

Access Queries

Steven S Prevette

Senior Statistician
Savannah River Nuclear Solutions, LLC

FLUOR[®]

Exercise Description

- **Microsoft Office “Access” allows for very quick sorting and filtering of raw data**
- **We will work with some downloaded US Department of Energy Occurrence Reporting data**
 - These are “final reports” from several years ago

Access Data

- Open file [ORPS Data.mdb](#).
- Open table ALL ORPS.
- Three additional tables provide the text description for codes used in the table.
- It is real data.

Exercises – Sorting and Filtering

1. **Sorting.** Sort by Categorization Date. Click on the column title, then hit the A -> Z sort icon.
2. **Filter.** Filter by form all of the Significance 3 reports. Select a cell that has a “3” in the Significance column (such as record 2). Then click on the icon with the funnel and the lightning bolt. Before going on to the next step, clear the icon (click on the plain funnel).

Searching and Filtering on Multiple Fields

3. Search for report SR--WSRC-CLAB-2004-0001. Highlight the OR_NUM column, then click on the binoculars icon and type in the serial number.
4. Find all “Failure to follow a prescribed hazardous energy control process or disturbance of a previously unknown or mislocated hazardous energy source resulting in a person contacting hazardous energy”. This is Reporting Criteria 2C(1) occurrence reports. Note that there are 4 fields that need to be searched as each report may have multiple Reporting Criteria. Go to “Records” menu, “filter”, “Advance filter/sort”. Drag down the fields Reporting Crit 1 through Reporting Crit 4 into the first four columns. In field Reporting Crit 1, first criteria row type “2C(1)” [Note - you must use the quotes because if you just type 2C(1) you cause an Access error message], Reporting Crit 2, second criteria row “2C(1)”, through the fourth row, Reporting Crit 4. Then hit the funnel button (or if there is no funnel, go to the “filter” menu and select “apply filter/sort”). By doing the entry in different rows, the search treats it as an “or”.

Multiple Field Filters and Word Searches

5. Find all ISM Core Function 1 reports that are Significance Category 4. Go to “Records” menu, “filter”, “Advance filter/sort”. Drag down the fields ISM and Significance. Enter criteria of 1 under ISM, and in the same row enter 4 under Significance. Then hit the funnel button.
6. Find all reports with “electrical shock” in the subject. Go to “Records” menu, “filter”, “Advance filter/sort”. Drag down the field SUBJECT. Type “Like *electrical shock*” in the criteria. Then hit the funnel button.

Linking Tables with a Query

7. Write a query showing the report number, the first Reporting Criteria, and the Reporting Criteria description. In Access, go to Queries and hit “Create Query in Design View”. Select tables ALL_ORPS and Reporting_Criteria_List, and “add” them to the query. Then hit “close”. Create a relational link between the two tables by sliding the “Reporting Crit 1” field in the ALL_ORPS table over to the “Reporting Criteria” field in the Cause_codes table. Now slide the OR_NUM, and Reporting Crit 1 fields from ALL_ORPS down to the first two columns of the “field” row. Then slide the “Description” field down to the third column. Then hit the exclamation mark (“!”). Sort by OR_NUM.