

REDCap Advanced Topics

University of Iowa



Institute for Clinical and
Translational Science (ICTS)

<https://www.icts.uiowa.edu/confluence/display/ICTSit/REDCap#REDCap-REDCapAdvancedTopicsTraining>





Importing and Exporting Data

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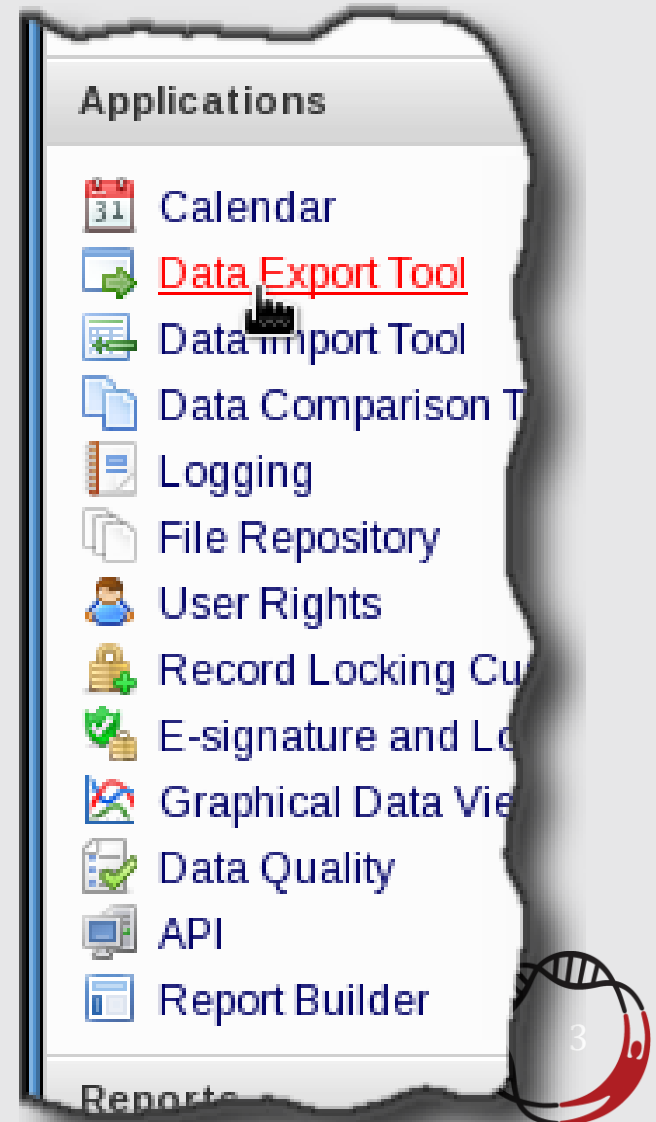
https://www.icts.uiowa.edu/confluence/download/attachments/53149797/REDCap_Import_Export_Data.pdf



Data Export Tool

Enables export of project data to the following formats:

- Microsoft Excel
- SAS
- Stata
- R
- SPSS



Simple Data Export

Exports your entire data set.



Simple Data Export (one-click)

To perform a quick data dump of your entire data set, simply click the button below. When done, it will provide you with various format options for downloading your data.

Export all data now



Excel File Data Export

Citation Notice reminder.

double-click on the Pathway Mapper (.bat) file, which will run quickly and invisibly. (If you do not see the file, click on the "Show Hidden Files" button in the top left corner of the window.)

Additional Instructions.) Now double-click on the *.sas file, which will open SAS. When the file is loaded and displayed, choose "Run" (or "Run > Submit") from the top menu bar.

Citation Notice [X]


















Please cite the REDCap project when publishing manuscripts (citation information and template methods language are [available here](#)).

Okay



Data Export File Formats



| | | Download Syntax & Data |
|---|--|---|
|  | Microsoft Excel You may download the survey results in CSV (comma-separated) format, which can be opened in Excel. You have the choice of downloading the data either with the full headers and answer labels or just with the answer codes (i.e. raw data). <i>NOTE: If you are using a version of Microsoft Excel prior to Excel 2007, due to limitations the data will only be read to 255 columns when opened.</i> | <div> EXCEL CSV Labels</div> <div> EXCEL CSV Raw</div> <div><input checked="" type="checkbox"/> Send file?</div> |
|  | SPSS Statistical Analysis Software Instructions: Download and save all 3 files on the right to a common location. First, double-click on the Pathway Mapper (.bat) file, which will run quickly and invisibly. (If you are not using a Windows operating system, such as Mac or Linux, please see the <i>Additional Instructions</i> .) Now double-click on the *.sps file, which will open SPSS. When the file is loaded and displayed, choose Run-->All from the top menu options. This action will launch the script that will automatically read in all data and manipulate data fields with labels, option values, etc. Additional instructions | <div> SPSS</div> <div> DATA CSV</div> <div> Pathway Mapper</div> <div><input checked="" type="checkbox"/> Send file?</div> |
|  | SAS Statistical Software Instructions: Download and save all 3 files on the right to a common location. First, double-click on the Pathway Mapper (.bat) file, which will run quickly and invisibly. (If you are not using a Windows operating system, such as Mac or Linux, please see the <i>Additional Instructions</i> .) Now double-click on the *.sas file, which will open SAS. When the file is loaded and displayed, choose Run (or Run-->Submit) from the top menu options. This action will launch the script that will automatically read in all data and manipulate data fields with labels, option values, etc. Additional instructions | <div> SAS</div> <div> DATA CSV</div> <div> Pathway Mapper</div> <div><input checked="" type="checkbox"/> Send file?</div> |
|  | R Statistical Software Instructions: Use command <code>read.csv('filename')</code> to read in data file. | <div> R</div> <div> DATA CSV</div> <div><input checked="" type="checkbox"/> Send file?</div> |
|  | STATA Analysis and Statistical Software Instructions: Download both files to common location and double-click on *.do file. This action will launch the script that will automatically read in all data and manipulate data fields with labels, option values, etc. | <div> STATA</div> <div> DATA CSV</div> <div><input checked="" type="checkbox"/> Send file?</div> |



Excel File Data Export

Download raw Excel CSV file:

| | A | B | C | D | E | F | |
|---|----------|------------|-----------|------------|-----|---------------------------|----|
| 1 | study_id | first_name | last_name | dob | age | address | pl |
| 2 | 1234 | John | MacArthur | 6/19/1939 | 71 | Santa Clarita, California | |
| 3 | 1235 | Jerry | Jenkins | 9/23/1949 | 61 | Kalamazoo, Michigan | |
| 4 | 1236 | Tim | LaHaye | 4/27/1926 | 85 | Detroit, Michigan | |
| 5 | 1237 | Max | Lucado | 1/11/1955 | 56 | San Antonio, Texas | |
| 6 | 1238 | Charles | Swindoll | 10/18/1934 | 76 | Plano, Texas | |
| 7 | 1239 | Elisabeth | Elliot | 12/21/1926 | 85 | Ecuador, Curaray River | |
| 8 | 1240 | Ken | Ham | 10/20/1951 | 59 | Queensland, Australia | |
| 9 | | | | | | | |



Advanced Data Export

- **Specify export fields**
- **Select de-identified data**



Advanced Data Export

This option provides a variety of choices for customizing what data gets exported. You may select individual data points one at a time or entire data collection instruments to export. You may also utilize the data de-identification options (if your user privileges permit) that allow you to limit the amount of sensitive information that you are exporting, as you wish.

Display advanced options



Advanced Data Export

Select fields to be exported:

Select All

Deselect All

Every field in the project

Duplicate Last Export

Repeat field selection from your last export

Select All

Deselect All

Form: **Demographics**

Form: **Demographics**

| | |
|---|-------------------------------------|
| Study ID (<i>study_id</i>) | <input checked="" type="checkbox"/> |
| Demographics Information | |
| First Name (<i>first_name</i>) | <input type="checkbox"/> |
| Last Name (<i>last_name</i>) | <input type="checkbox"/> |
| Date of Birth (<i>dob</i>) | <input type="checkbox"/> |
| Age (calculated): (<i>age</i>) | <input type="checkbox"/> |
| Street, City, State, ZIP (<i>address</i>) | <input type="checkbox"/> |
| Phone number (<i>phone_number</i>) | <input type="checkbox"/> |
| Behavior | |
| Do you currently smoke? (<i>smokingcurrently</i>) | <input checked="" type="checkbox"/> |
| On average, how many packs of cigarettes do you smoke per day? (<i>smokingpacksperday</i>) | <input checked="" type="checkbox"/> |
| How many years have you been smoking? (<i>smokingyears</i>) | <input checked="" type="checkbox"/> |



Advanced Data Export

De-Identification export options:

De-Identification Options (optional)

The options below allow you to limit the amount of sensitive information to

Known Identifiers:

- ☒ Remove all known Identifier fields (*tagged in Data Dictionary*)
- ☒ Hash the Study ID (*converts record name to an unrecognizable value*)

Free-form text:

- ☐ Remove unvalidated Text fields (*i.e. Text fields other than dates, numbers*)
- ☐ Remove Notes/Essay box fields

Date and datetime fields:

- ☐ Remove all date and datetime fields
- ☐ Shift all dates by value between 0 and 364 days (*shifted amount determined by user*)
[What is date shifting?](#)

[Deselect all options](#)



Advanced Data Export

Hash Study Id via export options:

| | study_id | | | |
|---|----------------------------------|-----|---------|----|
| | A | B | C | |
| 1 | study_id | age | smoking | sm |
| 2 | f6c7dc11f9da61d3f49d44427e749f97 | 71 | 0 | |
| 3 | cc1ecf571116d75cbd54b230f1dbebce | 61 | 1 | |
| 4 | 499dd437dc04109ad5221e0faf678c94 | 85 | 0 | |
| 5 | c109f2bbd1921e435f0d780772fa9e87 | 56 | 0 | |
| 6 | 3279ed480d72effea0e7a56c59771075 | 76 | 0 | |
| 7 | ed800714ca9bd1d7ba18a322151234f6 | 85 | 1 | |
| 8 | 12bed15cb9fecabfb656155b89d5e973 | 59 | 0 | |
| 9 | | | | |

Other Export Options

Exports all records in a project to a PDF report.

Other export options



PDF (includes data for all records)

The data for all records in this project may be exported to a PDF report in a page format as you would see it on the data entry screen. Click the icon to the right to export your data collection instruments. Click the icon to the right to export your data collection instruments.

Note: If your project has a large amount of field data, the PDF report may be very large both in file size and in page length.



PDF Export Display

Exports all records in a project and formats the data into to a PDF report.

The screenshot displays a PDF report generated from a data collection tool. The report is titled "SarcoidosisDataCollectionOnceF_2012-02-03_0955.pdf" and is displayed in a web browser window. The report content is organized into sections: "Demographics" and "Behavior".

Demographics

| | |
|----------|------|
| Study ID | 1234 |
|----------|------|

Demographics Information

| | |
|--------------------------|-------------------|
| First Name | John |
| Last Name | MacArthur |
| Date of Birth | 1939-06-19 |
| Age (calculated): | 71 |
| Street, City, State, ZIP | Santa Clarita, CA |
| Phone number | |

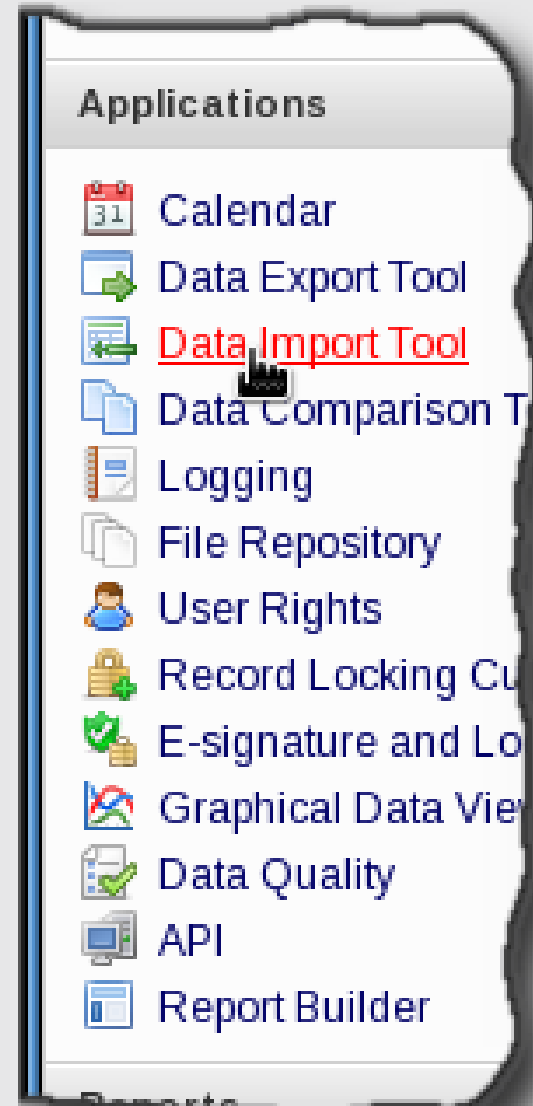
Behavior

| | |
|-------------------------|--|
| Do you currently smoke? | <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes |
|-------------------------|--|

The PDF report is displayed at 80% zoom. The browser window shows the file path "file:///tm" and the document is titled "SarcoidosisDataCollectionOnceF_2012-02-03_0955.pdf". The browser's address bar shows "file:///tm" and the document is titled "SarcoidosisDataCollectionOnceF_2012-02-03_0955.pdf". The browser's address bar shows "file:///tm" and the document is titled "SarcoidosisDataCollectionOnceF_2012-02-03_0955.pdf".

Data Import Tool

**Enables import
of project data
via a CSV format.**



Importing Data from Scratch

Download Data Import Template:



[Download your Data Import Template](#) (with records in rows)

OR



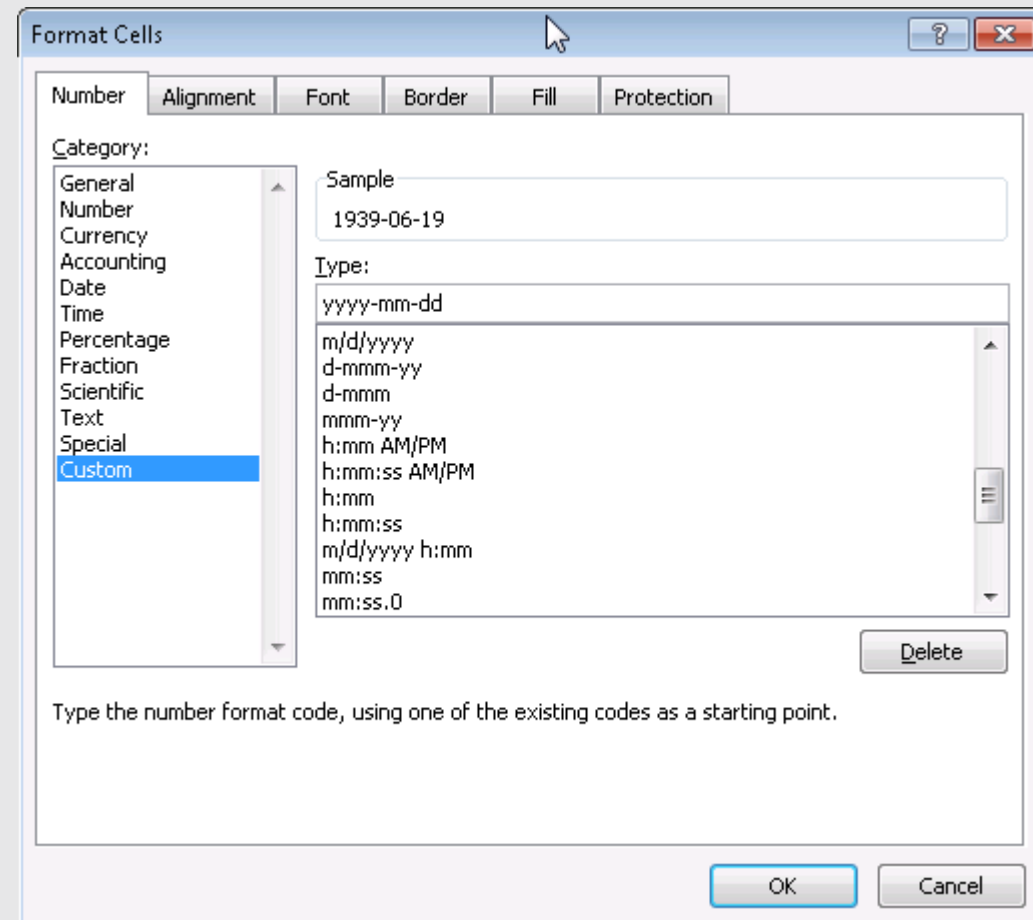
[Download your Data Import Template](#) (with records in columns)

Import File Preparation: Date Field

Format Cells

**Date field
should be
saved to a
custom
format:**

yyyy-mm-dd



Import Preparation: Calculated Field

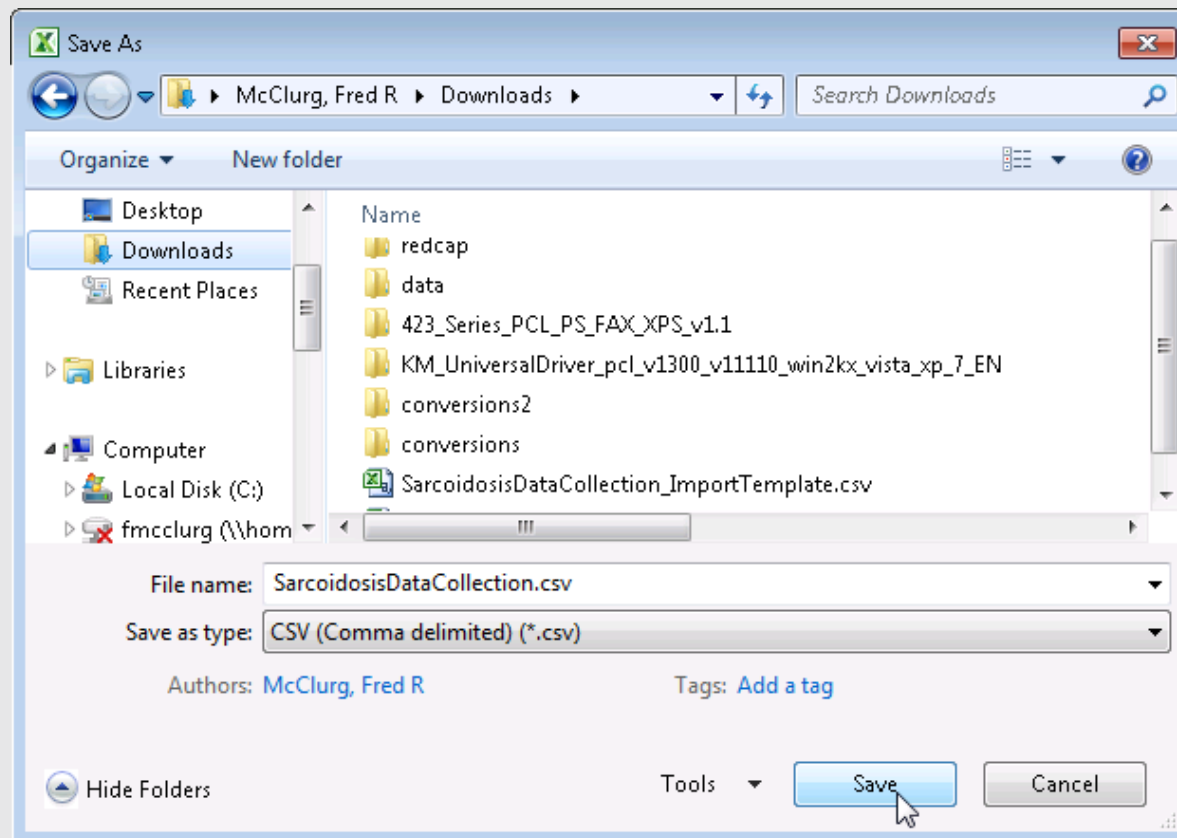
- **REDCap is unable to import the data saved to a Calculated Field.**
- **A column of calculated fields should be deleted before importing.**
- **REDCap will re-compute all calculated fields after import.**



Import Preparation: Calculated Field

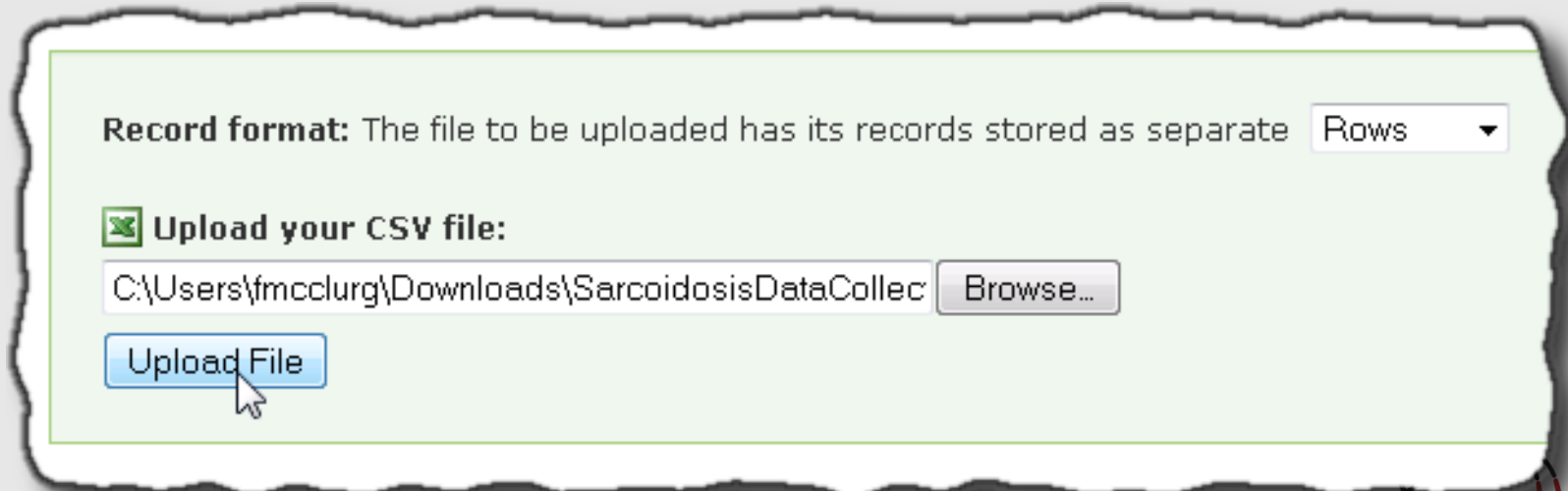
Save file in CSV format via:

1. File -> Save as ...
2. Save as type: CSV (Comma delimited) *.csv



Upload CVS File

- Indicate file by clicking the “Browse” button.
- Import file by clicking the “Upload File” button.



Record format: The file to be uploaded has its records stored as separate Rows ▼

☒ Upload your CSV file:

Browse...

Upload File



Data Display Table Review

**Review data
import**

Instructions for Data Review

The data you uploaded from the file is displayed below. Please review the data and ensure that it is all correct. After reviewing it, you can import this data into the project.

KEY for Data Display Table below

Black text = New Data

Gray text = Existing data (will not change)

(Red text) = Data that will be overwritten

Red box = error

Orange box = warning

Import Data Display Table

- Review Data Display Table
- Press the “Import Data” button

| | | | | | |
|-------------------------------------|-----|--------|------------|------------------------------|--|
| Record) | | | | River | |
| 1240 (existing record) | Ken | Ham | 1951-10-20 | Queensland, Australia | |
| 1241 (new record) | Jim | Elliot | 1927-10-08 | Ecuador, Curaray River | |

Do you wish to import the new data (displayed above) into the project?
(Click the button below to import the data.)

Import Data



Importing Calculated Fields

Calculated fields can't be imported.

height_ft

5.3

(calc) Calculated fields cannot be imported. They can only be calculated on the data collection instrument. Please remove this field from the data import file.

The calculated field columns must be deleted from the CSV file before importing.



Importing Longitudinal Data

In longitudinal studies, the event name can not be specified in the CSV file and imported:

| Field Name | Value | Error Message |
|-------------------|------------|---|
| redcap_event_name | Enrollment | <p>This field name does not exist in the project. <i>redcap_event_name</i> is a pseudo-field that is only used during data export. It cannot be imported.</p> <p>Since you have already defined multiple Events, you will be given the choice to select which uploaded records belong to which event once you have removed all errors here and upload the file again.</p> |

Importing Logitudinal Events

In longitudinal studies:

- ❖ Upon import, the event must be specified interactively.
- ❖ Records that belong to the same event should be imported together.

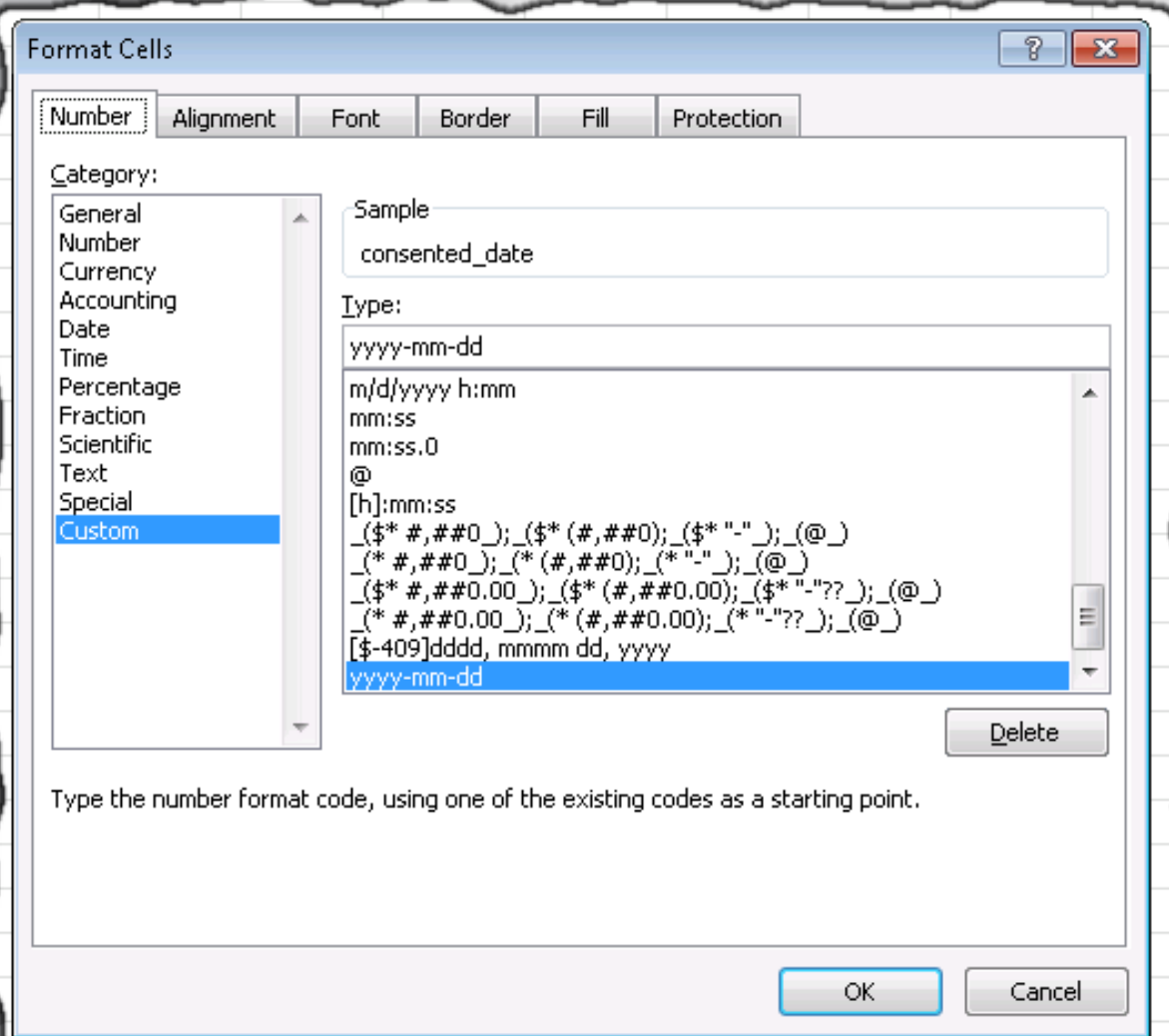
| Select an Event | mrn | first_name | middle_name | last_name |
|-----------------|------------|------------|-------------|------------|
| Enrollment | 12-12345-1 | Grub | R | Longfellow |

Importing Dates

**Date fields must be in the format:
YYYY-MM-DD**

| Field Name | Value | Error Message |
|------------|------------|---|
| entry_date | 09-06-2011 | Invalid date format. (NOTE: Dates must be imported here only in Y-M-D or M/D/Y format, regardless of the specific date format designated for this field.) |

Formatting Dates for Import



The date format can be specified via the Excel menu:

Home=>Format=>
Format Cells

A custom number category of the following type should be specified:

yyyy-mm-dd

This format should allow import of date fields.



REDCap Newsletter

- **Monthly REDCap Newsletter**

- ☐ Upcoming Training
- ☐ Walk-in Hours Schedule
- ☐ Helpful Tips
- ☐ New REDCap Functionality
- ☐ Frequently Asked Questions (and answers)
- ☐ REDCap Best Practices



- **REDCap LISTSERV Subscription:**

- ☐ <https://list.uiowa.edu/scripts/wa.exe?SUBED1=REDCAP&A=1>



REDCap Documentation

- **Training within REDCap:**

- **FAQs (Help & FAQ Tab):**



<https://redcap.icts.uiowa.edu/redcap/index.php?action=help>

- **Video (Training Resources Tab):**



<https://redcap.icts.uiowa.edu/redcap/index.php?action=training>

- **Local REDCap documentation:**



<https://icts.uiowa.edu/confluence/display/ICTSit/REDCap>

