Substance Abuse and Mental Health Services Administration (SAMHSA)

CSV Batch Upload Guide

Version 1.0

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Guide Overview

This guide provides information to the SPARS Comma-separated Values (CSV) batch upload feature. This feature provides SAMHSA Center for Mental Health Services (CMHS), Center for Substance Abuse Treatment (CSAT), and Training and Technical Assistance (TTA) grantees the ability to upload a prepared CSV file containing multiple records into SPARS; an alternative to completing data entry for each record individually via SPARS data entry screens. SPARS validates the CSV file and provides feedback that grantees can use to verify data and correct errors.

Use this guide to learn how to prepare and upload a CSV data file to SPARS and correct any data issues identified by SPARS. This guide is composed of the following sections and topics:

- Overview of the CSV Batch Upload Feature
- Procedures for Submitting Data
- Guidelines for Preparing a CSV File for Upload to SPARS
- Navigating the Batch Upload Page in SPARS
- Using SPARS Validation Information to Correct Data Errors
- Appendix: CSV Batch Upload Error Messages

Note: The SPARS CSV Batch Upload Training Slides resource provides a comprehensive and detailed walk through of the steps involved in CSV batch upload to SPARS. Additionally, this guide is most beneficial to the grantee staff directly involved in preparing, uploading, and correcting errors SPARS identifies within the CSV data files.

Overview of the CSV Batch Upload Feature

What is the SPARS CSV Batch Upload Feature?

The SPARS CSV batch upload feature allows grantees to download a template CSV file, populate the file with client- (or event-) level data, and upload the file and its data to SPARS. Grantees may find this data entry method more efficient than manually entering these data records individually into SPARS. The CSV batch upload feature does not require special access, permission, or technology expertise. It is particularly suited for grantees collecting these data in an electronic format that allows records to be exported for further processing (i.e., electronic health records systems, online survey platforms such as REDCap and Qualtrics, or spreadsheet applications such as Microsoft Excel).

SPARS validates all CSV data files at submission using the following verification steps:

- SPARS first conducts a general *file-level validation check* to ensure the CSV file is formatted correctly.
- Files that pass the above check are subject to a second, more detailed *record-level validation check* for each row of data. Records that pass the record-level validation check are entered in the SPARS database.

SPARS generates and maintains an "Upload history" table summarizing each of the grantee's batch upload attempts to date, including those that fail data validation checks. Grantees can consult the distinct Error record file and Error report associated with each failed upload attempt to identify the records that failed validation checks and the specific validation rules they triggered. With this information, grantees can amend the data records in the CSV file and reupload to SPARS.

Data records saved to SPARS after successful batch upload are treated the same as records entered via conventional online data entry. The records can be viewed and edited in SPARS in the same way as records entered via online data entry.

What data can be uploaded via CSV batch upload?

The SPARS CSV batch upload feature is available to all SAMHSA grantees collecting data using any of the following tools:

1. CSAT Government Performance and Results Act (GPRA) Client Outcome Measures Tool
2. CMHS National Outcome Measures (NOMs) Client-level Services Tool
3. TTA Program Monitoring Tool
   a. Event Description Form
   b. Post-Event Form
   c. Follow-Up Form

All data records collected using the above tools can be entered in SPARS via CSV batch upload.

Procedures for Submitting Data

This section explains SPARS fundamentals for preparing a CSV data file for batch upload, submitting the file in SPARS, and using the data validation information that SPARS provides to correct any data errors. The Guidelines for Preparing a CSV File for Upload to SPARS section of this document includes more technical information on how to format data for upload, the Navigating the Batch Upload Page in SPARS section walks through the various web components of the "Batch Upload" pane and "Upload history" table, and the Using SPARS's Validation Information to Correct Data Errors section includes more technical information on the meaning of specific data errors grantees may receive following a batch upload attempt.

Grantees enter data via SPARS' CSV batch upload feature in four distinct steps, outlined below.
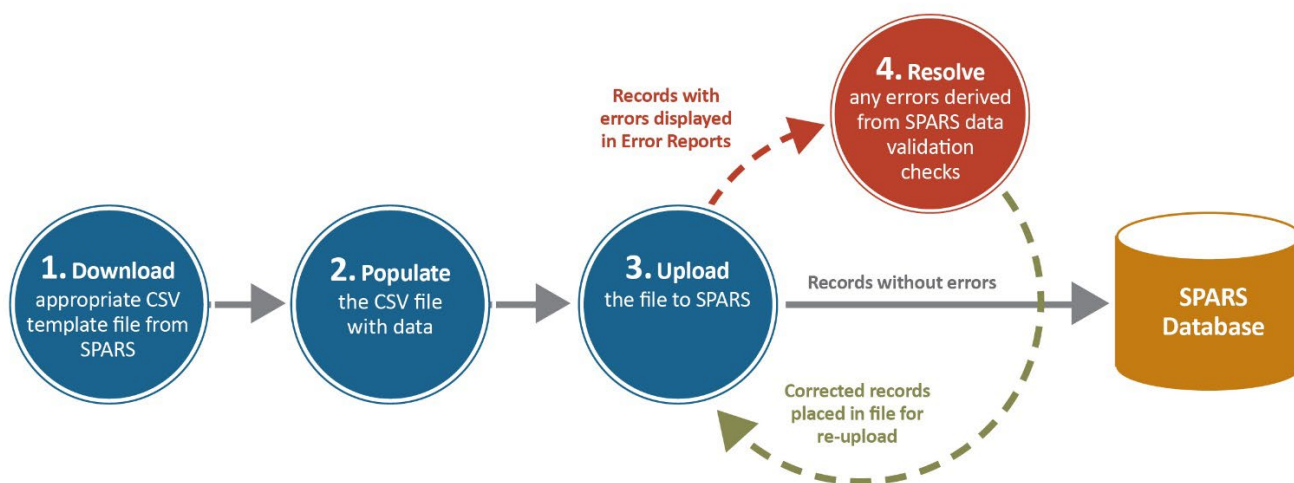
Each of these steps is described in detail in the sections below.

Step 1: Download the Appropriate CSV Template File from SPARS

The following CSV template files are available for download from the [SPARS Resources](#) area for the corresponding SAMHSA data collection tools/forms:

- [CSAT GPRA CSV Upload Template](#)
- [CMHS NOMs CSV Upload Template](#)
- [TTA Event Description Form CSV Upload Template](#)
- [TTA Post-Event Form CSV Upload Template](#)
- [TTA Follow-Up Form CSV Upload Template](#).

The CSV upload templates can be found by using filter or search criteria on the SPARS Resources search page as shown in the following screen capture.

Links to these templates are also available via each Center's respective Batch Upload page.

Step 2: Populate the CSV Template File with Data

Each tool's template is formatted as a CSV file; CSV files are commonly viewed and edited using a spreadsheet application, such as Microsoft Excel. Row 1 of each template file is populated with the data fields required for that tool. The rest of the file is blank. The CSAT GPRA CSV Upload Template is shown below, as an example.
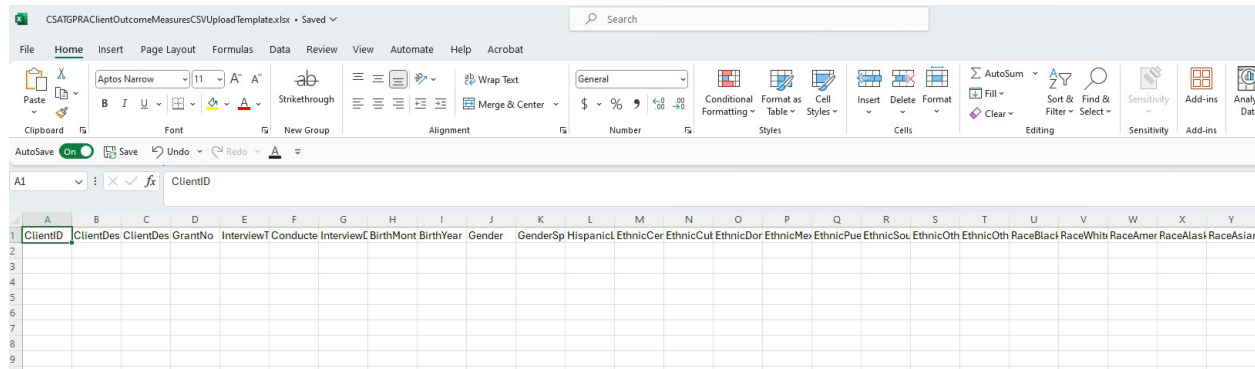
There are three common approaches to populating a template file with data, only two of which are recommended:

- **Recommended:** Grantees may use the template file to understand the list of required data fields and then use their own system or process to develop and populate a local CSV file with data. Note that the self-generated CSV file must include all field names found in the template for SPARS to process the file correctly at upload. The CSV file can include additional fields or columns not in the template; those extra fields will be ignored by SPARS.
- **Recommended:** Grantees may download a template file and populate this file by copying data saved on another system or spreadsheet and pasting it in the template file's respective data fields.
- **NOT Recommended:** Grantees may type data directly into the template file data fields. While this approach may be useful in certain circumstances, grantees entering data by hand may find it easier and more efficient to use SPARS' conventional data entry screens, as these provide data validation information immediately.

The Guidelines for Preparing a CSV File for Upload to SPARS section includes further detail on how to format data so that they pass SPARS' data validation checks.

Step 3: Upload the File to SPARS

Uploading a prepared CSV file to SPARS is straightforward. The necessary steps are listed below.

1. Log into SPARS via the respective Center's Data Entry portal and select "Batch Upload" from the Data Entry drop-down menu on the left side of the page to navigate to the Batch Upload page (The Navigating the Batch Upload Page in SPARS section includes a full description of this page).
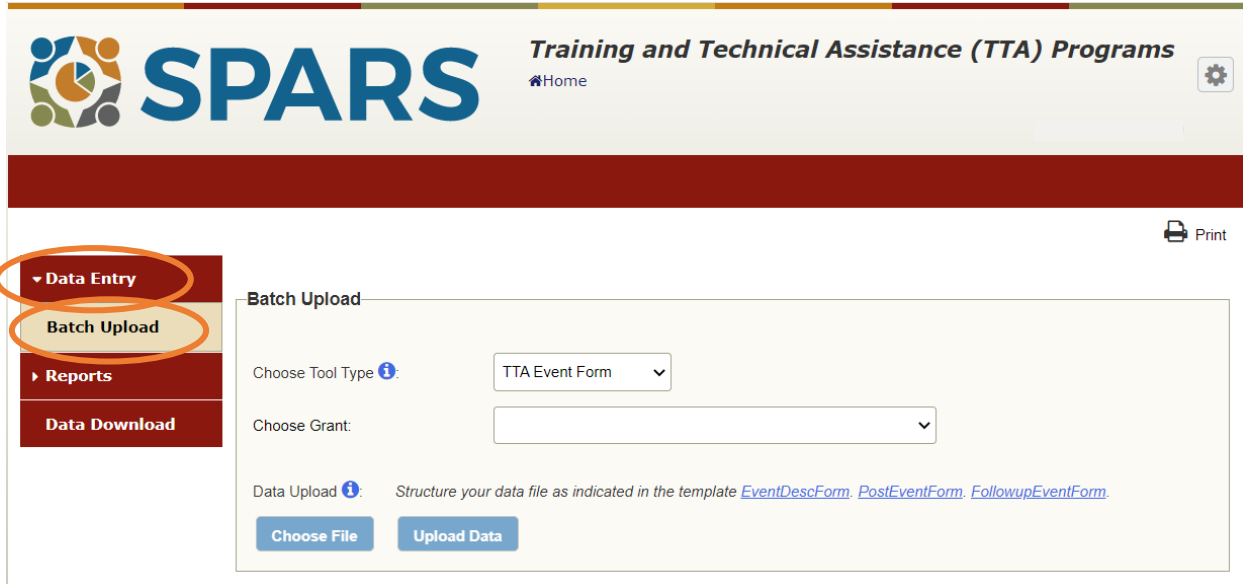
2. Use the "Choose Tool Type" drop-down list to select the tool for which the data are associated. Available tools correspond with the respective Center.
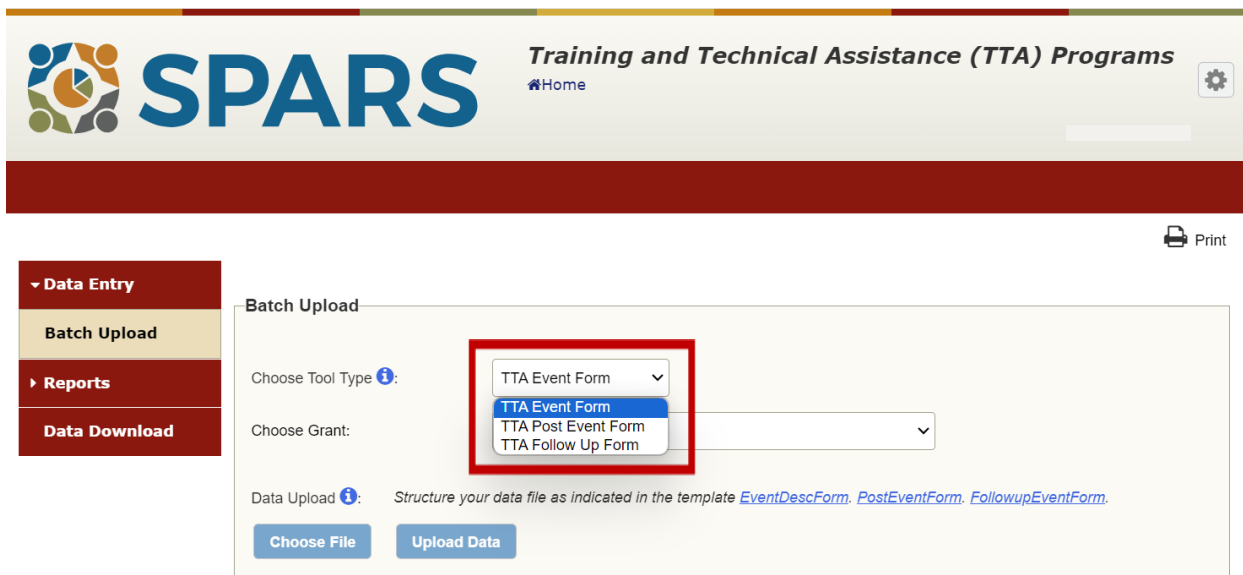
3. Use the "Choose Grant" drop-down list to select the grant for which the data are associated.
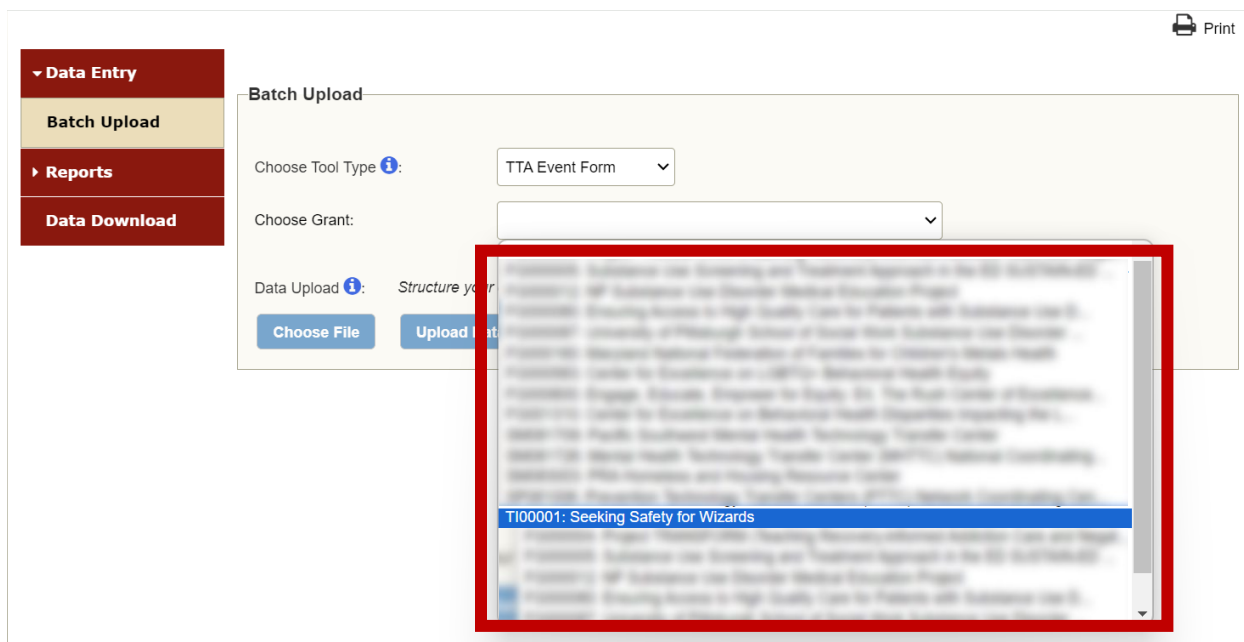
4. Click the "Choose File" button to display a file selection dialog box.
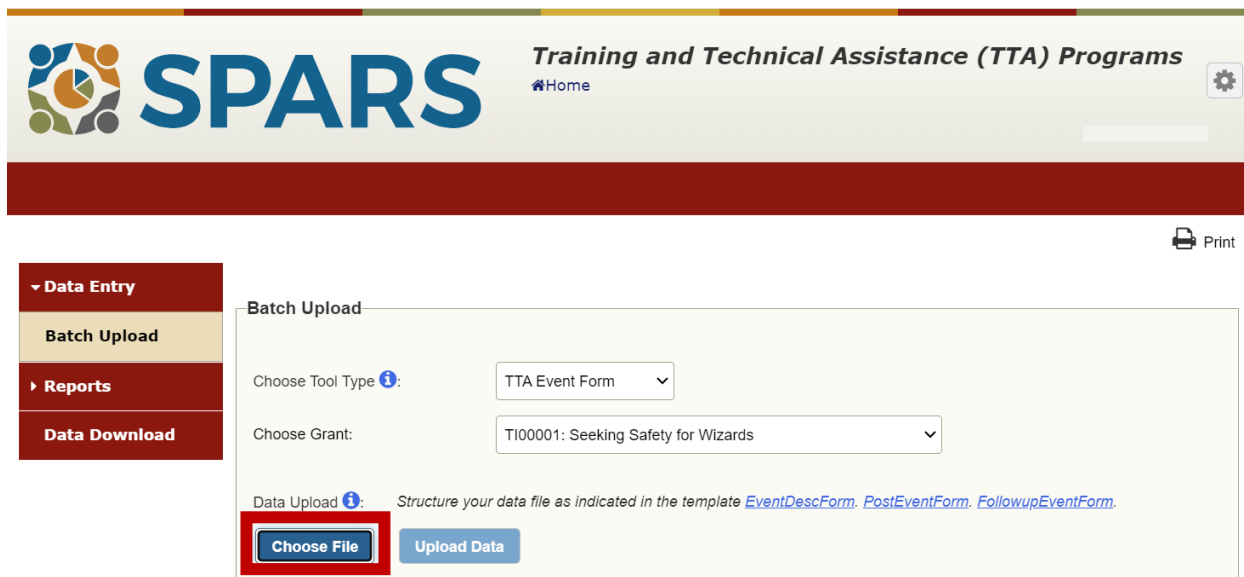
5. Use this file selection dialog box to navigate to the location where the prepared data file is saved, then select the prepared data file. Remember, this file must be in CSV format. The file selection dialog box is set to show only CSV files; if the prepared data file does not appear in the file selection dialog box, it likely is not formatted as a CSV file. Other spreadsheet file formats can be saved or exported as CSV files.
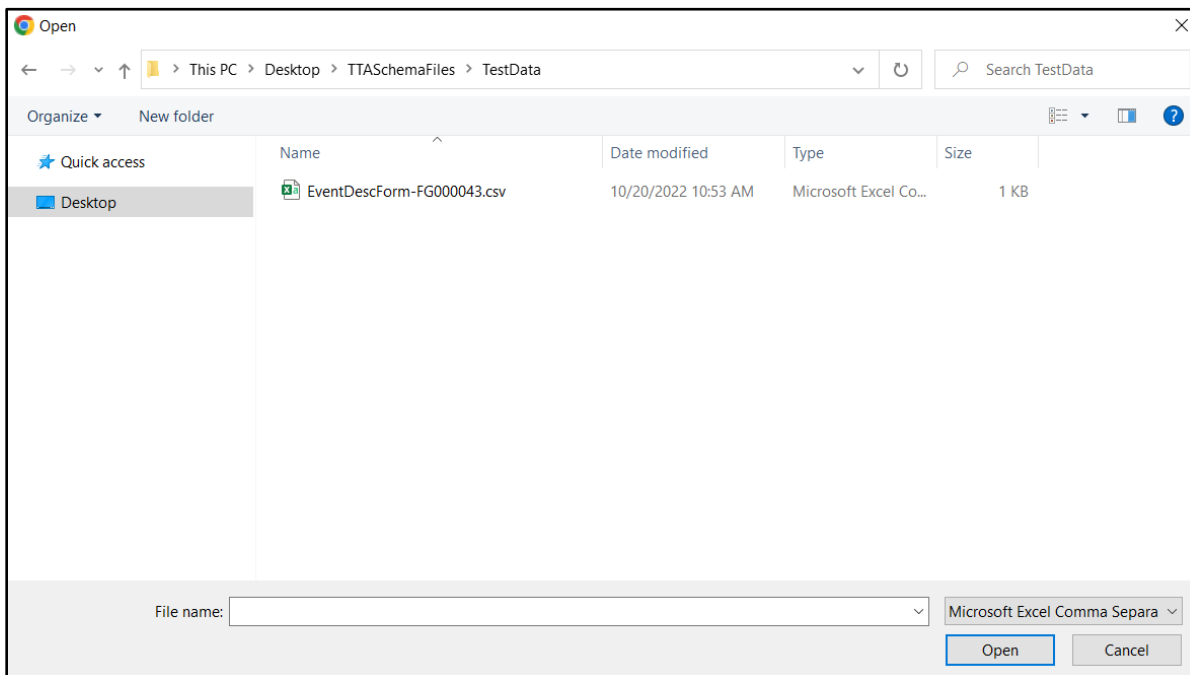
6. Once the prepared file is selected for upload, the filename will appear on the Batch Upload screen; check to ensure the correct file was selected. Then click the "Upload Data" button to submit the CSV file and initiate two data validation processes by SPARS.
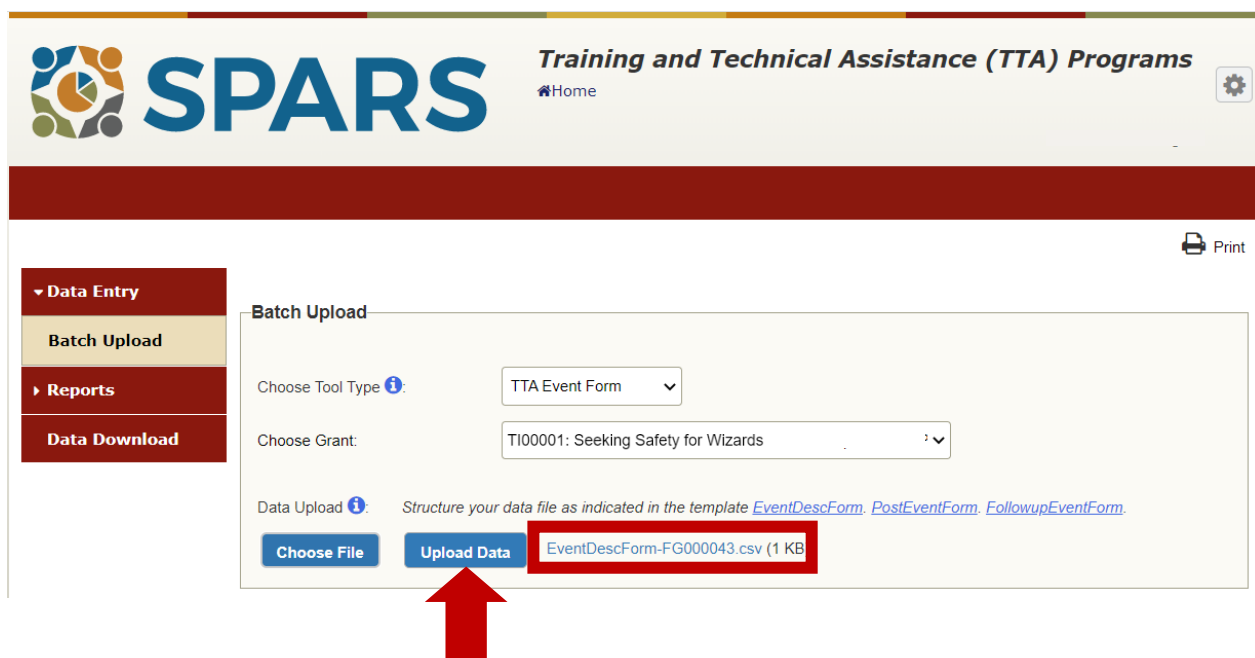
Step 4: Resolve Any Errors Derived from SPARS Data Validation Checks

SPARS conducts two types of data validation checks on submitted CSV files. First, SPARS completes a *file-level validation check*. Next, for files that pass the file-level validation check, SPARS completes a more detailed *record-level validation check.*

File-level Validation Check

SPARS completes the file-level validation check immediately upon file upload. This check determines whether the uploaded file meets general file-level formatting requirements and is suitable for further processing. The results are displayed immediately to the user. **If a file has file-level validation errors, no further processing occurs, and no records are added and saved to the SPARS database.** The entire file must be corrected and resubmitted.

Two formatting errors are commonly found in file-level validation checks:

- **The file is not in CSV format:** SPARS first checks whether the uploaded file is in CSV format. If the uploaded file is not in CSV format, SPARS displays a pop-up box with an error message in red font across the top of the Batch Upload page. SPARS is unable to process the file further, and no row for this upload attempt is added to the "Upload history" table. Grantees must return to their data source and re-export data in CSV format and/or check the file using a spreadsheet application like Excel or a text editor to determine where the formatting problem lies.

- **The file does not contain the required data fields included in the template:** SPARS checks the data field names in the uploaded file to make sure all required fields are present. If all required fields are not present, SPARS displays a pop-up box with an error message. All required field names must match the template field names exactly; any misspellings or change in capitalization will result in a file-level data validation error.
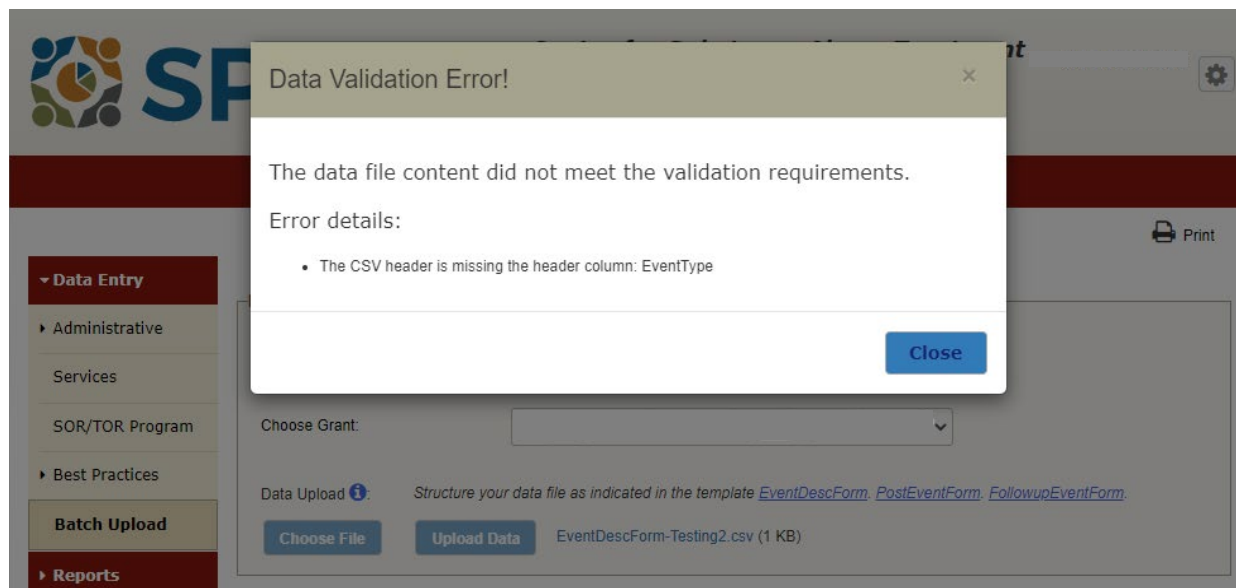
SPARS further catalogs this upload attempt in the "Upload history" table; the error message text is contained in the "Errors" column. This message indicates the necessary fields that were not found in the file. Grantees must return to their data source and correct the names of any data fields that differ from the template and/or add any omitted fields included in the template.

Record-level Validation Check

Files that pass the file-level validation check are then subject to a detailed record-level validation check**.** These checks examine the data values in every row to ensure each is within the range of permitted values described in the respective tool's codebook and that the values are logically consistent. **Records that pass these checks are added and saved to the SPARS database; <u>records that do not pass these checks are not saved to the SPARS database and are listed in error reports</u>**.

Note that record-level validation checks may take up to 15 minutes to complete.

Once record-level validation checks are complete, SPARS conducts two further actions:

- SPARS sends an email to the address on file for the user, notifying the user that the checks are complete and providing summary results.
- SPARS adds a row to the "Upload history" table with results for the upload attempt. This row of information includes the total number of records in the file and the number of records that contained errors. The table's "Errors" column includes links to two detailed reports that can be used to identify and amend any records containing data errors.

If SPARS reports that no errors were found, no further action is necessary. If SPARS reports that one or more records contained errors, and therefore were not entered into the SPARS database, grantees may use the two links that SPARS provides to examine and correct errors:

1. The **Error record file** links to a CSV file that includes one row for each original record that contained one or more errors at upload; grantees may open this CSV file in Excel or a similar spreadsheet application, correct the errors, and then resubmit the updated Error record file into SPARS.

2. The **Error report** links to a CSV file that provides detailed information for each discrete error found in the data file at upload; if a single record contained more than one error at upload, the same record occupies multiple rows in the Error report. The Error report file should not be used to submit data into SPARS.

The Using SPARS's Validation Information to Correct Data Errors section reviews the specific terms that appear in the Error record file and Error report and their meaning, as well as guidance on resolving data errors prior to resubmission.

Guidelines for Preparing a CSV File for Upload to SPARS

This section outlines best practices for formatting data to reduce the occurrence of data validation errors at upload. The first subsection covers upload templates and codebooks. The second subsection covers rules governing the upload file's overall structure. The remaining subsections cover coding rules, including those applicable to all data fields and those that are specific to particular fields.

Guideline A: CSV Batch Upload Template Files & Interview Tool Codebooks

The following CSV template files are available for download from the SPARS Resources area for the corresponding SAMHSA data collection tools/forms:

- CSAT GPRA CSV Upload Template
- CMHS NOMs CSV Upload Template
- TTA Event Description Form CSV Upload Template
- TTA Post-Event Form CSV Upload Template
- TTA Follow-Up Form CSV Upload Template

Links to these templates are also available via each Center's respective Batch Upload page.

Each CSV template file contains data fields corresponding to the items in the selected tool and two additional fields relevant to the CSV batch upload process. The additional fields are:

1. **"QAOnly:"** This data field allows the user to conduct a data test in SPARS prior to formal upload by designating a record as a "test" or QA record; entering a '1' in this field designates the record as QA only. SPARS processes records designated as such **but does not save them to its database**. The default value is '0' when left blank, indicating this record should be added to the database.
2. **"BatchID:"** This data field's values are generated by SPARS during an upload. These numeric values can be used to identify and track specific batch uploads via the "Upload history" table.

Batch upload files should be prepared to match respective tool codebook specifications. SPARS users should, therefore, consult the respective tool codebook to determine permissible values for each data field in the CSV template file and any logic or skip patterns that occur between fields. The data fields included in each batch upload template file align with the respective tool codebook by default. Codebooks can be found on the SPARS Resources page and are linked below for each tool with batch upload capabilities.

- CSAT GPRA Client Outcome Measures Codebook
- CMHS NOMS Client-Level Measures Codebook
- TTA Codebook

It is recommended that batch users refer to the spreadsheet (.xls) formatted codebook that enables users to filter the codebook to include only those fields that are relevant for batch upload. Only the fields in the codebook that indicate "Yes" in the batch upload column of the codebook are relevant for CSV Batch Upload. The codebook has specific information such as metadata, possible valid values, and other rules and restrictions needed to populate data into the CSV Batch Upload file.

Guideline B: Rules Governing Overall File Structure

1. **Each file must only include records for a single grant:** In SPARS, the grant is selected before the file is uploaded.
2. **All data fields must be present:** Row 1 of the template file contains data field names required for the relevant tool. A batch upload file must contain all the field names present in the template.
3. **Data field names must match spelling and case:** Data field names in template files are case-sensitive. Field names in batch upload files must match both spelling and case with those in the template, and all template files use CamelCase. For example, the template files contain a "GrantNo" data field; an upload file with a "Grantno" data field will fail the file-level validation checks.
4. **Data field sequence does not matter:** The sequence in which the data fields are included in the batch upload file does not need to match the same sequence in the template. When processing an upload file, SPARS checks for each data field in the upload file by name, not by position, so the fields in an upload file can be included in any order.
5. **Additional data fields are allowed:** The batch upload file can contain additional data fields not relevant to data entry. SPARS only checks for each required data field in the upload file and ignores fields that do not appear in the template file. However, grantees should never upload any data that includes personally identifiable information (PII).
6. **Tool sections that are not applicable should be left blank or set to '-1':** For the CMHS Client-level Services Tool and the CSAT Client Outcome Measures Tool (but not the forms associated with the TTA Program Monitoring Tool), grantees should leave blank entire response sections that do not apply to the corresponding interview type or grant program. For example, Sections A through F of the CMHS Client-level Services Tool are collected only during an assessment interview; if an interview was not conducted, data for these sections are not captured. In these instances, data fields corresponding to these sections of the tool may remain blank in the upload file. Similarly, Section G of the CMHS Client-level Services Tool and Section H of the CSAT Client Outcome Measures Tool are program-specific; the template file includes all data fields for all programs for these sections, however, grantees need only include data for the fields specific to their program in the upload file. Refer to the appropriate codebook for more information on each set of program-specific data fields.
7. **All data fields within applicable tool sections must be completed:** Similarly, grantees must complete response sections that do apply to the corresponding interview type. Note that certain data fields or sets of fields within a section may be left blank or coded '-1'

(i.e., "not applicable") if, for example, certain data fields within a section are not relevant to the corresponding interview type. For example, Questions 2 and 3 in Section H of the CMHS Client-level Services Tool only apply at clinical discharge; at baseline and/or reassessment, data fields corresponding to these questions of the tool may remain blank in the upload file.

8. **Data must match specifications in the relevant codebook:** The codebooks contain detailed information for each data field including data type, permissible values, skip patterns, and logical validation rules. Note that some fields listed in the codebooks are calculated by SPARS and excluded from the batch upload template by default; the leftmost column in each codebook indicates whether or not the grantee provides data associated with a given field via the upload file.

9. **A single file can contain multiple assessment types associated with the same tool:** CSAT Client Outcome Measures and CMHS Client-level Services Tool files can contain intake/baseline, follow-up/reassessment, and discharge records in a single file, with sections that are not applicable for certain interview types left blank. Records for each TTA Program Monitoring Tool form type (i.e., Event, Post-Event, Follow-Up) must be in a distinct file; these are distinct forms with distinct questions and distinct batch upload templates.

10. **Multiple records for a single client must be uploaded in different files and must be uploaded and processed in chronological order:** SPARS checks its database for previous assessments associated with a client as part of the validation process. For example, SPARS ensures an intake/baseline assessment is already saved in its database for client follow-up/reassessment records submitted via batch upload. If no intake/baseline assessment is found, then the record will not be uploaded, and SPARS will return a validation error in the "Upload history" table's error reports.

11. **SPARS does not allow duplicate records:** Multiple records for a single client are treated as duplicates if they have common values for all specific data fields indicated in the table below:

Tool Template	Data Fields
CMHS: "NOMs"	"ClientID," "GrantID," "Assessment," "InterviewDate"
CSAT: "CSAT GPRA"	"ClientID," "GrantNo," "InterviewType," "InterviewDate"
TTA: "PostEventForm" and "FollowupEventForm"	"ExternalRecordID," "GrantNo," "EventDate"

Any duplicate records in the upload file are marked as an error and are not saved in the SPARS database.

12. **SPARS does not issue a warning for multiple intake/baseline records over different dates for a single client:** SPARS establishes a new active episode of care when a repeat client intake/baseline record is uploaded and marks the episode of care associated with the older intake/baseline record date as inactive.

Guideline C: Rules Governing Coding that Apply Across All Items

1. **'Yes'/'No' coding is consistent:** Conventional coding for 'yes'/'no' questions is:
   - 0 = 'No'
   - 1 = 'Yes'

   There are exceptions to this convention when valid responses to a question contain "Yes" and "No" among a larger set of values. In these cases, the responses are coded as listed in the paper tool or codebook.

2. **Invalid data codes are consistent:** Conventional coding for invalid responses to questions is:
   - -1 = 'Not Applicable'
   - -7 = 'Refused' or 'Prefer not to answer'
   - -8 = 'Don't Know'
   - -9 = 'Missing Data'

   Not all codes are available for all data types; the set of permissible invalid responses varies across data fields. The tool codebook is the best source for information on which values are allowed for each field.

3. **Numeric coding generally follows the order of the response options in the paper tool:** Grantees should always consult the respective tool's codebook to determine the coded values based on response options in the tool. However, numeric codes for response options generally follow the order listed in the paper tool for questions with a discrete set of valid responses. Exceptions include 'yes'/'no' items (see above) and some questions that have been edited in transitions to revised tools.

Guideline D: Rules Governing Coding of Specific Field Types

1. **Coding of choose-all-that-apply items:** Data collection tool items that allow the client to choose one or more response options are formatted as a set of data fields, where each field represents a valid response option. For example, the tool question regarding a client's race is asked as indicate more than one or choose all that apply from numerous valid response options such as Black or African American, White, American Indian, Alaska Native. In the batch upload template there is a separate field for each response option (e.g., RaceBlack, RaceWhite, RaceAmericanIndian, RaceAlaskaNative). These individual fields are treated as 'yes'/'no' response options and are coded '1' or '0' to indicate the selected response. Invalid data values apply at the level of the *question*, not the level of the individual *response options*. That is, a client may refuse to disclose their race entirely, but a respondent may not refuse to answer only specific response options, such as "Black or African American," or "White." Therefore, the invalid data codes for choose-all-that-apply items are uniform across all the question's fields. If any data field in a choose-all set contains a value indicating an invalid response (-1, -7, -8, -9), then all fields of that set must contain that same value. The permissible coding for choose-all sets is as follows:

Situation	Coding
Respondent gave a valid response to the question.	The fields in the choose-all set have a mix of 1s and 0s indicating which responses were selected.
Respondent did not give a valid response to the question.	All the fields in the choose-all set are set to the relevant invalid data code (-1, -7, -8, -9).

2. **Permissible values for "Other" and "Specify" text fields:** Several items associated with each data collection tool allow respondents to choose an "Other" option when none of the available responses apply. Clients who respond to a question this way then provide a free-text response in a corresponding "Specify" data field. Refer to the tool's codebook for character limits. Generally, the "Specify" field must be completed when the corresponding "Other" option is selected. If the "Other" option is not selected, the "Specify" field must be left blank or coded '-1' (i.e., "Not Applicable").

3. **Questions under a skip pattern that are skipped over:** The data collection tools contain several instances where one or more items can be skipped over depending on responses to previous items or other factors, such as the interview type. Generally, skipped items should be left blank or coded '-1' (i.e., "Not Applicable").

4. **Questions under a skip pattern when the triggering item has invalid data:** Data collection tool items that are coded to indicate an invalid response (i.e., '-1,' '-7,' '-8,' '-9') and trigger skip patterns for subsequent items render all these skipped items not applicable and are therefore coded '-1' (i.e., "Not Applicable"). The invalid data code is not carried through to the dependent items. Please refer to the codebook on the SPARS Resources page for items that follow this pattern.

Invalid Data Situation	Client Refused -7	Missing Data -9	Not Applicable -1	Blank
Entire section of the interview is irrelevant			X	X
Question or questions within a section skipped due to internal skip logic				
Categorical "choose one" or "choose all that apply" questions			X	
Quantitative or date questions				X
Data not available, question left blank				
Categorical "choose one" or "choose all that apply" questions		X		
Quantitative or date questions				X
Client refused	X			

Navigating the Batch Upload Page in SPARS

SPARS users can access the CSV batch upload feature by navigating to the appropriate Center or Program area of SPARS via the Quick Links on the SPARS Home Page or via the SPARS Data Entry & Reports page. When using the SPARS Data Entry & Reports page, the "Data Entry" links for the CMHS, CSAT, and TTA portals should be used to access the CSV Batch Upload feature. Note, TTA grantees can batch upload data using the CSAT or the TTA areas of SPARS.

Each Center's Data Entry portal includes a "Batch Upload" link within the drop-down menu on the left side of the page. The screenshots below show each Center's respective drop-down menu. The Batch Upload page features are also uniform across Centers.

CSAT Data Entry portal and menu
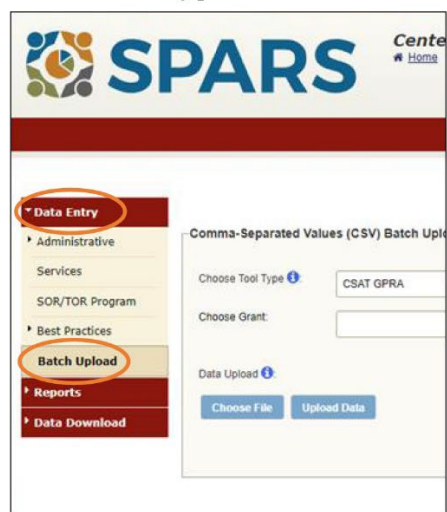
CMHS Data Entry portal and menu
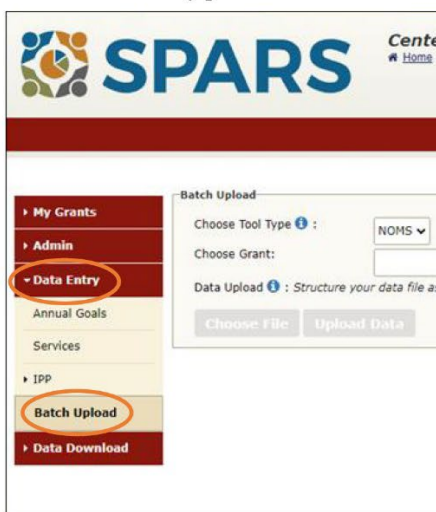
TTA Data Entry portal and menu
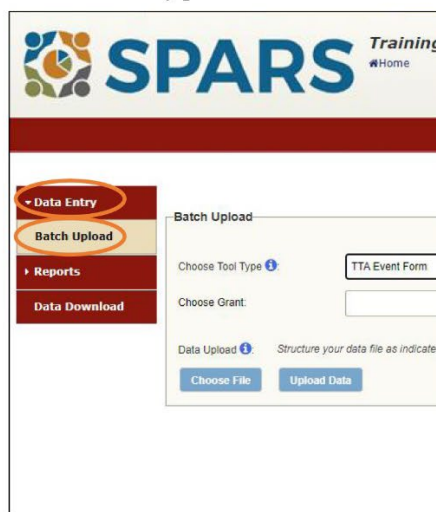
The Batch Upload page consists of the "Batch Upload" pane at the top of the page and an "Upload history" table that appears beneath the "Batch Upload" pane upon selecting a specific grant. Each of these components is described below.

The "Batch Upload" Pane

The "Batch Upload" pane features several criteria, links, and action buttons that grantees select to complete a new batch upload. These include:

- **Choose Tool Type field:** This drop-down list allows the user to select the tool or form type used to collect the data they wish to upload. The list of tools available for the CSV-batch upload is specific to each Center's Batch Upload page, as shown in the table below. In the screenshot above, the user has selected the "CSAT GPRA" Tool Type.

Data Entry Portal/Batch Upload Page	Available Tool/Form Data for Batch Upload
CMHS	"NOMS"
CSAT	"CSAT GPRA," "TTA Event Form," "TTA Post Event Form," "TTA Follow Up Form"
TTA	"TTA Event Form," "TTA Post Event Form," "TTA Follow Up Form"

- **Choose Grant field:** This drop-down list allows the user to select the grant associated with the data they wish to upload. The list of available grants includes those that collect data using the selected tool type and for which the user has access.
- **Data Upload template links:** These links allow the user to download the respective CSV upload template file for the selected tool type. The template files are included in the "Batch Upload" pane as a convenience; they are also available via the SPARS Resources page.
- **Choose File button:** This button generates a pop-up window through which the user can navigate their local system and select a prepared CSV data file for upload.
- **Upload Data button:** This button uploads the selected prepared CSV data file.

The "Upload history" Table

The "Upload history" table features information about each upload attempt during the previous two weeks. Users can view upload activity from a specific range of dates by selecting the appropriate start and end dates in the fields directly above the "Upload history" table; click "Update/Refresh Table" to view upload activity from only the selected range of dates. Note that upload attempts using a file not in CSV format are not recorded in the "Upload history" table.

The columns in the table are:

- **Id:** SPARS generates a batch ID which is unique within each grant.
- **Upload File:** The name of the CSV data file that was uploaded.
- **Tool Type:** The tool type selected at upload.
- **Upload Date:** The date and time of upload (in Eastern Time Zone).
- **Total Records:** The number of data records (i.e., rows with data in the CSV data file) included at upload.
- **Error Records:** The number of data records (i.e., rows with data in the CSV data file) identified by SPARS with one or more errors at upload.
- **Errors:** The types of data errors identified by SPARS at upload. The screenshot below shows all three possible renderings.
    - **File-level validation errors:** A <u>single error message</u> is displayed for an upload in which SPARS encountered an overall *file-level validation error* due to missing necessary data fields.
    - **Record-level validation errors:** Links to <u>two error files are displayed</u> for an upload in which SPARS encountered specific *record-level validation errors*. These links are described in greater detail in the next section, <u>Using SPARS Validation Information to Correct Data Errors.</u>
    - **No errors:** The Errors column is blank for any upload in which SPARS did not encounter any errors in the CSV data file.

▾ **Data Entry**

Batch Upload

▸ **Reports**

Data Download

Batch Upload

Choose Tool Type ℹ: [TTA Event Form ▾]

Choose Grant: [TI00001: Seeking Safety for Wizards ▾]

Data Upload ℹ: *Structure your data file as indicated in the template* EventDescForm, PostEventForm, FollowupEventForm.

[**Choose File**] [**Upload Data**]

Upload history: Tool = *Event Form*, Grant = *TI00001*

Showing uploads from [3/15/2024] to [3/29/2024] [**Update/Refresh Table**]

Id	Upload File	Tool Type	Upload Date	Total Records	Error Records	Errors
1459	TTAEventForm.csv	Event Form	3/29/2024 1:04:58 PM	1	1	• Error record file • Error report
1458	TTAEventForm.csv	Event Form	3/29/2024 12:55:13 PM	1	1	• Error record file • Error report
1457	TTAEventForm0324.csv	Event Form	3/29/2024 12:51:29 PM	NA	NA	The CSV header is missing the header column: NrParticipantsFlwp
1456	TTAEventForm.csv	Event Form	3/29/2024 12:16:01 PM	1	1	• Error record file • Error report
1455	TTAEventFormCSVUploadTemplate	Event Form	3/29/2024 11:45:47 AM	1	0	

Using SPARS Validation Information to Correct Data Errors

As described in the [Procedures for Submitting Data](#) and [Navigating the Batch Upload Page in SPARS](#) sections, SPARS performs a *file-level validation check* of an uploaded file's formatting and, for files that pass this check, a detailed *record-level validation check* that examines the values in each data record for validity.

SPARS presents file-level validation error messages to the user immediately; SPARS conducts record-level validation on a set schedule that may take up to 15 minutes. Once complete, SPARS emails the user and produces two reports to help users correct their data, as needed. These reports are available via links in the "Upload history" table.

The two error reports SPARS produces are the **Error record file** and the **Error report**. Each is described below. Consult the [Appendix: CSV Batch Upload Error Messages](#) for details regarding specific error messages SPARS may produce during batch upload.

Error Record File

The Error record file is designed to allow users to easily make corrections to the CSV upload file and resubmit. The Error record file is a CSV file that includes one row for each original record that contained one or more errors at upload. It includes all originally submitted data field names and several additional columns to help grantees identify the error(s) that occurred for each

record. Grantees may open this CSV file in Excel or a similar spreadsheet application, correct the errors, and then reupload this file in SPARS.

SPARS includes the following columns, in addition to the original columns in the submitted batch upload file, in the Error record file:

- **BatchID:** The unique identifier SPARS assigned to this batch.
- **UpdateDate:** The date the file was uploaded.
- **ErrorMessage:** A message containing the error(s) and the data field(s) involved. Since one data record may contain multiple errors, this cell may contain multiple error messages. Each error message and the field it pertains to is listed, with the vertical pipe character "|" delimiting the different error messages. For example, the error message:

indicates that the EventType data field, which is a categorical field with a designated set of permissible values, had an invalid value for this data record, and the NrParticipants field, which is a numeric field, also had an invalid value for this data record.

Error Report

Unlike the Error record file, the Error report is not designed to be resubmitted in SPARS. The Error report may be helpful in reviewing and understanding all errors for all records, but the data corrections should not be made in this file. It is also a CSV file that grantees can open in spreadsheet applications like Excel and provides more detailed information they can use to correct invalid data in their file (or source system) before resubmitting in SPARS. This report contains one row for each error found in the data file at upload; if a single record contained more than one error at upload, the same record occupies multiple rows in the Error report.

	A	B	C	D	E	F	G	H	I
	Batchid	UpdateDate	GrantNo	EventDate	EventCode	ErrorMessage	Fields		
	14	10/19/2022	SM083003	10/20/2022	SM083003-1	DateInFuture	EventDateEventDate=10/20/2022		
	14	10/19/2022	SM083003	10/20/2022	SM083003-1	InvalidCategoricalValue	EventType=7		
	14	10/19/2022	SM083003	10/20/2022	SM083003-1	AtLeastOneMustBeSelcted	PrimAudProfsOrgs - PrimAudRural		

SPARS generates the following columns in the Error report:

- **BatchID:** The unique identifier SPARS assigned to this batch.
- **UpdateDate:** The date the file was uploaded.
- **GrantNo:** The grant number for which the data were uploaded.
- **[Additional identifying column(s)]:** Additional columns necessary to uniquely identify the data record for the tool that is being uploaded, such as "EventDate" and "EventCode" for TTA Event Form data, or "ClientID," "InterviewDate," and "InterviewType" for CSAT GPRA data.
- **ErrorMessage:** A message containing a single error message such as "InvalidCategoricalValue" or "InvalidContinuousValue." See the Appendix: CSV Batch Upload Error Messages for a comprehensive list of possible error messages.
- **Fields:** The data fields to which the error message applies. If a single field is involved, it is listed along with the value that caused the error. For example, the columns below indicate that the field "EventType" was set to '7' for this record in the uploaded file, and '7' is not among the allowed values for this categorical field.

ErrorMessage	Fields
InvalidCategoricalValue	EventType = 7

If an error involves multiple fields, they are listed together in the Fields column. For example, the columns below indicate that at least one of the fields in the set from "PrimAudProfsOrgs" to "PrimAudRural" must be selected, and this was not the case in the uploaded data. This pattern is frequent for choose-all-that-apply sets of fields.

ErrorMessage	Fields
AtLeastOneMustBeSelected	PrimAudProfsOrgs - PrimAudRural

Grantees may use the information in the Error report to correct the data in the Error record file and then resubmit the corrected Error record file for upload and processing in SPARS. Grantees may find sorting the Error report by "ErrorMessage" in Excel or other spreadsheet application may allow for more efficient dispositioning of errors.

Appendix: CSV Batch Upload Error Messages

CSAT Client Outcome Measures Tool & TTA Forms Error Messages

Error Message	Error Description	Solution
AdminOnlyWithInterviewDate	Admin only records cannot have an interview date	Set interview date to not applicable OR change the Conducted Interview field to yes
AtLeastOneMustBeSelected	At least one choose-all-that-apply option must be selected	Enter a valid, non-N/A value from the list of allowable values specified in the tool's codebook
AtLeastOneMustBeYes	Question does not include any 'Yes' responses when expected	Enter at least one 'Yes' response value (see tool's codebook for details)
CannotBeNullOrEmpty	Item cannot be left blank	Enter a valid, non-null value from the list of allowable values specified in the tool's codebook
DateNotInRangeof	Date value, such as Interview Date, is not within the valid date range	Enter a date that is within the valid date range
DuplicateInFile	The file contains duplicate records, for example the Client ID appears 2 or more times in the file	Remove the duplicate record(s)
DuplicateInterview	The file contains records that were previously uploaded via either Batch Upload or Data Entry	Remove the duplicate interview
ExceedsMaxLength	Entered value exceeds the maximum character length	Reduce the character length to fit within the character length limits specified in the tool's codebook
GrantEnded	The file contains records for a grant that has ended	Enter an active grant number
InconsistentSvcRecoveryPlanning	Recovery Planning is not duplicated in the	Remove the Recovery Planning response option from the Recovery Support Services

	Recovery Support Services section	section OR enter the same value in both fields (see tool's [codebook](#) for details)
InterviewAfterGrantEnd	Interview date occurs after the grant ended	Enter an interview date prior to the end of the grant or enter an active grant number
InterviewBeforeGrantStart	Interview date occurs before the grant started	Enter an interview date after the start of the grant or enter an active grant number
InvalidDate	Date value is not in the valid date format	Enter a valid date using the date format specified in the tool's [codebook](#)
InvalidDaysUsedValue	Entered value for Number of Days Used is invalid	Enter a valid value for 'Number of Days Used' as specified in the tool's [codebook](#)
InvalidOptionSelected	Selected option is invalid	Enter a valid response option
InvalidValue	Entered value is invalid	Enter an allowable value as specified in the tool's [codebook](#)
MoreThanOneOptionWithValue	Only one option can have a value	Enter a single response option
NoEarlierThanIntake	Follow-up or Discharge interview date occurs before the intake interview date	Enter an interview date occurring after the intake interview date
NoEarlierThanPrevious	Follow-up interview date occurs before the previous follow-up interview date	Enter an interview date occurring after the previous follow-up interview date
NotAllSetToBlankOrNotApplicable	If one item under a choose-all-that-apply question is left blank or set to not applicable, all items must be left blank or set to not applicable	Set all response options within the choose-all-that-apply question to not applicable or leave them blank
NotAllSetToMissing	If one item under a choose-all-that-apply question is set to missing, all items must be set to missing	Set all response options within the choose-all-that-apply question to missing OR remove/replace any missing values in that question
NotAllSetToNotApplicable	If one item under a choose-all-that-apply question is set to not	Set all response options within the choose-all-that-apply question to not applicable OR

	applicable, all items must be set to not applicable	remove/replace any not applicable values in that question
NotAllSetToRefused	If one item under a choose-all-that-apply question is set to refused, all items must be set to refused	Set all response options within the choose-all-that-apply question to refused OR remove/replace any refused values in that question
NotValidEndDate	The date entered occurs outside the valid date range for the grant.	Ensure the dates are correct and occur before the grant end date and correct any date value as needed
OtherSpecifyWithoutOther	'Other Specify' value was entered but the 'Other' option was not selected	Select the 'Other' response option OR remove the 'Other Specify' value
OtherSubstanceSpecifiedButNotUsed	'Other Substance Specified' has a value but 'Other Substance Days Used' does not	Enter a value for 'Other Substance - Number of Days Used'
OtherWithoutOtherSpecify	'Other' option was selected but an 'Other Specify' value was not entered	Enter an 'Other Specify' value OR remove/replace the 'Other' option
SBIRTClientIDLength	SBIRT Client IDs must be 12 characters long	Enter a valid Client ID that is 12 characters long
SBIRTClientIDMatch	SBIRT Client IDs must match random sample criteria	Enter a valid Client ID that matches the random sample criteria (see tool's codebook for details)
SpecifyOtherSubstanceNeeded	'Other Substance' option was selected but an 'Other Substance Specify' value was not entered	Enter an 'Other Substance (Specify)' value
ToolExpired	File contains interviews conducted using the expired tool	Remove the interviews with dates occurring prior to the implementation of the new tool (1/10/23)
ValueIsEmpty	A required value is empty	Enter an allowable value as specified in the tool's codebook
ValueNotApplicable	Selected value is not applicable to selected option	Enter a value that is allowable and applicable to the selected response option as specified in the tool's codebook

ValueOutOfRange	Entered value was outside the valid value range	Enter a value that is within the allowable value range specified in the tool's codebook

CMHS Client-level Services Tool Error Messages

Error Message	Error Description	Solution
AdminOnlyWithInterviewDate	Admin only records cannot have an interview date	Set interview date to not applicable OR change the Conducted Interview field to yes
AtLeastOneMustBeSelected	At least one choose-all-that-apply option must be selected	Select at least one valid response option from the choose-all-that-apply item
CannotBeNullOrEmpty	Item cannot be left blank	Enter a valid, non-null value from the list of allowable values specified in the tool's codebook
DateInFuture	Interview date is after today's date	Enter an interview date that is prior to today's date
DateNotInRangeof	Date value, such as Interview Date, is not within the valid date range	Enter an interview date that is within the valid date range
DischargeBeforeReassessment	Discharge occurred the Reassessment, and the user is trying to batch-upload the Discharge record	Remove the Reassessment from SPARS, then enter the Discharge record next
DuplicateInFile	The file contains duplicate records, for example the Client ID appears 2 or more times in the file	Remove the duplicate record
DuplicateInterview	The file contains records that were previously uploaded via either Batch Upload or Data Entry	Remove the duplicate interview
ExceedsMaxLength	Entered value exceeds the maximum character length	Reduce the character length to fit within the character length limits specified in the tool's codebook

FirstReceivedAfterGrantEnd	First Received Services Date value is after the grant's end date	Correct the value in this date
FirstReceivedAfterToday	First Received Services Date is after today's date	Enter a date that is prior to today's date
InterviewAfterGrantEnd	Interview date occurs after the grant ended	Enter an interview date prior to the end of the grant or enter an active grant number
InterviewAfterToday	Interview date is after today's date	Enter an interview date that is prior to today's date
InvalidDate	Date value is not in the valid date format	Enter a valid interview date using the date format specified in the tool's codebook
InvalidOrBlankOptionSelected	Required field in the Record Management section is blank or has an invalid value	Select a valid or non-blank response option from the list of allowable values specified in the tool's codebook
InvalidSkipRelationship	Question/category does not comply with the questionnaire's skip logic	Correct the dependencies between interview items to reflect the skip logic specified in the tool's codebook
InvalidValue	Entered value is invalid	Enter an allowable value as specified in the tool's codebook
LastServiceAfterGrantEnd	Last Service Date is after the grant's end date	Correct the value in this date
LastServiceAfterInterview	Last Service Date is after the record's Interview Date	Correct the value in either date
LastServiceAfterToday	Last Service Date is after today's date	Enter a date that is prior to today's date
LastServiceBeforeFirstReceived	Last Service Date for the Reassessment or Discharge is before the client's Current episode of care's Baseline's First Received Services Date	Enter a value for Last Service Date that complies with the timing of the episode of care
MissingBaseline	No baseline interview exists in SPARS for a Reassessment or Discharge that is being uploaded	Upload a baseline assessment for the record prior to uploading the re-assessment

NotAllSetToBlankOrNotApplicable	If one item under a choose-all-that-apply question is left blank or set to not applicable, all items must be left blank or set to not applicable	Set all response options within the choose-all-that-apply item to not applicable or leave them blank
NotAllSetToMissing	If one item under a choose-all-that-apply question is set to missing, all items must be set to missing	Set all response options within the choose-all-that-apply item to missing
NotAllSetToNoImpactNoChange	If one item under a choose-all-that-apply question is set to don't know, all items must be set to don't know	Set all response options within the choose-all-that-apply question to don't know OR remove/replace any don't know values in that question
NotAllSetToNotApplicable	If one item under a choose-all-that-apply question is set to not applicable, all items must be set to not applicable	Set all response options within the choose-all-that-apply item to not applicable
NotAllSetToRefused	If one item under a choose-all-that-apply question is set to refused, all items must be set to refused	Set all response options within the choose-all-that-apply item to refused
NotValidBeginDate	The date entered occurs outside the valid date range for the grant.	Ensure the dates are correct and occur after the grant start date and correct any date value as needed
NotValidEndDate	The date entered occurs outside the valid date range for the grant.	Ensure the dates are correct and occur before the grant end date and correct any date value as needed
OtherSpecifyWithoutOther	'Other Specify' value was entered but the 'Other' option was not selected	Select the 'Other' response option
OtherWithoutOtherSpecify	'Other' option was selected but an 'Other Specify' value was not entered	Enter an 'Other Specify' value

ReassessmentORDischargeBefore Baseline	Reassessment or Discharge occurred before the Baseline (such as for a previous episode of care), and the user is trying to batch upload the Reassessment or Discharge record	Delete any records (e.g., baseline, assessments) associated with a *new/current episode of care* to add records associated with a *previous episode of care*
ToolExpired	File contains interviews conducted using the expired tool	Remove the interviews with interview dates occurring prior to the implementation of the new tool (12/10/22)
ValueOutOfRange	Entered value was outside the valid value range	Enter a value that is within the allowable value range specified in the tool's codebook