

Prevent Past or Future Dates External Module User Guide

Background:

In REDCap, setting min and/or max ranges for a date field is not a 'hard stop,' meaning someone entering data would be allowed to put a date beyond the min/max values into those fields. At times this may be acceptable; but other dates, such as *date of vaccination*, the *date someone gave birth*, a participant's *date of birth*, a *lab collection date*, or *date of previous visit*, should never have a date entered that is in the future; while *date of next visit* or *date of upcoming procedure* should never have a past date that was entered, especially when doing real-time data entry.

Description:

This REDCap module adds the new actions tags @PREVENT-FUTUREDATE and @PREVENT-PASTDATE that can be applied to date fields - i.e., a text field with date or date/time validation applied - to disallow (a 'hard stop') entry of dates in the future or past, respectively.

The module's behavior is very similar to required fields on surveys - it will not allow any user to save a form (or survey) if a date in the past or future has been entered and the appropriate Action Tag has been applied to that field. Any date field that has a date entered into it that is not 'allowed' via the Action Tag will turn the data field red and a pop up box will also appear letting the user know the date they just entered is out-of-range, which is normal REDCap behavior when a value is entered that is out-of-range. However, unlike normal REDCap behavior, these out-of-range date values must become in range to save the form/survey.

Action Tag:

@PREVENT-FUTUREDATE
@PREVENT-PASTDATE

Dates available in the date picker:

Any past date to today's date
Today's date to any future date

Prerequisites:

REDCap version >= 10.0.1

Considerations:

- The Action Tags are *mutually exclusive*, so applying both action tags will **not** result in any date restrictions.
- Both Action Tags will allow you to select/enter the current date ('today') as the date.
- To enforce today's date (which is not in the past or the future), use the @TODAY action tag instead.
- The action tags will *only* apply to **empty fields**; if data already exists in a field when the form is loaded the action tag will *not* apply to that field.
- If the field has date/time validation, the module will prevent a past or future date being entered, but it does **not** take into account the time portion (HH:MM or HH:MM:SS). A past or future time can be entered, as long as the date itself is in range.

- Once a 'valid' date has been saved on a form or survey, the action tag is **no longer applied** to that field on that record – in case a data entry error has been.
 - For example, if the Action Tag @PREVENT-PASTDATE has been applied to a field and someone entered in '04-01-2021' (a date that was *not* in the past at that time), but on 04-10-2021 someone noticed the date was supposed to be '04-02-2021' (which is now *in the past*), you can correct the date to a past date without the module's interference.

Module Configuration:

The module does not need to be configured on the *External Modules* page within a project. Once the module has been enabled in your project, the two new Action Tags this module created will appear in your list of available Action Tags when creating or editing a field: @PREVENT-FUTUREDATE and @PREVENT-PASTDATE.

Edit Field

You may add a new project field to this data collection instrument by completing the fields below and clicking the Save button form on this page. For an overview of the different field types available, you may view the [Field Types video \(4 min\)](#).

Field Type: Text Box (Short Text, Number, Date/Time, ...)

Field Label Use the Rich Text Editor [?](#)

Date of Vaccine

Action Tags / Field Annotation (optional)

Learn about [@ Action Tags](#) or [Using Field Annotation](#)

New Action Tags:

Add	@PREVENT-FUTUREDATE	Prevents future dates from being entered into date field—i.e., a text field with date validation applied. This and @PREVENT-PASTDATE are mutually exclusive, to enforce today use @TODAY
Add	@PREVENT-PASTDATE	Prevents past dates from being entered into date field—i.e., a text field with date validation applied. This and @PREVENT-FUTUREDATE are mutually exclusive, to enforce today use @TODAY

Examples:

@PREVENT-FUTUREDATE

In this example, I do not want to see a future date entered into this field, so I am applying the Action Tag @PREVENT-FUTUREDATE

Edit Field

You may add a new project field to this data collection instrument by completing the fields below and clicking the Save button at the bottom. When you add a new field, it will be added to the form on this page. For an overview of the different field types available, you may view the [Field Types video \(4 min\)](#).

Field Type: Text Box (Short Text, Number, Date/Time, ...)

Field Label: Date of Vaccine Use the Rich Text Editor

Variable Name: vaccine_date Enable auto naming of variable based upon its Field Label?
ONLY letters, numbers, and underscores

How to use: [Smart Variables](#) [Piping](#) [Field Embedding](#)

Validation? (optional): Date (M-D-Y)
Minimum:
Maximum:

Required?* No Yes
* Prompt if field is blank

Identifier? No Yes
Does the field contain identifying information (e.g., name, SSN, address)?

Custom Alignment: Right / Vertical (RV)
Align the position of the field on the page

Field Note (optional):
Small reminder text displayed underneath field

Action Tags / Field Annotation (optional): @PREVENT-FUTUREDATE

[Learn about @ Action Tags](#) or [using Field Annotation](#)

When I go to enter data into the field, if I click on the date selector, all dates beyond today are greyed out and cannot be selected:

Date of Vaccine

Today M-D-Y

Apr 2021

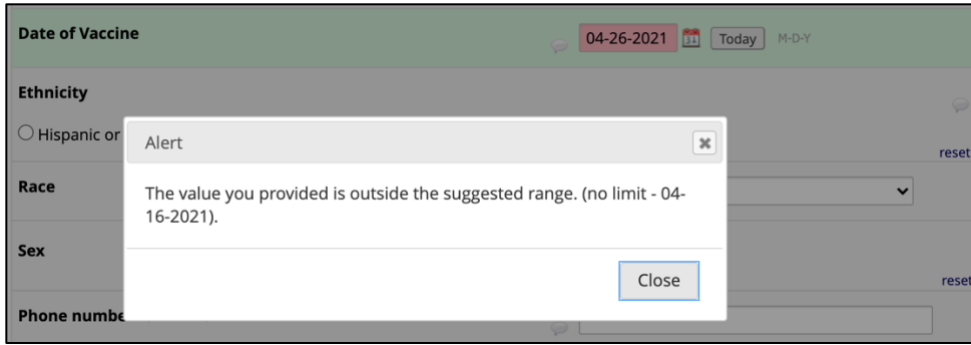
Su	Mo	Tu	We	Th	Fr	Sa
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	

If I try to manually enter a date in the future, bypassing the date selector, the field turns red:

Date of Vaccine

04-26-2021 Today M-D-Y

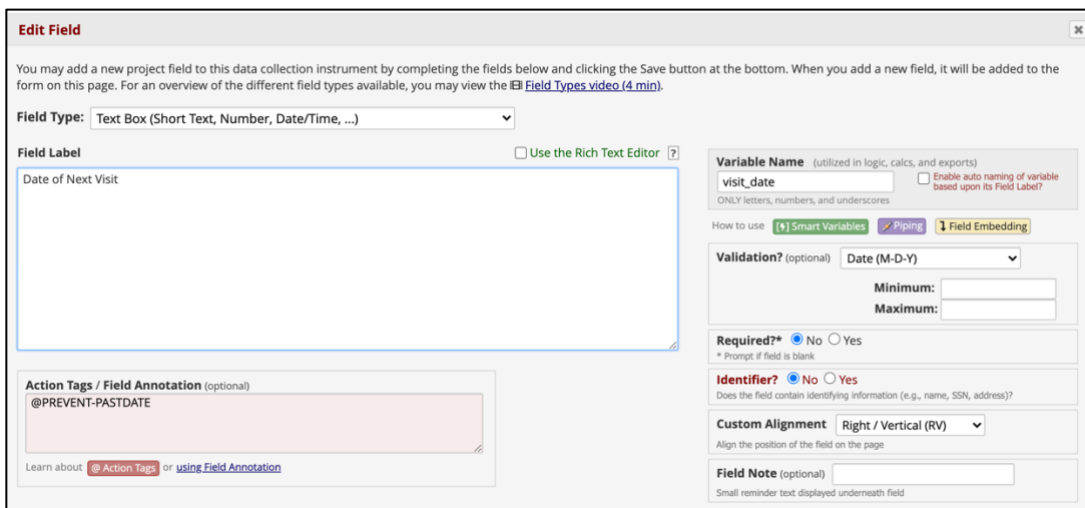
And I get a pop-up alert letting me know my date is outside of the range:



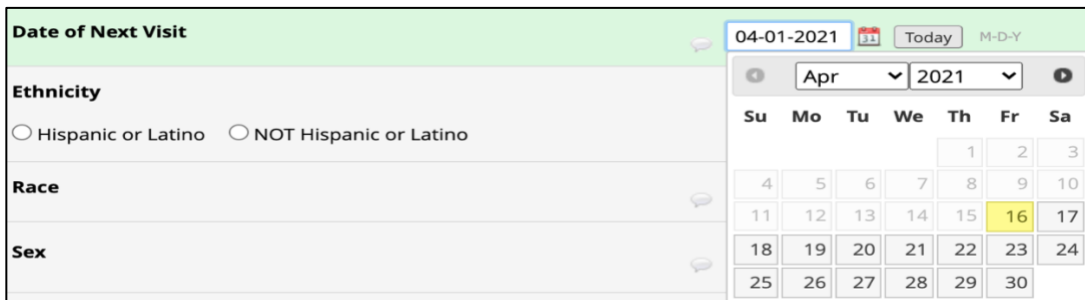
Even if I click on 'Close,' this date must be adjusted before I can save/leave the form. This same pop-up will appear if I try to re-save the form without correcting the date.

@PREVENT-PASTDATE

In this example, I do not want to see a past date entered into this field, so I am applying the Action Tag @PREVENT-PASTDATE



When I go to enter data into the field, if I click on the date selector, all dates before today are greyed out and cannot be selected:

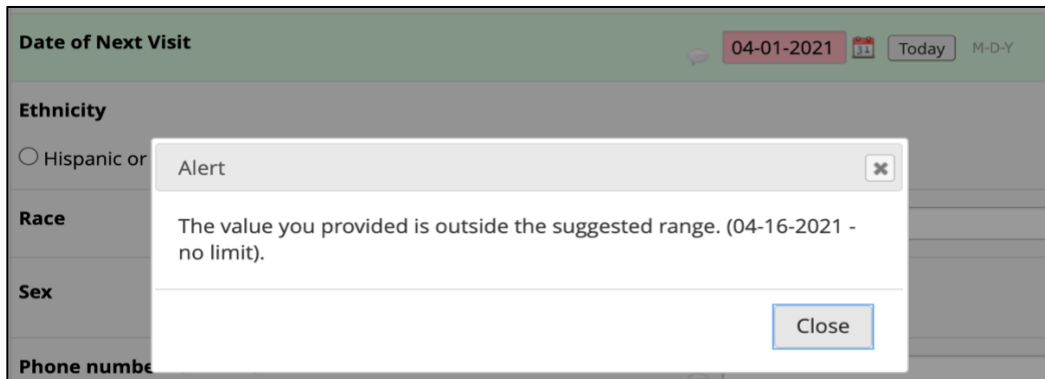


If I try to manually enter a date in the past, bypassing the date selector, the field turns red:



A screenshot of a date input field labeled "Date of Next Visit". The field contains the date "04-01-2021" and is highlighted with a red border, indicating an error. To the right of the date is a calendar icon, a "Today" button, and the format "M-D-Y".

And I get a pop-up alert letting me know my date is outside of the range:



A screenshot of a form with a date input field labeled "Date of Next Visit" showing the date "04-01-2021" and a "Today" button. Below the date field, there is a pop-up alert box with the following text: "Alert", "The value you provided is outside the suggested range. (04-16-2021 - no limit).", and a "Close" button. The form also includes sections for "Ethnicity", "Race", "Sex", and "Phone number".

Even if I click on 'Close,' this date must be adjusted before I can save/leave the form. This same pop-up will appear if I try to re-save the form without correcting the date.