possibly meeting the criteria for reporting to the Each Baby Counts programme
- **Assigned to you (requiring action)** – cases assigned to you by another Trust/Health Board for completion of additional data
- **Assigned by you (waiting return)** – cases assigned by you to another Trust/Health Board for completion of additional information

There are similar traffic lights for the PMRT:
### 1.6 MBRRACE-UK reporting requirements and PMRT support

<table>
<thead>
<tr>
<th>Type of death</th>
<th>Eligible for reporting to MBRRACE-UK</th>
<th>Supported by the PMRT</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Late fetal losses</strong> – the baby is delivered between 22⁺⁰ and 23⁺⁶ weeks of gestation showing no signs of life, irrespective of when the death occurred</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Stillbirths – the baby is delivered from 24⁺⁰ weeks of gestation showing no signs of life, irrespective of when the death occurred</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Early neonatal deaths</strong> – death of a live born baby occurring before 7 completed days after birth</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Late neonatal deaths</strong> – death of a live born baby occurring between 7 and 28 completed days after birth</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Post-neonatal deaths</strong> – death of a live born baby (born at 20⁺⁰ weeks gestation of pregnancy or later or 400g where an accurate estimate of gestation is not available) occurring after 29 or more completed days after birth.</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Surviving sibling(s) in a multiple pregnancy</strong> – any live born baby who lives beyond 28 days, as part of a multiple pregnancy resulting in at least one late fetal loss, stillbirth or neonatal death.</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td><strong>Terminations of pregnancy</strong> – Any late fetal loss, stillbirth or neonatal death resulting from a termination of pregnancy should be reported. However, you will only be required to complete the initial notification. Completion of the full surveillance form is not required, and these deaths will not be supported for review using the PMRT.</td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>

**Note 1 – Unknown gestation:** Where a baby is born without signs of life, and an accurate estimate of gestation is not available, the death will be recorded as a stillbirth. Should a post-mortem examination subsequently confirm the gestation the notification should be updated accordingly to ensure the death is classified correctly.

**Note 2 - Multiple pregnancies:** (a) Where the death of a baby is confirmed before 20⁺⁰ weeks gestation but the baby is delivered at 22⁺⁰ weeks gestation or later AND the birthweight is less than 200g, you will only be required to complete the initial notification. If the baby was not weighed at birth please enter an estimated birthweight under 200g. (b) Review is not supported for multiples where the death is confirmed before 22⁺⁰ weeks gestation but the baby is delivered after 22⁺⁰ weeks gestation AND birthweight is under 400g.

If there are no late fetal losses, stillbirths or neonatal deaths in a multiple pregnancy notification is not required.
2 Notifying a death and entering surveillance data

2.1 Introduction

Notifying a death and entering the surveillance data is done via the case management screen. To access the case management screen directly click on Data entry > Manage cases.

The case management screen has two modes: surveillance and review/PMRT. Your account permissions will determine which modes are available to you. If your account allows access to both surveillance and the PMRT you can switch between the two modes via a single button.

From the case management screen you can:

- Start a new perinatal case
- Search for an existing case and either view or edit the data
- Manage your perinatal cases, including:
  - Filtering cases to select different subsets
  - Viewing the current status of each case
  - Performing case actions such as assigning a case to another organisation or requesting a case be cancelled
2.2 Starting/notifying a new perinatal case

In order to start a new case you must first create an initial case notification. This is the common starting point for any new case. Once this notification is complete you will then be able to add the surveillance data or, if your user profile allows it, start a review using the PMRT.

Before starting a new case you should first check that the death has not already been notified by searching for it using the Quick find function (see Section 2.3)

To create an initial notification, from the case management screen click on Start a new case. You will then be asked to enter a number of key data items to identify the mother, baby, and units involved in their care.

For live births the place of death is automatically checked, and if the location is a non-clinical setting (e.g. a hospice or at home) you will be asked to confirm the circumstances of the baby’s death.
When you have completed the notification click **Validate and save** to check the data for completeness and highlight any errors.

Accepted values are highlighted in **green**. Unusual values will be highlighted in **amber** but will be accepted by the system if you confirm them by clicking the **Validate and save** button again. Values which are missing or not permitted will be highlighted in **red** and you will be unable to proceed until the data has been amended.

Alternatively, you can save the notification for completion later by selecting **Save (for later completion)**. If you choose to save the notification without validating the data you will be unable to begin entering the surveillance data or to start a review.

Once the notification is complete and validated you will be taken to the **Perinatal surveillance case list** which will now show your newly notified case.

From here you can view the notification you have just created, including its status, as well as begin to add surveillance data (see section 2.4).
2.3 Finding an existing case

To search for an existing case click on **Quick find** from the case management screen to open the search screen.
You can search for a case using any of the following:

- **Case identifier**
  - MBRRACE-UK case ID
- **Mother’s identifiers**
  - Family name
  - Date of birth
- **NHS/CHI numbers**
  - Mother’s NHS/CHI number
  - Baby’s NHS/CHI number

Enter the search criteria, then click on the Find button.

The results will appear on the case management screen. If there is more than one case containing the same identifier (for example, multiple mothers with the same surname, or more than one case with the same mother’s NHS number) the results will appear as a list.

![Perinatal surveillance case list](image)

From this list you can then view the notification for each case, start or complete the surveillance data, or view the full surveillance details. You can also assign a case to another Trust or Health Board as well as request that a case be cancelled.

### 2.4 Cancelling a notification

If you have started a notification by mistake then you can request that it be cancelled by clicking on the Contact Us button at the top of the screen and entering the reason for cancellation.

### 2.5 Entering surveillance data

Once you have completed a notification you can then enter the surveillance data. If you have just added a new notification and the case status is “Surveillance not started” you can begin to enter the surveillance data by selecting Start surveillance case from the Case Actions menu. Any data entered as part of the initial notification will be automatically imported into the surveillance form but you will not be able to edit it. Occasionally you may notice errors in this data which need correction. To make any changes to these fields you will therefore have to reopen the notification via the Case actions > Reopen notification facility.
Once you have made the necessary changes you will need to re-validate the notification before you can continue to add the surveillance data.

If the surveillance data has already been started but isn’t complete you can continue to edit the data by selecting **Edit this case**. This will open the surveillance form so you can begin or continue to add data.

![Sidebar](image)

The first section of the form you will see is **1 Notification and Woman’s details**.

![Form](image)

Before continuing you will need to confirm that the record you are about to edit relates to the correct mother. To confirm you wish to edit the record click **Confirm and continue**. Once you have confirmed the mother’s details you can then add information to the rest of the form.
2.6 Sections of the form

There are six sections you are required to complete. These are:

<table>
<thead>
<tr>
<th>Section</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Notification and Woman’s details</td>
<td>1. Basic information about the woman (e.g. name, address, demographic information, NHS and hospital identification).</td>
</tr>
<tr>
<td>2 Woman’s health</td>
<td>2. Pre-existing medical conditions, smoking status and breath CO levels, and information about alcohol and drug use.</td>
</tr>
<tr>
<td>3 Previous pregnancies</td>
<td>3. Previous pregnancies and obstetric history here (including outcomes and complications).</td>
</tr>
<tr>
<td>4 This pregnancy</td>
<td>4. Booking and antenatal care details such as type of antenatal care provision (intended and actual), the woman’s height and weight, EDD, place of delivery.</td>
</tr>
<tr>
<td>5 Delivery and outcomes</td>
<td>5. Details of (A) labour and delivery, (B) baby/fetus outcomes, (C) cause of death, and (D) post-mortem.</td>
</tr>
<tr>
<td>6 Check and complete the form</td>
<td>6. Details of clinicians involved. You can also check the form to see if there are any errors or missing data.</td>
</tr>
</tbody>
</table>
2.6.1 Finding your place

The index page allows you to access different sections of the form for editing. You can close and expand each section of the form using this menu.

The Jump to section button at the bottom of the page allows you to quickly access other parts of the form.

Using these headings to navigate through the form will automatically save work in progress. However, it is worth continually saving work to make sure data is not lost.

2.6.2 Saving work in progress

At the end of each section, there is a Save and continue button. Once you have finished a section click this button to avoid losing data.

Alternatively, you can save a section as it currently stands, even if it is incomplete, using the Save ‘as is’ option at the bottom of the page.

2.6.3 Finalising the form

Before finishing the form, you will be asked to check through the data to rectify any mistakes. This is in section 6.1 “Check and close the case”.

- Click on the heading Check and close the case
- Then click Check all sections
• Any errors will show up in the list on the right-hand side
• You can jump to the relevant section by clicking on the highlighted text on the left.

<table>
<thead>
<tr>
<th>Section</th>
<th>Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>Woman's identifiers</td>
<td>No errors</td>
</tr>
<tr>
<td>Woman's details</td>
<td>No errors</td>
</tr>
<tr>
<td>Woman's health</td>
<td>No errors</td>
</tr>
<tr>
<td>Previous pregnancies</td>
<td>Outcome of previous pregnancy is required</td>
</tr>
<tr>
<td></td>
<td>Year of previous pregnancy is required</td>
</tr>
<tr>
<td></td>
<td>The gestation in weeks is required</td>
</tr>
<tr>
<td></td>
<td>The birth weight (g) is required</td>
</tr>
<tr>
<td></td>
<td>A response to 'Fetal anomaly' is required</td>
</tr>
<tr>
<td></td>
<td>A response to 'Infant death' is required</td>
</tr>
<tr>
<td></td>
<td>Year of previous pregnancy is required</td>
</tr>
<tr>
<td></td>
<td>The gestation in weeks is required</td>
</tr>
<tr>
<td>Obstetric history</td>
<td>Please indicate whether the woman had previous pregnancy problems</td>
</tr>
<tr>
<td>Booking</td>
<td>No errors</td>
</tr>
<tr>
<td>Antenatal care</td>
<td>No errors</td>
</tr>
<tr>
<td>Clinicians</td>
<td>Please supply the name of the clinician responsible for care</td>
</tr>
<tr>
<td></td>
<td>Please supply the name of the neonatologist/pediatrician responsible for care</td>
</tr>
</tbody>
</table>

Once you have corrected any errors you should re-check the form before closing it. Once the form has been closed you will be able to view the full surveillance details but will be unable to make any changes without reopening the case (see Section 2.9.1)

Leaving the form is easy: simply click on the MBRRACE-UK logo or Home at the top of the page. The Logout button can be found in the top-right corner of the page.

If the form has been inactive for some time, you will be logged out automatically. You may lose unsaved data if this happens. You can also leave the form by clicking the Perinatal and Infant Death heading at the top of the page.

To ensure confidentiality, and to avoid losing unsaved data, please log out of the database if you have to leave your computer station unattended. When leaving the site, you will be reminded to make sure your data is saved.

2.7 Printing a completed surveillance form

Once you have completed a surveillance form you can print out a copy for your records, if required.

• Using the Quick Find facility locate the case you wish to print
• Select View full surveillance case details from the list of case actions
• Select the “print” function from your web browser options menu
2.8 Reopening, assigning, and cancelling a case

As well as allowing users to view and edit surveillance data, the list of case actions also allows users to:

- Reopen a case for editing
- Assign a case to a different Trust/Health Board to obtain additional information
- Cancel a surveillance case

2.8.1 Reopening a closed case

Occasionally you may wish to reopen a case which has previously been validated and closed by a member of the team at your Trust/Health Board. This may be because you have noticed an error in the data entry and wish to correct it; or you may have acquired additional information such as post mortem results. If the Surveillance case status is listed as Surveillance complete you will need to reopen the case before you can make any changes.

To reopen a case simply select Reopen surveillance case from the list of case actions. You will then be asked to give a reason for reopening the case.

![Reopen surveillance case 50442](image)

Once you have entered the reason into the text box provided click on the Confirm button to reopen the case and restore the editing function.

When you have completed adding or correcting data you can then finalise and close the form (see Section 2.8)
2.8.2 Assigning a case

We realise that you may need to report the deaths of babies born outside your hospital and you may therefore not have immediate access to all of the details about the mother, her booking and antenatal care, and the circumstances of the baby’s delivery. In these circumstances there is a facility within the system to enable you to temporarily transfer responsibility for data entry to another Trust/Health Board. Whilst the responsibility for reporting the data still remains with the unit where the death occurred, the case assignment facility allows reporters from other Trusts/Health Boards to enter the relevant data.

In order to assign a case to another Trust/Health Board firstly locate the case using the case management screen. Once you have located the relevant case select **Assign this case** from the list of case actions.

You will then be presented with a box like the example below.

![Assign this case to another trust/board](image-url)
From the drop-down menu choose the Trust/Health Board you wish to assign the case to. You can also describe what information you would like the team there to enter as well as provide any additional information about the case, if necessary.

Finally, click **Assign** to give the other Trust/Health Board temporary editing rights to the case. The lead reporters at the receiving Trust/Health Board will then receive an email notifying them that the case has been assigned to them. The case will also appear as an **Assigned case (requiring action)** in the organisation’s traffic lights.

You will be unable to make any changes to the data while a case is assigned to another Trust/Health Board, but you can still view the details by selecting **View full surveillance case details** from the list of case actions.

You can also view details of the case assignment by selecting **Assignment summary** from the list of case actions.

![Assignment summary for case 60181](image)

**2.8.3 Editing an assigned case**

When a case has been assigned to your Trust/Health Board it will appear as an **Assigned case (requiring action)** within your organisation’s traffic lights. The case assignment status will also appear in the **Surveillance case status**. Further details of the assignment, including what information is required, can be found by selecting **Assignment summary** from the list of case actions (see Section 2.10.2 above).

To add the missing data select **Edit this case** from the list of case actions.

**2.8.4 Returning an assigned case**

Once you have completed the information required you should return the case to the assigning Trust/Health Board as soon as possible by selecting the **Return case** option from the list of case actions. This allows you to confirm that the missing data has been entered or provide an explanation as to why the data cannot be completed. You do not need to close the case before returning it. Until the case has been returned the assigning Trust will be unable to make any additional changes to the data.

Once the case is returned to the assigning Trust/Health Board you will continue to be able to view the full surveillance details but will no longer be able to edit the data. To view the case select **View full surveillance case details** from either the notification drop-down or the case actions dropdown.
2.8.5 Cancelling a case

If you wish to cancel a surveillance case because, for example, it has already been reported under a different number, you can submit a request to MBRRACE-UK by selecting **Request surveillance case be cancelled** from the list of case actions.

You will be asked to give the reason you are requesting that this surveillance case should be cancelled before confirming your request. A member of the MBRRACE-UK team may contact you for further information if necessary.

2.8.6 Restoring a cancelled case

You can also request that a cancelled case be restored by selecting **Request surveillance case be restored** from the list of case actions.
You will be asked to give a reason for restoring the case before confirming your request. Once the case has been restored you will be informed by a member of the MBRRACE-UK team. You will then be reopen the case for editing, if required.

2.9 Data entry notes

2.9.1 Incorrect answers

When you click **Save and continue** at the end of each section the data will be validated and any issues highlighted.

Data items highlighted in **amber** can be accepted by clicking **Save and continue** again. Data items highlighted in **red** are not permitted, and you will be unable to continue entering data until they are corrected.

![Diagram showing data entry notes](image)

- When an appropriate value is added in the boxes, the text will show up in **green**.
- Unusual or unlikely values (e.g. higher than expected height) will show up in **amber** to highlight the value.
- When a value is added which is not permitted, the text will show up in **red** along with an explanation.
2.9.2 Date-format questions

Some questions ask for a specific date (e.g. the woman’s date of birth). When you click in the box, a calendar will appear and you can choose the specific date from here. Alternatively, you can enter the date manually using the format DD/MM/YYYY (e.g. 01/01/1979).

A calendar will appear when you click in any box that requires a date.

2.9.3 Entering specific places

When completing a case notification you will be asked to enter the care provider(s) at each point of the care pathway (normally a medical facility).

Where it asks for place of delivery, type in the first few letters of the place. Options will appear in the drop-down list below the box. Select the appropriate location, making sure you choose the correct Trust/Health Board as well as the unit, as there may be several hospitals with the same name (e.g. St Mary’s).
2.9.4 Reporting the cause of death using CODAC

The MBRRACE-UK surveillance system records causes of death using the CODAC (Cause Of Death and Associated Conditions) system. CODAC is a three-level hierarchical system, with level 1 grouping causes of death into the following broad categories:

- 0 Infection
- 1 Neonatal
- 2 Intrapartum
- 3 Congenital Anomaly
- 4 Fetal
- 5 Cord
- 6 Placenta
- 7 Maternal
- 8 Unknown
- 9 Termination

Each of these categories is sub-divided at Level 2 and again at Level 3. A final code is then generated based on the selections made at each level.

Example: CODAC code for Necrotizing Enterocolitis

The CODAC code for Necrotizing Enterocolitis is therefore 141. The surveillance system will automatically generate the correct code based on the user’s selections at each level (in this example, Neonatal > Gastrointestinal > Necrotizing enterocolitis).

To record the cause of death as Necrotizing Enterocolitis:

1. Navigate to “Baby/fetus primary cause of death” in Section 5.1C of the surveillance form and click Add baby/fetus primary cause of death.
2. Select the main category “Neonatal: Conditions, diseases and events specific to neonatal life” from the drop-down list.
3. Select “Neonatal, Gastrointestinal, Necrotizing enterocolitis” from the **Specific cause of death** drop-down list.
4. Alternatively, you can refine the list of conditions by entering a search term.

5. Once you have selected the appropriate cause of death click Add condition. The cause of death and corresponding CODAC code will then be added to the surveillance form.

6. You can use the same procedure to add any associated conditions (just click Add baby/fetus associated condition). If there is no known associated condition you must select the corresponding tick box.
**IMPORTANT**: You cannot have more than one primary cause of death. Entering more than one primary cause of death will result in an error when you finalise the case. Additional causes should be added as associated conditions. You can have one or two additional causes.

**If the final cause of death is pending you should record the initial cause of death based on clinical assessment and select the “No - awaiting results” option in Section 5.1C**

You can update the cause of death once the final cause has been agreed.

### 2.9.5 Entering medical conditions

Some sections will ask for information about medical conditions, and use specific classification systems for illnesses and causes of death – either the WHO International Classification of Disease (ICD-10) or Causes Of Death and Associated Conditions (CODAC). These sections are:

1. **Woman’s health (ICD-10)** *(Did the woman have any pre-existing medical conditions?)*

2. **Obstetric history (CODAC)** *(Did the woman have any previous pregnancy complications?)*

In some instances you may have to answer a filter question, e.g. ‘Did the woman have any pre-existing medical conditions?’

Click “Yes”
More options will appear below

Click “Add ICD-10 condition”
A search box will appear.
The selected condition and its corresponding ICD-10 code will then be added as a **Pre-existing Medical Problem**.
2.9.6 Deleting a medical condition or cause of death

To delete a pre-existing medical problem, or a cause of death, click on the grey ‘X’ on the right hand side of the box.

![Pre-existing Medical Problems table]

2.9.7 Unknown answers

Questions that have a drop down list may have an option to select ‘Not known’ if you do not know the answer. For certain questions, such as date of birth or hospital number, you can click the grey (X) on the left-hand side of the box if the answer is not known:

![Date of birth drop down]

It will then turn black with a check (√):

![Date of birth with check]

You can click this box again if you obtain the information at a later date.
3 Managing your cases

3.1 Introduction

As well as starting a new case or searching for an existing case the case management screen allows you to easily view and filter a list of all of your reported perinatal deaths. To access the case management screen directly click on **Data entry > Manage cases**.

From the case management screen you can:

- Start a new perinatal case
- Search for an existing case and either view or edit the data
- Manage your perinatal cases, including:
  - Filtering cases to select different subsets
  - Viewing the current status of each case
  - Performing case actions such as assigning a case to another organisation or requesting a case be cancelled

3.2 Filtering your list of surveillance cases

2. The default filters are set to display any open cases.
3. Clicking on any of the toggle switches adds (green) or removes (grey) the selected group of cases from the display list.
4. The available filters are:

   - **Open cases** – surveillance cases which have been started but are not complete and closed
   - **Missing cases** – deaths identified in routine data sources which MBRRACE-UK have been unable to match to an existing surveillance case
   - **Incomplete notifications** – deaths which have been notified to MBRRACE-UK where the notification is incomplete
   - **Surveillance required** – deaths which have been notified to MBRRACE-UK where the notification is complete but the surveillance case has not been started
   - **No further data required** – deaths which have been notified to MBRRACE-UK where the notification is complete and no surveillance data is required
5. Additional subsets of cases can be selected by clicking on any of the buttons under **Other case types**. These are:

- **EBC cases** – cases identified as possibly meeting the criteria for reporting to the Each Baby Counts programme
- **Assigned cases** – cases assigned to you by another Trust/Health Board for completion of additional data, or cases assigned by you to another Trust/Health Board for completion of additional information
- **Surveillance complete** – deaths which have been notified to MBRRACE-UK where the surveillance case has been finalised and closed
- **Surveillance cancelled** – deaths which have been notified to MBRRACE-UK where the surveillance case has been cancelled
- **Cancelled notifications** – deaths which have been notified to MBRRACE-UK where the notification has been cancelled

**Example – Open cases and Incomplete notifications:**

![Example of cases list]

### 3.3 Switching between surveillance and PMRT modes

The case management screen has two modes: surveillance and review/PMRT. Your account permissions will determine which modes are available to you. If your account allows access to both surveillance and the PMRT you can switch between the two modes via a single button.

![Switch to review cases]
4 Your data

4.1 Introduction

The MBRRACE-UK on-line reporting system allows you to access information relating to local cases via the Your data tab. Clicking on Your data allows you to access case lists and summaries as well as the MBRRACE-UK Real-Time Data Monitoring tool. You can also access custom versions of the annual perinatal surveillance reports, containing additional information specific to your Trust/Health Board. If you have access to the PMRT you can create perinatal mortality reviews summary reports and data extracts.

4.2 Perinatal surveillance reports

4.2.1 Trust/Health Board reported cases

The Trust/Health Board reported cases list provides abbreviated details of all cases reported by your Trust/Health Board. A “sort” facility is available to enable you to find cases from a particular year, or from a particular hospital, or distinguish between cases of stillbirth or neonatal death. You can change the display order by clicking on any of the headings. Clicking on the same heading again changes the order to either ascending or descending.

4.2.2 Trust/Health Board Summary

The Trust/Health Board summary provides an annual and monthly summary number of cases by case-type and unit.
4.2.3 Downloading reports

Reports can be downloaded in .csv format for use in Excel by clicking on the appropriate link at the top of the page.

Trust/Health Board reports cases/summary for downloading

- ☑ Trust/health board reported cases
- ☑ Trust/Health Board summary

4.2.4 Trust/Health Board-specific surveillance reports

In addition to the annual UK-wide perinatal mortality surveillance reports, MBRRACE-UK also produce supplementary reports exclusively about stillbirths and neonatal deaths of babies born within each Trust/Health Board. They contain information in addition to that which appears in the national reports, specific to individual Trusts/Health Boards, and are only available to registered users of the MBRRACE-UK surveillance system.

To download the report for your Trust/Health Board in .pdf format click on the appropriate year.
4.3 Real-Time Data Monitoring

This tool allows you to monitor, filter and summarise the perinatal deaths reported to MBRRACE-UK for your organisation.

There are three elements to the tool: a **line chart**, which shows the number of days between consecutive deaths, to help you identify unusual patterns of deaths; four **bar charts**, which plot the number of deaths according to various characteristics; and a series of **filters**, which allow you to select which deaths are shown in the line and bar charts.

The tool uses live surveillance data from the MBRRACE-UK system. If the surveillance data hasn't been entered for a death, the reported death has only reached the initial notification stage, or the death has not yet been reported to MBRRACE-UK, the death won't appear in the tool. To make full use of the tool, it is therefore essential that surveillance data is entered as soon as possible after a death.

Deaths are displayed according to date of death. For stillbirths and late fetal losses, this is deemed to be the date of delivery.

4.3.1 Overview

The page comprises the following features:

- the **title** summarises the current view; it shows the selected **date range**, the number of deaths in the range, and any applied filters

- the **Switch to...** button allows you to toggle between views: babies who died within your organisation or (deaths of) babies who were born within your organisation

- the **filters** panel contains items and categories on which to filter the data

- the main **line chart** plots the number of **days between deaths**; the chart features a **range selector**, which allows you to select the date range to display within the chart, and a **navigator**, which shows a mini view of the entire dataset. Hover over a point to display the **case summary**
tooltip

- a group of **bar charts** plot the number of deaths by selected categories
- the **toolbar** offers commands and settings to customise the view:
  - **Snapshot** – take a snapshot of the bar chart data values
  - **Chart settings** – customise the current view by choosing the categories to show in the **bar charts** and the items to show in the **case summary tooltip**.
  - **Chart size** – change the height of the line chart; for smaller screens, a smaller line chart will allow more room to show the bar charts

### 4.3.2 Switching views

By default, the tool shows **deaths within your organisation**, including babies born elsewhere. Click **Switch to Deaths of babies born within your organisation** to show deaths of babies who were born within your organisation, including babies who died elsewhere.

### 4.3.3 Changing the date range

**Important!** Cases must have a date of death in order to be included in the visualisation. Please note that the tool currently excludes all terminations of pregnancy and cases born before 1 Jan 2016.

The **date range** determines which deaths are plotted in the line chart, summarised in the bar charts, and totalled in the page title and filters panel. By default, the tool shows deaths in the past **1 year**.

To change the date range, do one of the following:

- edit the dates in the **From** and **To** input boxes in the range selector
- click one of the **year** buttons above the date input boxes in the range selector
- click one of the **Zoom** buttons in the **range selector** to set a fixed time interval
- click and drag the **plot area** to select a subset of the current range
- click, drag or resize the **navigator** (or use the scrollbar)

Whenever you change the date range, the tool will immediately refresh all the charts and update the totals shown in the title and next to each filter category value.
4.3.4 Filters

You can filter the deaths on any of the categories shown in the filters panel. We've arranged the filters into collapsible sections. If the filter you want to apply is in its collapsed state, click the plus symbol (+) next to its name to expand the section. Select a category's value to apply a filter. To reverse the current selection – i.e., set the unselected checkboxes and clear the selected checkboxes – click Invert.

To expand (or collapse) every filter, click Expand all (or Collapse all) at the top of the filters panel.

Whenever you refine a filter, the tool will immediately recalculate the number of days between each (filtered) death, refresh all the charts, and update the totals shown in the title and next to each filter category value.

For each filter category value, the figure in brackets represents the number of deaths that match that category value and the filters applied in all other categories. Filter categories and category values that do not match the filtered data are hidden from view.

Example:

The following illustration shows the results of applying successive filters. In the left-hand image, there are 100 unfiltered deaths.
When we filter the deaths on **Stillbirth** (middle image), the gestational age options for **20-21** and **22-23** are no longer shown because there are no stillbirths with a gestational age below 24 weeks. Of the filtered stillbirths, we can see there are, among others, three with gestational age **>=42**.

When gestational age is filtered on **>=42** (right-hand image), the **Late fetal loss** option disappears from the type of death category because there are no late fetal losses with gestational age greater than or equal to 42. Of the deaths with gestational age greater than or equal to 42, we can see there are three stillbirths and two neonatal deaths. However, the latter will not be visible on the chart (or included in the number of deaths shown in the title) unless the **Neonatal death** filter is selected.

![Filter examples](image)

**Clearing filters**

To clear a filter, either clear its checkbox in the filters panel, or click the button representing its name in the list of applied filters (beneath the page title). To clear all filters, click **Clear all filters**.
4.3.5 Line chart (days between deaths)

The main (line) chart shows the **number of days between deaths** that occurred during the selected date range for cases that meet the applied filter criteria. For each case, we plot the **date of death** (x-axis) against the **number of days since the previous death** (y-axis).

This type of chart helps you to identify unusual patterns of deaths – and is the basis for statistical process control, a feature that we will introduce in a future update of this tool.

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**Point markers**

We use special markers to convey information about the points. A shaded marker indicates the case's surveillance status is open; a hollow marker represents a complete case. When three or more deaths occur on the same day, the multiple deaths plotted at the same point (where y=0) will be shown on the chart as a single point marker with a thicker border.

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**Case summary tooltip**

Hover over a point to display a **case summary tooltip**, which shows a summary of the death or deaths at that point. Click the **report ID** to open the case in the MBRRACE-UK system.
Changing tooltip items

To change the items that are displayed in the case summary tooltip, click Chart settings. On the Case summary tooltip tab, select the items you want to see. To restore the settings to their original defaults, click Reset.

4.3.6 Bar charts

The bar charts show the number of deaths by selected categories for the current date range and applied filters.
The categories and values in the bar charts correspond with the categories and values shown in the filters panel. You can click on a bar chart’s category value to quickly apply a filter on the corresponding value. For example, clicking on stillbirth in the number of deaths by type of death chart will filter the data on stillbirths; clicking the value again will clear the filter.

**Changing categories**

To change the categories plotted in the bar charts, click **Chart settings**. On the Bar charts tab, for each bar chart, select a category from the dropdown list. To restore the settings to their original defaults, click **Reset**.

**Tip:** You can also drag and drop categories from the filters panel onto the bar charts area.

**Snapshot**

The **snapshot** feature allows you to compare totals between two sets of data. For instance, you can compare deaths in one time period with deaths in another. Or all deaths versus deaths from neonatal cause of death.

Snapshot records the totals shown in the bar charts and displays the data as a second, lighter coloured,
series. The date range, along with any filters in effect at the time of the snapshot, is displayed below the bar charts.

For example, to compare all deaths in 2017 with all deaths in 2018, clear any applied filters, set the date range to 2017, click **Snapshot**, and then change the date range to 2018.

Hover over a bar to display a tooltip containing values for both the main and snapshot series. To clear the snapshot, and remove the second series from the bar charts, click **Clear snapshot**.

Snapshot data is preserved until you redo or clear the snapshot. At any time, you may configure the bar charts to show the categories you want to compare.

### 4.4 Perinatal mortality reviews summary report and data extracts

You can now produce a report that provides a summary of reviews completed using the PMRT.

This report can be generated for specific date ranges which you are able to define, and includes information about all perinatal deaths during that period where a review has been completed and the review report published.

Included in the report is a summary of:

- The deaths reviewed, by gestational age and type of death
- The grading of care, by gestational age and type of death
- The causes of death entered in the review of babies during this period
- The issues raised by reviews during this period
- The number of staff involved in reviews, and their specialities (from June 2018)
- The top contributory factors identified as relevant to the deaths reviewed

The report is generated from the information entered by your Trust/Health Board into the PMRT during the review of each death. This means some parts of the report may be more useful if more detail is provided during the review process.
4.4.1 Generating a PMRT summary report

To generate a PMRT summary report click on Your data > Generate a Summary Report.

Select the appropriate date range, and then click Generate Reviews Summary Report.

4.4.2 Extracting factors, actions and gradings of care

Alternatively, you can create data extracts showing contributory factors, actions or gradings of care for the selected period by clicking on the appropriate button. Each extract contains the following information:

Factors
- Perinatal case ID
- Issue text
- Outcome contribution
- Contributory factor
- Comments

Actions
- Perinatal case ID
- Issue text
- Outcome contribution
- Contributory factor
- Issue comments
- Action plan text
- Implementation text
- Person responsible for the action
- Target completion date

Gradings of care
- Perinatal case ID
- Grading of care of the mother and baby up to the point that the baby was confirmed as having died (stillbirths and late fetal losses only)
- Grading of care of the mother following confirmation of the death of her baby (stillbirths and late...
fetal losses only)

- Grading of care of the mother and baby up to the point of the birth of the baby
- Grading of care of the baby from birth up to the death of the baby (neonatal deaths only)
- Grading of care of the mother following the death of her baby (neonatal deaths only)

### 4.4.3 Downloading your summary report and data extracts

All reports can be downloaded as a .csv file for use in Excel by clicking on the **Download!** Button.
5 Contacting MBRRACE-UK

If you need further assistance or wish to discuss a reporting matter you can contact the MBRRACE-UK team in several ways:

1. The easiest way to get in touch is via the Contact us facility built into both the surveillance system and the PMRT. Simply click the link at the top of any page to open the contact form. A member of the MBRRACE-UK team will respond to your message via email or telephone as soon as possible.

2. Alternatively, you can email us directly at mbrrace-uk@npeu.ox.ac.uk

3. For urgent queries or advice during office hours you can also contact the MBRRACE-UK perinatal team in Leicester on 0116 252 5425.
<table>
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<th>Version</th>
<th>Details of changes</th>
<th>Release date</th>
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<tr>
<td>1.0</td>
<td>First release</td>
<td>18/02/2019</td>
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<tr>
<td>1.1</td>
<td>Revised PMRT criteria</td>
<td>21/02/2019</td>
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<tr>
<td>1.2</td>
<td>Reopening of notification added.</td>
<td>28/02/2019</td>
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<td>1.3</td>
<td>Revised PMRT criteria for babies &lt;500g and unknown gestation, revised reporting criteria for multiple pregnancies and babies &lt;400g, new Your Data section added.</td>
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<td>Updated minimum browser specification</td>
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