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:	Dates available in the date picker:
@PREVENT-FUTUREDATE	Any past date to today's date
@PREVENT-PASTDATE	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.

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

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:
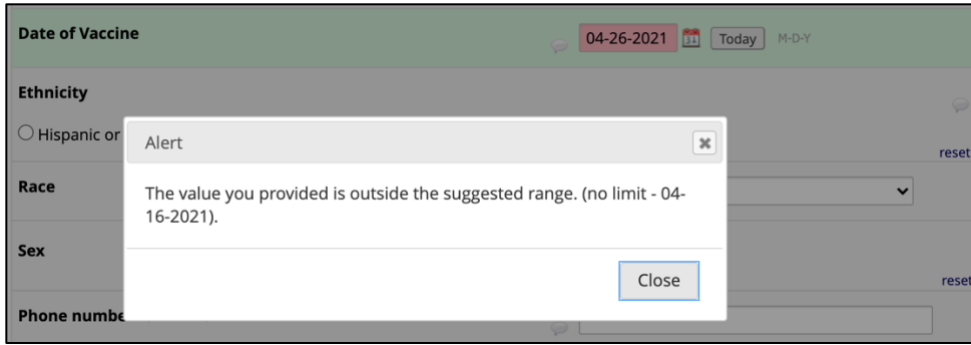

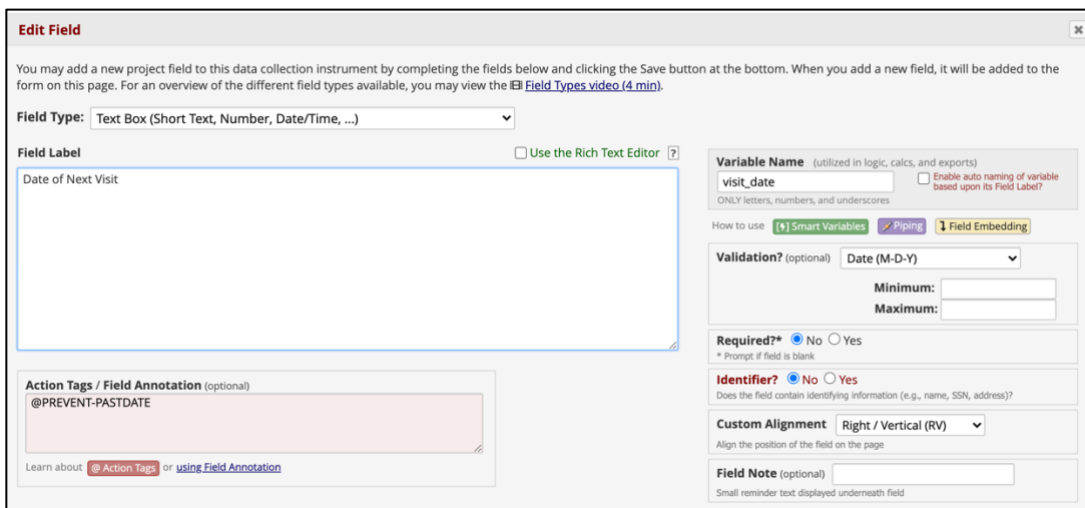If I try to manually enter a date in the future, bypassing the date selector, the field turns red:

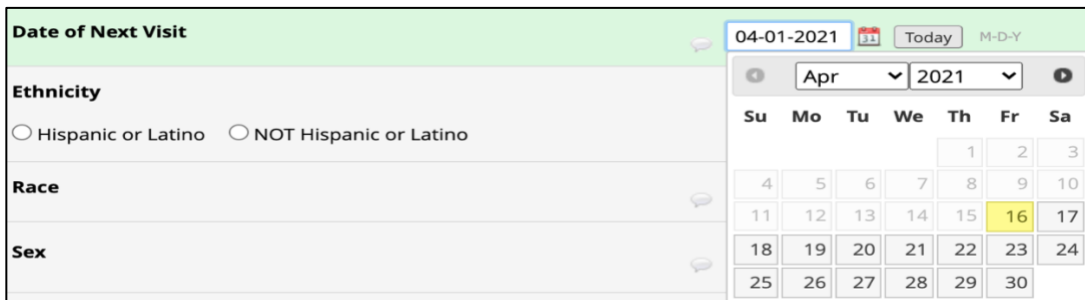And I get a pop-up alert letting me know my date is outside of the range:

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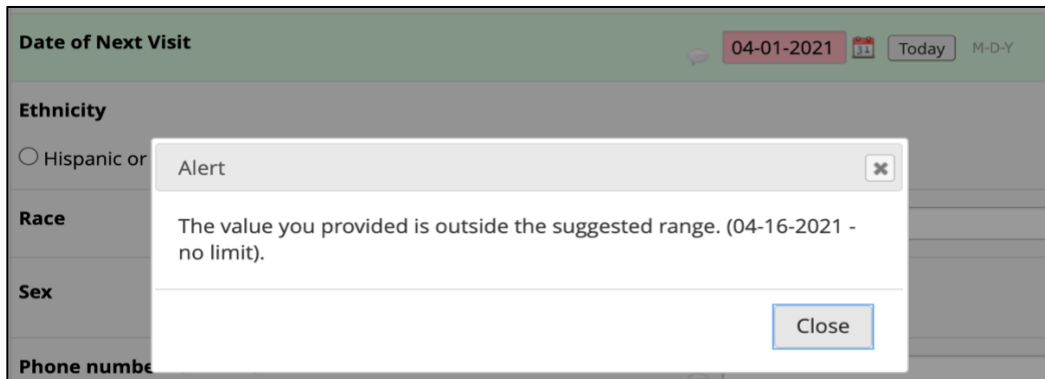
If I try to manually enter a date in the past, bypassing the date selector, the field turns red:

Date of Next Visit		04-01-2021 📅 Today M-D-Y

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

Date of Next Visit			04-01-2021 📅 Today M-D-Y

Ethnicity

○ Hispanic or

Alert ✖

Race

The value you provided is outside the suggested range. (04-16-2021 - no limit).

Sex

Close

Phone numbe

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.