Data Upload Wizard
User guide

ICU Data Capture System

Contents

Introduction

The Data Upload Wizard is an optional data entry tool that allows reporting units ('you') to batch upload surveillance data to the ICU Data Capture System (DCS).

This lets you collect information for multiple infection episodes (or census days/months) onto a spreadsheet, which you then upload onto the DCS. This can save time and effort compared to manually entering the data via the Case Capture tool.

The Data Upload Wizard is available for 'Data Entry' role users.

1. Preparing a spreadsheet for upload

The upload file is a specially formatted spreadsheet. For the bloodstream infections data collection, each row represents an individual positive blood culture episode. For the daily or monthly census data collections, each row respectively represents data for a specific day or month. Each column contains data for a specific field (e.g., specimen date).

Step 1 – Inputting data into the spreadsheet

You can skip this step if your upload file has already been created, for example if you are using an extract from the Medicus electronic health records system. If this is the case, skip to 'Step 3 - Mapping the data'.

Inserted values must adhere to the options listed in the DCS Data Dictionary. To facilitate this, you can use the standard template spreadsheets, available from the ICU DCS Help page. A preview of the template for the BSI data collection is shown in Figure 1.

Figure 1. Template spreadsheet for Bloodstream Infections collection.

Please note that these templates are not mandatory to use: some organisations might prefer to use their own templates, for example because they have bespoke automation processes that facilitate the creation of upload files directly from their electronic health records.

Download the latest UKHSA template from the ICU DCS Help page. You may rename the template, for example to mention the relevant period.

The UKHSA template for BSI comes in two versions.

One, with extension .xlsm, contains Excel macros, which make it easier to complete multi-select fields (see below). When you open this template, a security warning will appear; please click 'Enable Content' when prompted (Figure 1).

If your organisation does not allow macros, please use the macro-free template.

Figure 1: Excel macro warning, please click Enable Content
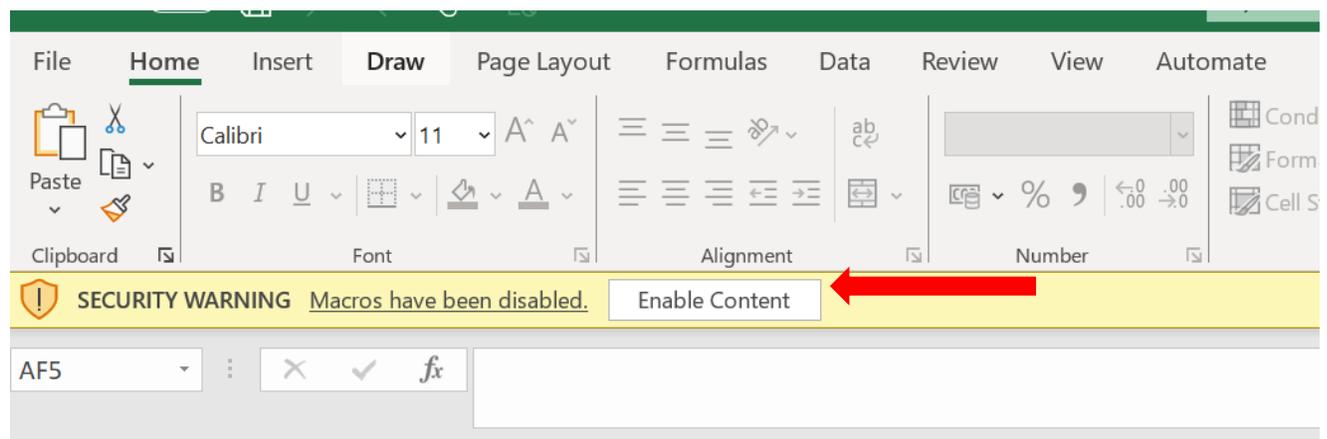
Start completing each row. Detailed information on each question and the values can be found in the data dictionaries and in the surveillance protocol.

As you click on a cell, some fields will include a dropdown menu. Please use these dropdown options to ensure that the data is correctly formatted for upload.

Other fields will have a note indicating how the data should be entered; for example, dates must be in the format of dd/mm/yyyy.

At a minimum, you need to populate all mandatory fields; these have an orange background on the template. If one or more rows don't have a value in a mandatory field, the upload will fail. Fields with a yellow background are mandatory for sign-off. Fields with a light-orange or light-yellow background are only mandatory if certain options to previous questions were selected. If the information is available, please also complete the optional fields (white background).

Do not edit the column names, otherwise they will not be recognised when mapping the file later.
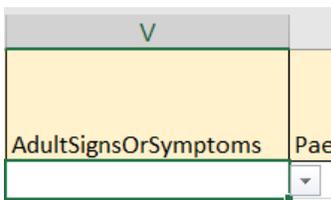

BSI: multi-select fields

Some fields can be answered with more than one option. The ICU requires these options to be separated by a tilde (~) sign; for example:
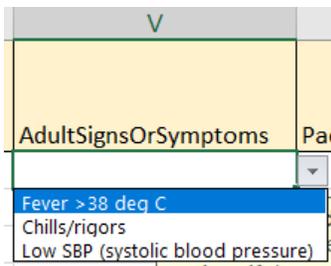
Fever >38 deg C~Chills/rigors

If this is not correctly formatted, the file will fail to upload.

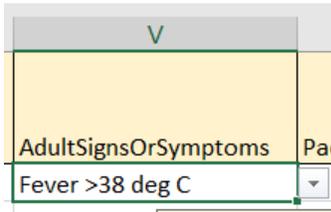If you are using the macro-enabled template, you can insert multiple values by following these instructions:

V AdultSignsOrSymptoms Pae	Click on the drop-down arrow
V AdultSignsOrSymptoms Pae Fever >38 deg C Chills/rigors Low SBP (systolic blood pressure)	Select an option
V AdultSignsOrSymptoms Pae Fever >38 deg C	The option will appear in the field.
V AdultSignsOrSymptoms Pae Fever >38 deg C Fever >38 deg C Chills/rigors Low SBP (systolic blood pressure)	Now click on the drop-down arrow again and select another option
V AdultSignsOrSymptoms Pae Fever >38 deg C~Chills/rigors	The new option will be added to the field, correctly separated by a tilde (~) symbol.
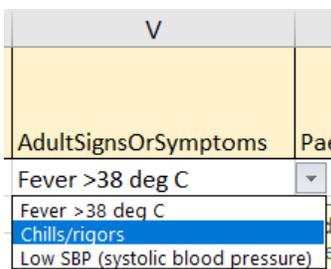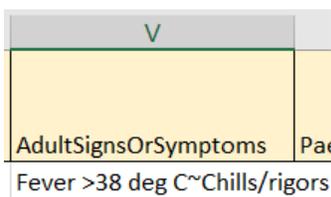
Step 2 – Saving the spreadsheet

Once you have input all data into the template file, please save the file as a CSV using the 'save as' option (Figure 2). This will ensure that the correct file format is saved, ready for upload onto the DCS.

Figure 2: Saving as a CSV
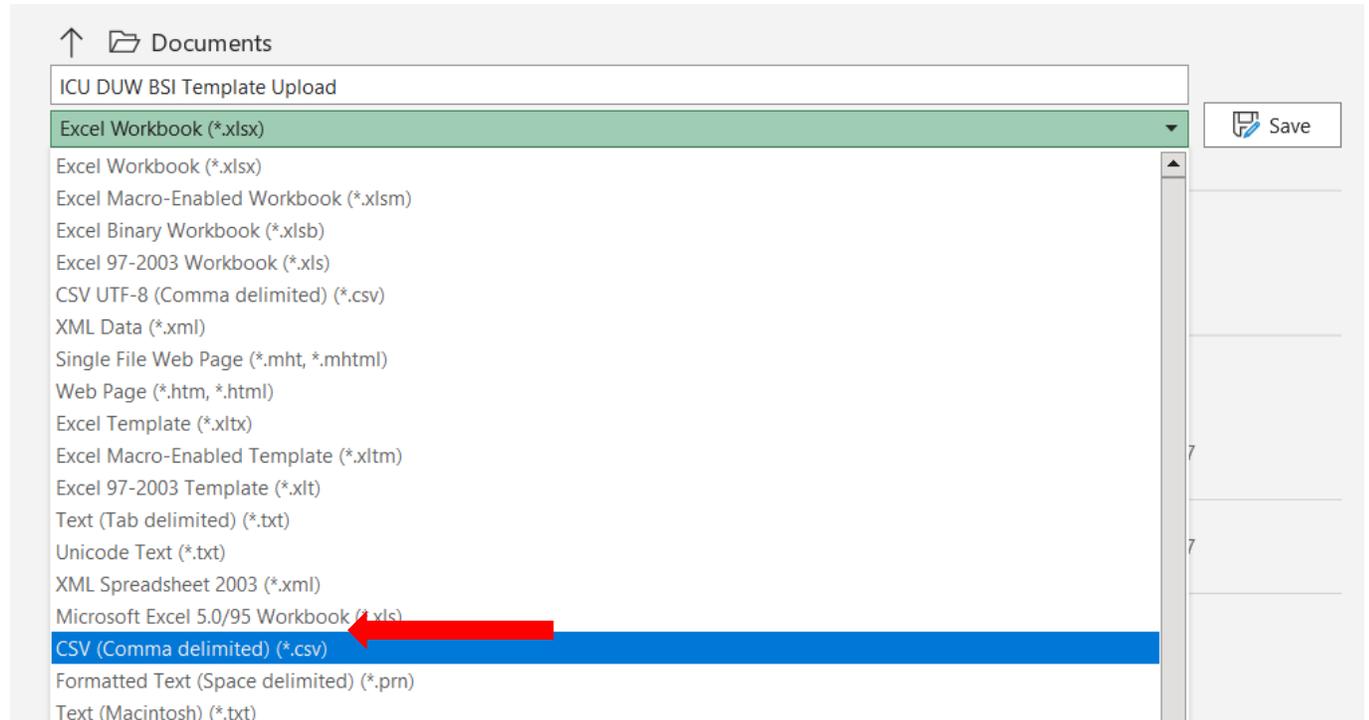
You will get a warning saying that the selected file type does not support workbooks with multiple sheets. Click OK.

2. Navigating to the Data Upload Wizard Screen

Once you have correctly populated the spreadsheet, log into the DCS as a Data Entry role. You will see the 'Data Uploads' tab on the left-hand side menu toolbar. Clicking on 'Data Uploads' will dropdown two further tabs, "Data Upload Wizard" and "My Data Upload" (Figure 3).

Figure 3: Navigating to the Data Upload Wizard screen from the homepage
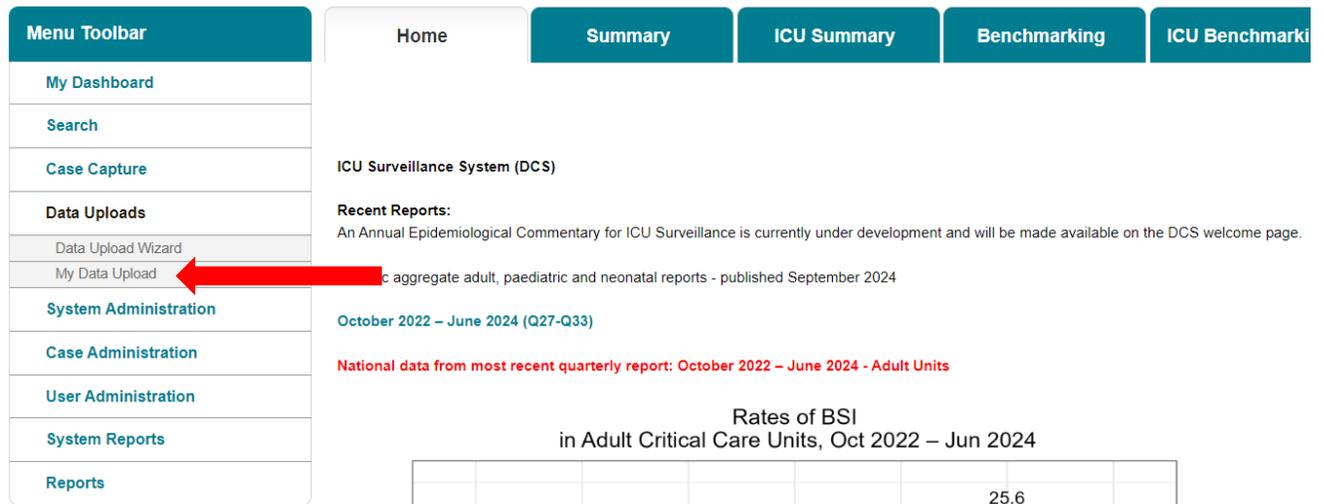
Clicking on the "Data Upload Wizard" button will take you to the Data Upload Wizard screen (Figure 4):

Figure 4: The initial data upload wizard screen
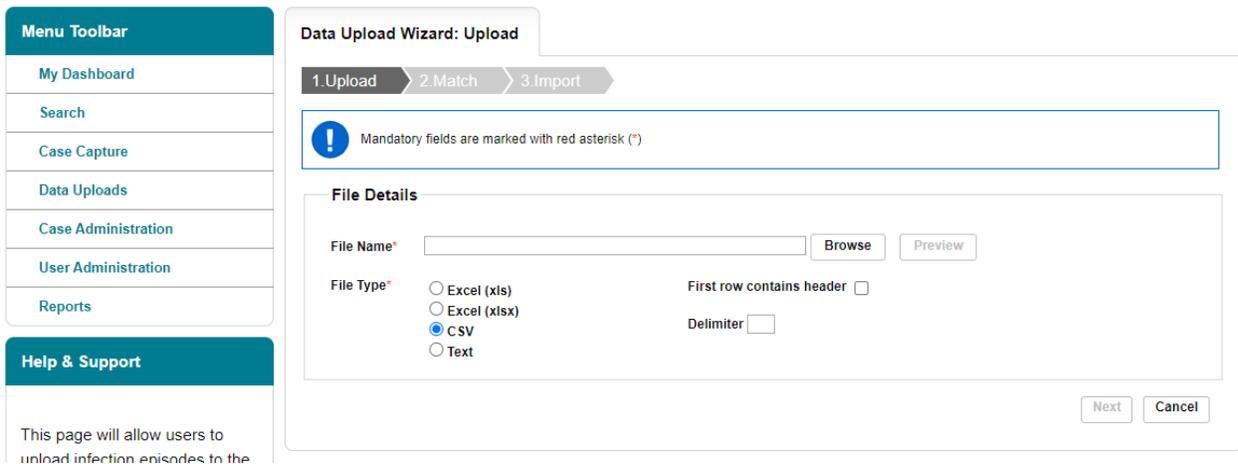
The process of a data upload is completed in three stages: upload, match (mapping columns), import.

3.   Uploading the spreadsheet

In the Upload screen, select the relevant parameters:

- 'File Type' (e.g., CSV)
- 'First row contains header' - tick if the first row of your spreadsheet contains the column names, for example if you used the spreadsheet template or the Medicus export.

- 'Delimiter' - only relevant if your spreadsheet is in text format.

Then click 'Browse' (Figure 5).

Figure 5: Browse for data upload file

This will then generate a pop-out – click "Add File" to browse to your computer and locate the file you wish to upload. Once the file is selected, press save. (Figure 6).

Please note: Only one data file may be uploaded at a time. Multiple episodes can be compiled on a single spreadsheet for batch upload.

Figure 6: Add file and save for upload

Click 'Preview'. This will provide a preview of the data you are uploading (Figure 7).

Figure 7: Preview the upload file

If the preview appears to be correct, click 'Next' to continue.

4.   Mapping columns

The 'Match' screen will appear; this is to map the upload file to the correct data collection.

In the 'Data Collection' dropdown menu, select the type of data you would like to upload, for example, ICU Blood Stream Infection (Figure 8).

Figure 8: Selecting data collection

In the 'Select Data Collection Categories' dropdown menu, tick all tabs contained in your upload spreadsheet. Please note that in order to successfully upload 'ICU Bloodstream Infections' data both the 'Episode Details' and 'Positive Blood Culture' tabs must be selected at a minimum.

If you used a template provided by UKHSA, please tick the 'Use Upload Specifcation' box, select the relevant pre-saved template mapping (for BSI, this is 'ICU Blood Stream Infections', *Figure 9*) and click Match. The matching will be previewed in the table. Click 'Next'. You can now skip the 'Creating a new mapping' section of this guide and proceed to the '<u>Importing data' section</u>.

Figure 9: Using the 'Upload Specification'

If you are not using the provided templates but you previously created your own mapping, you can select it now.

Otherwise, you now need to map your file manually using the 'Match Data' function.

Creating a new mapping

Click 'Match', which will present a grid with three columns (

Figure 10):
- Input Column
- Destination Column

- Mapping

Figure 10: Matching data

The values in the 'Input Column' are the variable headings from your spreadsheet; you need to populate the 'Destination Column' with the relevant variable within the ICU DCS.

To create the mapping, please click on the 'Map' button in the 'Mapping' column for each row. A pop-up window will prompt you to select the tab, question group and question that the data in the 'Input Column' will be mapped to in the 'Destination Column' (

Figure 11).

An example of how to perform the mapping is below. After clicking on 'Map', in the pop-up window you need to select the 'Category' (that is, the tab in the system if doing manual data entry), the 'Question Group' and the 'Field Listing'.

Figure 11: Matching data: Mapping data upload file to destination columns

If an 'Input Column' row entry does not need to be mapped to a 'Destination Column' then tick the 'None' check box (Figure 11).

Please note - As you populate each field in the 'Destination Column', it gets removed from the 'Field Listing' dropdown menu, so the number of remaining fields to map is easily visible.

All field listing values that have an asterisk (*) next to them in the 'Field Listing' dropdown menu are mandatory fields. Each of these mandatory fields in the upload file's 'Input Column' must map to the appropriate Destination Column, otherwise the Data Upload Wizard cannot progress to the next step in the process. Data must be present in these mandatory fields, or the upload will fail, and the file will need to be resubmitted.

Please note - The mapping only needs to occur the first time that you wish to upload data using the same formatted spreadsheet. You can then save the mapping to 'My Mappings' so the next time you wish to upload data, you simply select 'Use Upload Specification'.

Map the remaining Input Columns to the appropriate Destination Column. The 'Unmap' button can be clicked to undo any mapping from an Input column to a Destination column.

After mapping at least one field, you can save the partially complete mapping to complete at a later date.

You can do this by clicking on the "My Mappings" button (Figure 12) if you would like to save the Input / Destination Column mappings.
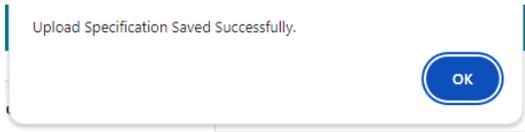
Figure 12: My Mappings

You will then be directed to the My Mappings page (Figure 13). To save the partially complete mapping, fill in the mapping name and click save. You will then see a screen confirming your mapping ("Upload Specification") has been saved successfully (Figure 14).

Figure 13: My Mappings screen

Figure 14: Upload Specification saved successfully pop-up box

Tip: ensure that you name your mapping in a data collection specific way (e.g., BSI Upload), and if you are going to use multiple file structures, in a way that you can differentiate the files (e.g., number 1, 2, etc).

To revisit your partially saved mapping please see the manage mappings section.

When ready, map the remaining Input Columns to the appropriate Destination Column.

When your mapping is complete tick the mapping complete box in the my mappings screen (if you have mapped all in one session) (Figure 15), or in the manage mappings view/edit screen (if you have mapped in more than one session) (Figure 16).

Figure 15: My Mappings Screen, Mapping complete tick box
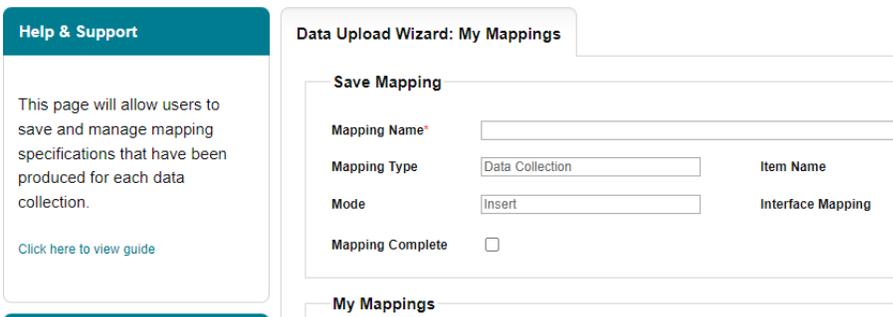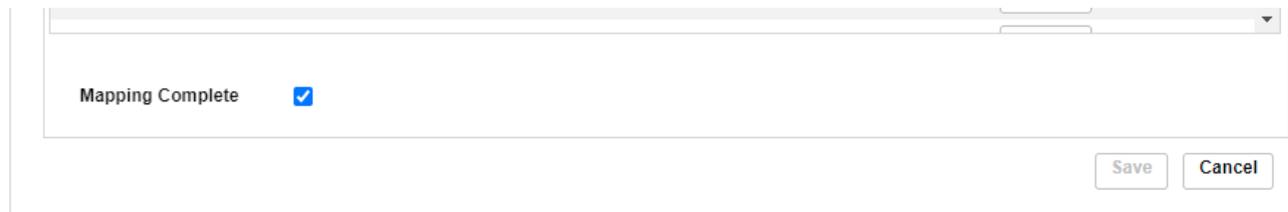

Figure 16: Manage mappings screen, Mapping complete tick box

Do not forget to click "Save" and you will then see a screen confirming your mapping ("Upload Specification") has been saved successfully (Figure 14 and Figure 17).

Figure 17: Manage mappings upload specification updated successfully pop-up box

Data Upload Wizard: Manage Mappings

Data Upload Specification Mappings Updated Successfully.
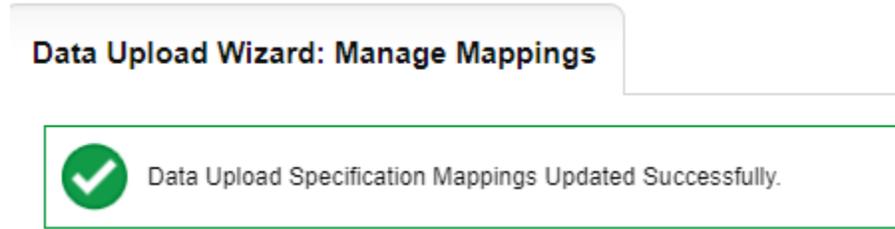
Now you can simply tick the "Use Upload Specification" checkbox then select your saved mapping in the dropdown (Figure 18). Please note your saved mappings will only appear if you have ticked mappings complete ([Figure 25](#) or [26](#)). (Note: The Input Column names, and order must be the same each time you use the saved mappings).

Figure 18: "Use Upload Specification" checkbox and saved mappings dropdown

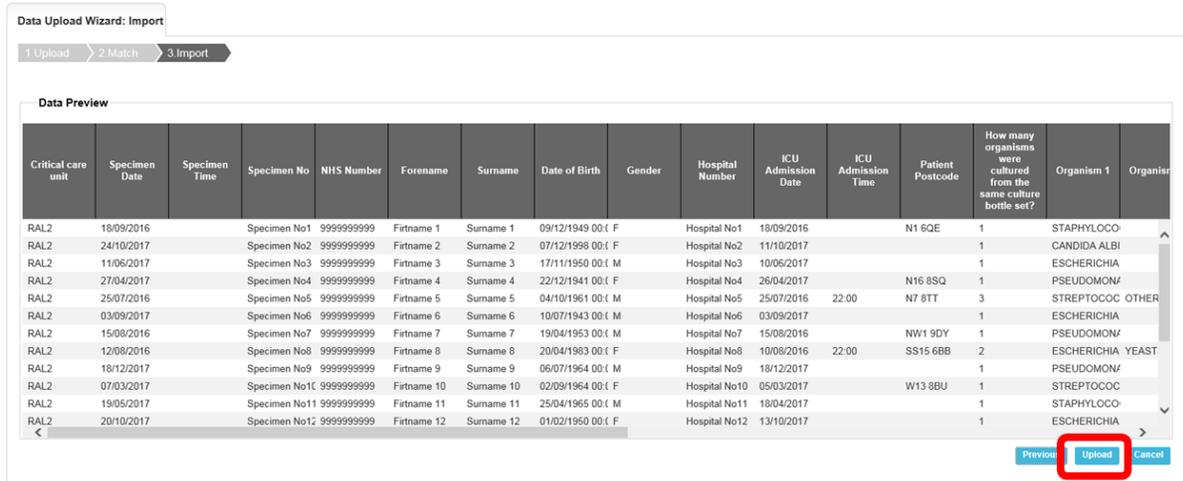Use Upload Specification ✔

—Select—

Then click match, then click next to move to the import screen.

5. Importing data

The last stage of the data upload process is to import the data in your file. You will see a row-by-row preview of the data in your input file. Review the data in the preview window and make sure it is correct. Then click 'Upload' (Figure 19).

Figure 19: Uploading Data

A system message will appear informing you that the file will be processed offline and that you will receive an email with an update of the upload status (Figure 20).

Figure 20: Confirmation of import
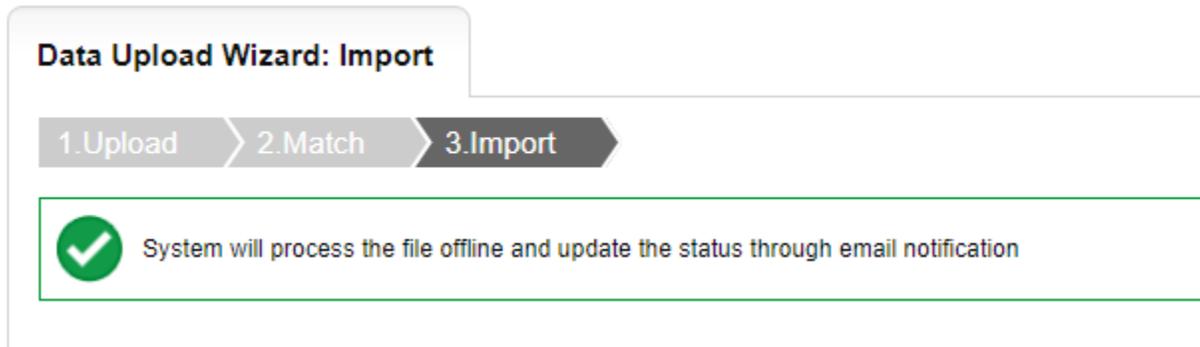
You can also check the progress of your upload in the "My Data Upload" tab, found underneath the Data Uploads tab (Figure 21). Please note this is only for viewing purposes, and you cannot obtain the error/results file from this screen. The error/results file can only be obtained via email.

Figure 21: Navigating to the "My Data Uploads" tab
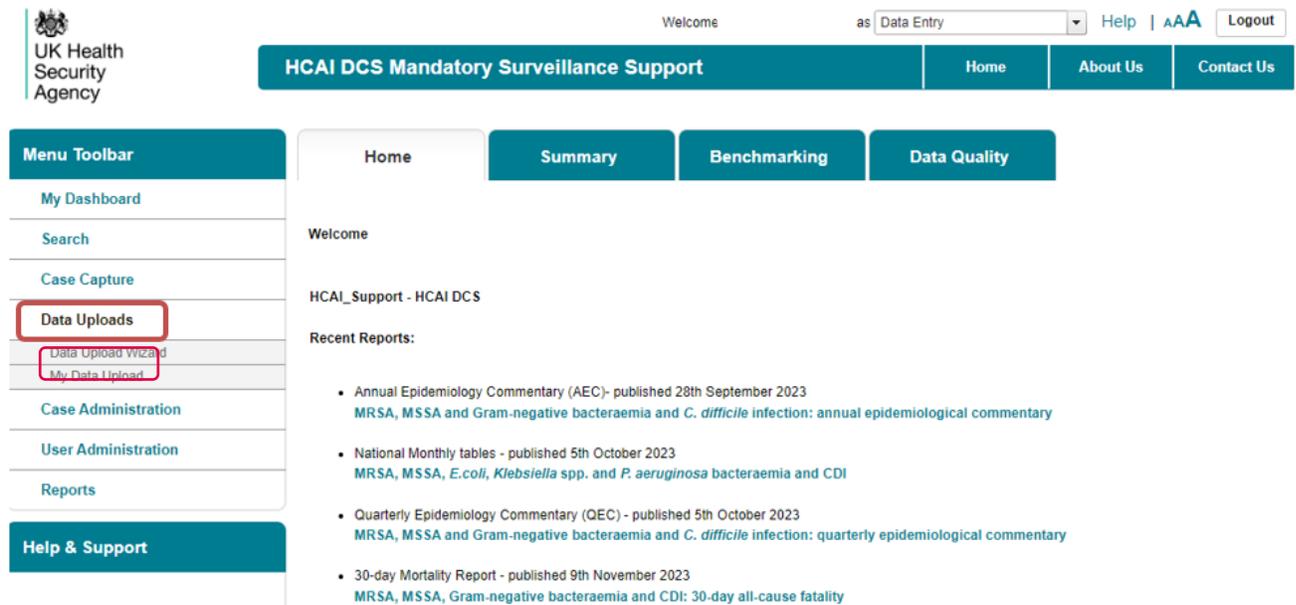
The below table (Table 1) details what the fields in the table mean.

Table 1: My Data Upload table field name and description

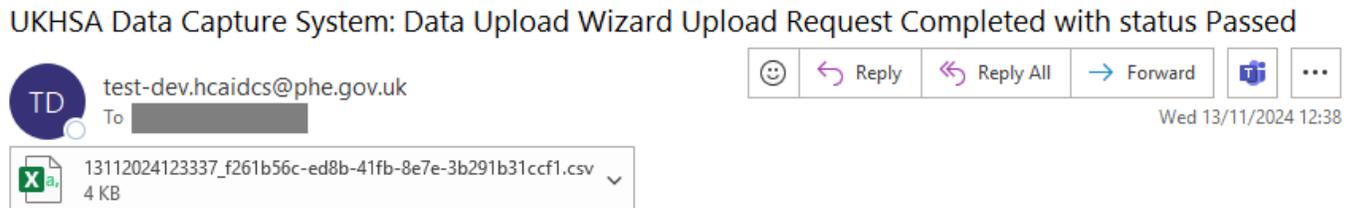| Field Name	Description
Import Id	Displays Import Id of the uploaded file.
Specification Id	Displays Specification/mapping Id used for the uploaded file.
Mapping Type	Displays the Mapping type for the upload. Possible values are: Data Collection, Reference Table, Target, and Denominator
Item Code	Displays what data collection the data is going into. Please note these displays this as the code rather than the data collection description. Example: DCOLL**ICUBS**0000000001 is the ICU Blood Stream Infection data collection.
Mode	Possible values are: Insert, Update, Replace
File Name	Displays the system created file name of the uploaded file. This file name will not be the same as the file name uploaded by you during upload.
Organisation Type Code	Displays your Organisation Type Code
Role Code	Displays your user Role Code
File Processing Status	Displays the uploading status. The column will have one of the following values: • In Queue - File has been uploaded and is queued for processing • In Progress - File still has not yet completed processing • Completed - File has been processed successfully. • Error - File processing is failed.
Import Error Message	Displays the error message when the File Processing Status is in Error. Otherwise, it is blank. Describes the reason of failure during file processing of the uploaded file.

6. Data upload email receipt

Shortly after you upload the DUW file to the DCS, you will receive an email to notify you if your file either 'Passed' or 'Failed'.

If the upload passed (Figure 23), the process is now complete.

Figure 23…

UKHSA Data Capture System: Data Upload Wizard Upload Request Completed with status Passed

test-dev.hcaidcs@phe.gov.uk
To

Reply   Reply All   Forward
Wed 13/11/2024 12:38

13112024123337_f261b56c-ed8b-41fb-8e7e-3b291b31ccf1.csv
4 KB

Your request for the Data Upload Wizard Upload has been completed while you were logged out. Please see the attached file for details.
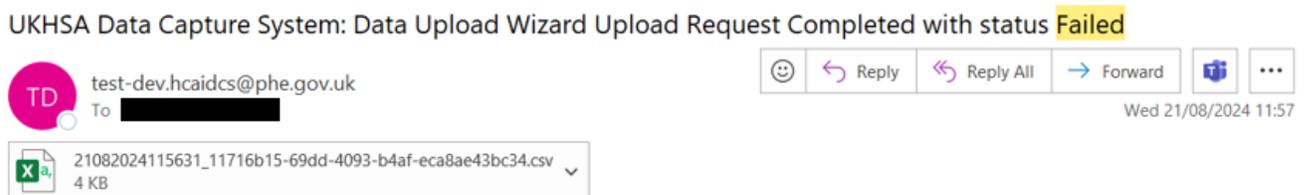
Note: Request to save the attached file to local disk and open the saved file using Microsoft Excel by giving the delimiter as '$' for better view of data.

This message has been auto-generated, please do not reply to this message

7. Troubleshooting failed uploads

If the upload has failed (Figure 24), follow these steps to understand why.

Figure 22: DUW Email receipt

UKHSA Data Capture System: Data Upload Wizard Upload Request Completed with status Failed

test-dev.hcaidcs@phe.gov.uk
To

Reply   Reply All   Forward
Wed 21/08/2024 11:57

21082024115631_11716b15-69dd-4093-b4af-eca8ae43bc34.csv
4 KB

Your request for the Data Upload Wizard Upload has been completed while you were logged out. No records were uploaded due to some invalid data in the file. Please see the attached file for details.

Note: Request to save the attached file to local disk and open the saved file using Microsoft Excel by giving the delimiter as '$' for better view of data.

This message has been auto-generated, please do not reply to this message

Do not try opening the attached CSV file directly. Instead, download it . Then open a blank excel file. Click on the 'Data' tab in the ribbon, Click 'Get Data', click 'From File', Select the 'From Text/CSV' option (

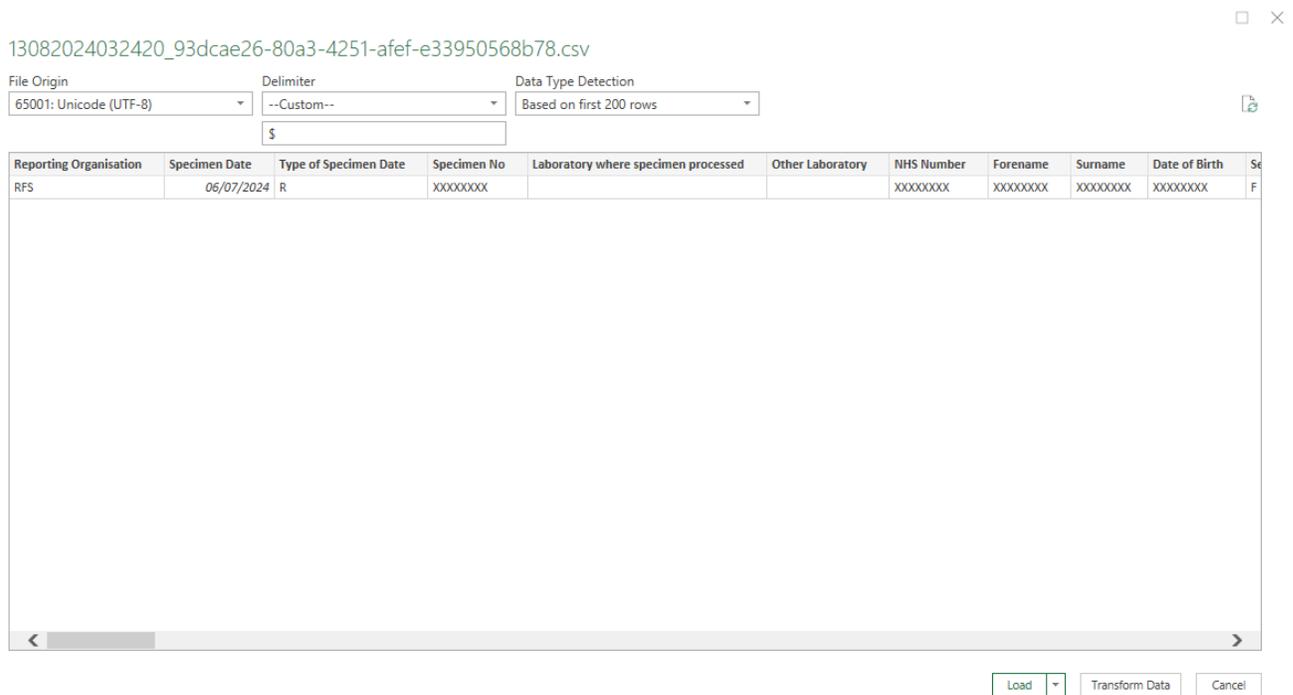Figure 23)**.** Select the file you just downloaded, then click import.

Figure 23: Navigating to 'Get data from Text/CSV' in excel
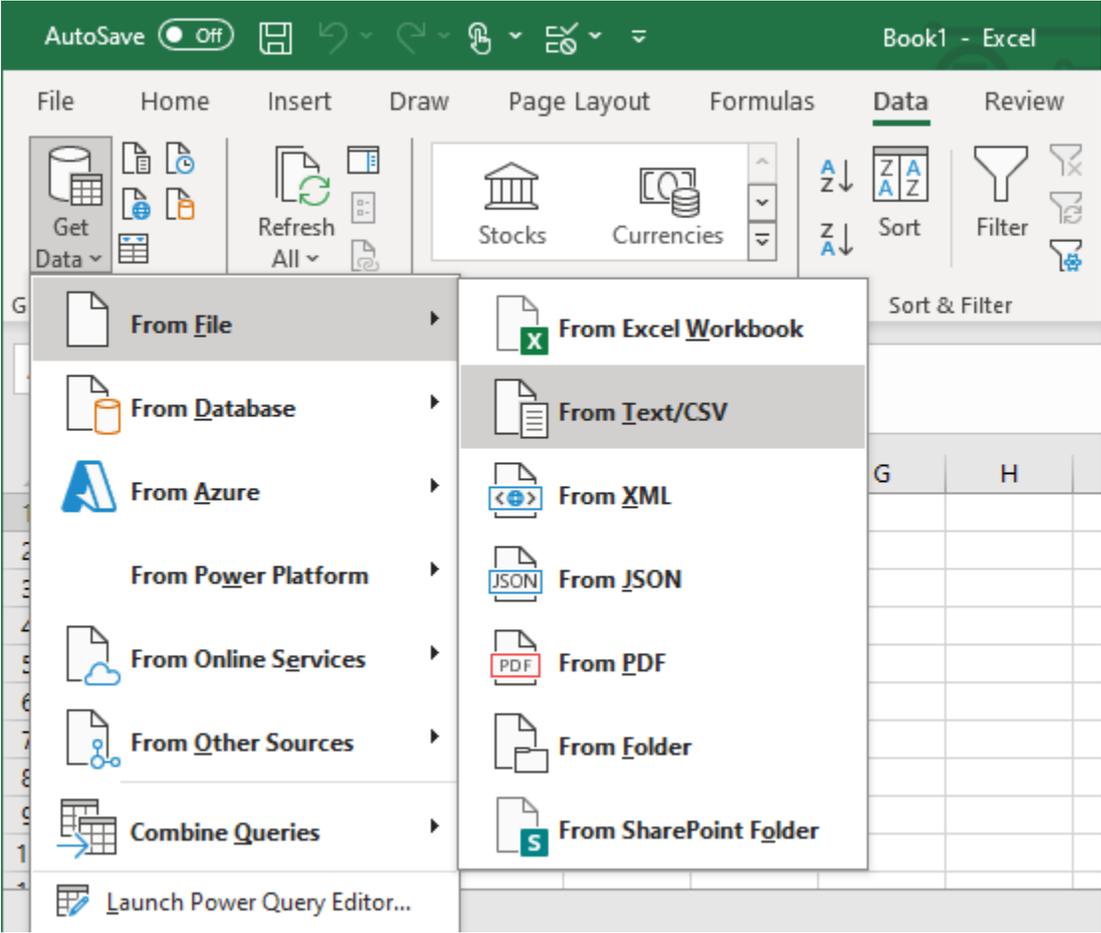
A screen will show (

Figure 24); in the 'Delimiter' field change the value to '--Custom--' and input the $ symbol in the field below. Then click 'Load'.
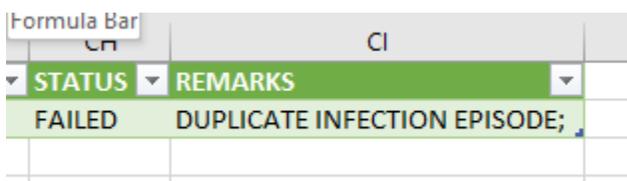
Figure 24: Delimiter pop-up

Once the file has loaded, scroll to the end of Excel sheet and there will be an aditional column named 'Remarks' (Figure 25). This column will identify why the file failed the upload. Once you have understood why the file has failed, you can address the issue and re-upload.

Please note that if one row within your file fails, the whole file will not upload.

Figure 25: Remarks column

Document history

Revision date	Author	Version	Changes
04/06/2021	Public Health England	4.2	-
30/08/2024	UK Health Security Agency	4.3	• Updated branding (PHE to UKHSA)
13/01/2025	Andrea Mazzella, Principal Scientist William McMillan, Information Officer UK Health Security Agency	5.0	• Restructured • Added reference to the new templates
31/01/2025	Andrea Mazzella, Principal Scientist, UK Health Security Agency	5.1	• Clarifications on multi-select fields

About the UK Health Security Agency

UKHSA is responsible for protecting every member of every community from the impact of infectious diseases, chemical, biological, radiological and nuclear incidents and other health threats. We provide intellectual, scientific and operational leadership at national and local level, as well as on the global stage, to make the nation health secure.

UKHSA is an executive agency, sponsored by the Department of Health and Social Care.

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