

REDCap Advanced Topics

University of Iowa



**Institute for Clinical and
Translational Science (ICTS)**

[https://www.icts.uiowa.edu/confluence
/display/ICTSit/REDCap#REDCap-
REDCapAdvancedTopicsTraining](https://www.icts.uiowa.edu/confluence/display/ICTSit/REDCap#REDCap-REDCapAdvancedTopicsTraining)





Survey Overview

Fred McClurg, fred-mcclurg@uiowa.edu
Heath Davis, heather-davis@uiowa.edu

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



REDCap Survey Advantages

The survey capability inside REDCap has some strengths:

- Easy to create the forms.
- Easy to administer and deploy.
- Easy for the participants to use.
- Secure completion (uses https).
- Participant data can be exported.



REDCap Survey Creation

When creating a survey in REDCap, remember the following:


- ☐ One survey per project
- ☐ Survey responses are read-only



Survey Division

A section header can be used as a divider to define the beginning of a new section.

Requirements

1) **Date of Birth:**
1996-04-23  Today Y-M-D

2) **Age:**
15

3) **Are you less than 18 years of age?**
☐ Yes ☐ No [reset value](#)

Geography

4) **Have you ever lived near water?**
☐ Yes ☒ No [reset value](#)

Exposures

5) **Have you ever been exposed to silicon dust?**
☐ Yes ☒ No [reset value](#)

[Submit](#)

Survey Page Division

A section header can also be used to define the beginning of a new page.

Project Setup => Modify Survey Settings

**Question Display
Format**

One section per page ▼



Survey Multiple Page Results

The image displays three overlapping survey page mockups, each with a light blue header and a white body. The first mockup, titled 'Requirements', contains three questions: '1) Date of Birth:' with a text input '1996-04-23', a calendar icon, a 'Today' button, and a 'Y-M-D' label; '2) Age:' with a text input '15'; and '3) Are you less than 18 years of age?' with radio buttons for 'Yes' and 'No', a red asterisk note '* must provide value', and a 'reset value' link. A 'Next Page >>' button is at the bottom. The second mockup, titled 'Geography', contains question '4) Have you ever lived near water?' with radio buttons for 'Yes' and 'No' (selected), a 'reset value' link, and navigation buttons '<< Previous Page' and 'Next Page >>'. The third mockup, titled 'Exposures', contains question '5) Have you ever been exposed to silicon dust?' with radio buttons for 'Yes' and 'No' (selected), a 'reset value' link, and navigation buttons '<< Previous Page' and 'Submit'.

Requirements

1) Date of Birth:
1996-04-23 Today Y-M-D

2) Age:
15

3) Are you less than 18 years of age?
* must provide value
☐ Yes ☐ No
reset value

Next Page >>

Geography

4) Have you ever lived near water?
☐ Yes ☒ No
reset value

<< Previous Page Next Page >>

Exposures

5) Have you ever been exposed to silicon dust?
☐ Yes ☒ No
reset value

<< Previous Page Submit

- Each page will be labeled “Page 1 of 3”, “2 of 3”, etc.
- First page has “Next Page” button.
- Middle pages have “Previous” and “Next” buttons.
- Last page has “Previous” and “Submit” buttons.



Public or Private Survey Link

There are two different ways to invite individuals to participate in a survey. Each method was designed for a specific purpose. Which method you choose depends upon the requirements of your project. The methods are:

- 1. Public Survey Link**
- 2. Private Survey Link**



Public Survey Link

The Public Survey Link may be the easiest way to promote your survey. The attributes of this survey type are:

- 1. Responses are anonymous (unless the survey contains identifying questions).**
- 2. All participants access the same URL.**
- 3. The same participant may take the survey multiple times.**

Public Survey URL:

<https://redcap.icts.uiowa.edu/redcap/surveys/?s=s...>

 **Copy to clipboard**

 **Open public survey**

 **Send me URL via email**

Private Survey Link

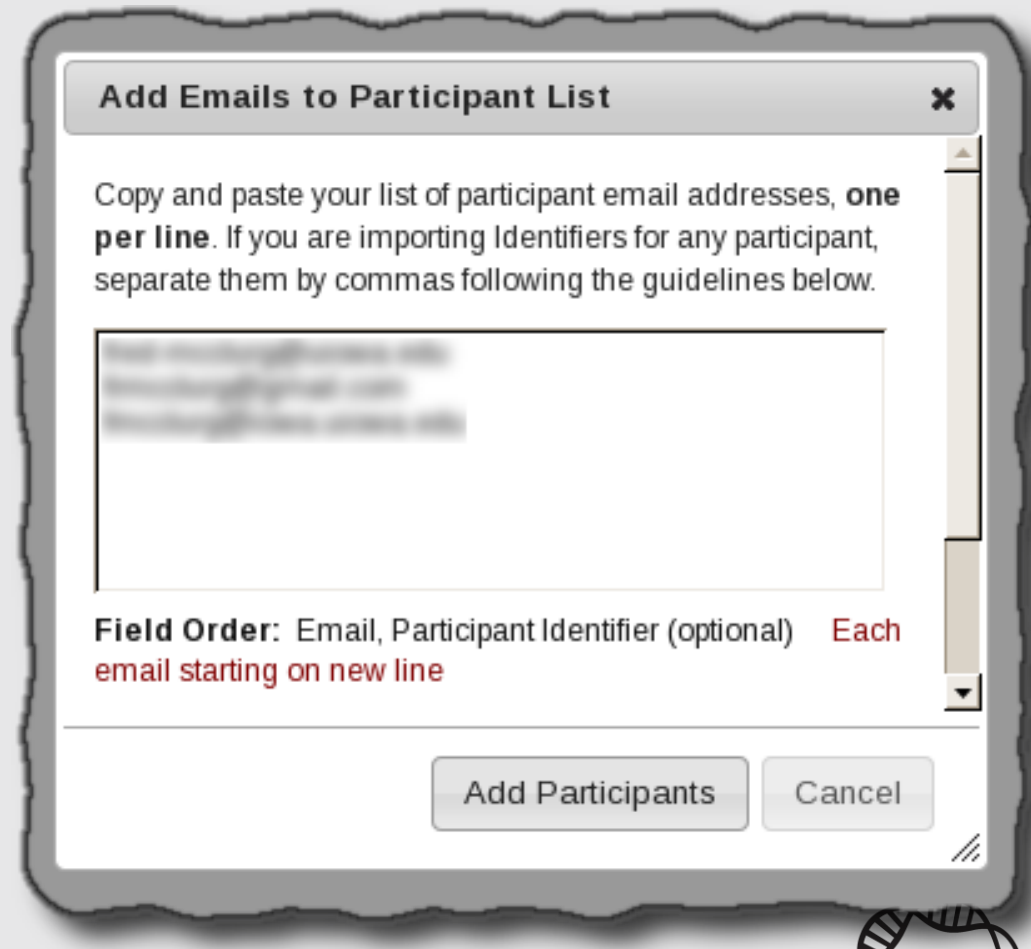
The Private Survey Link offers the greatest control over the survey responses. The attributes of this survey type are:

- 1. Responses are anonymous (unless the survey contains identifying questions).**
- 2. A unique URL is generated for each participant.**
- 3. Each participant may respond to the survey only once.**



Private Survey Link

A participant e-mail list is created within REDCap.



The screenshot shows a dialog box titled "Add Emails to Participant List" with a close button (X) in the top right corner. The main text inside the dialog reads: "Copy and paste your list of participant email addresses, **one per line**. If you are importing Identifiers for any participant, separate them by commas following the guidelines below." Below this text is a large, empty rectangular text area for pasting the list. At the bottom of the dialog, the "Field Order" is specified as "Email, Participant Identifier (optional)" in black text, followed by the instruction "Each email starting on new line" in red text. At the very bottom of the dialog are two buttons: "Add Participants" and "Cancel".

Private Survey Link

REDCap maintains the list of participants. It also keeps a record of those that have responded, have not responded and the ones that have submitted partially complete responses.

Build your Participant List & Email Survey Invitations

This option allows you to **send a customized email** to anyone in your Participant List and **track who responds to your survey**. It is also possible to identify an individual's survey answers, if desired, by providing an Identifier for each participant. However, unless otherwise specified, all survey responses are collected anonymously. [More details](#)

Participant List

Displaying 1 - 3 of 3



Add participants











Send Survey Invitations

Remove all participants



Export list

Email	Participant Identifier (optional)	Link	Sent Msg?	Responded?	
working@redcap.org					remove
test-working@redcap.org					remove
working@redcap.org		-			remove


Which Survey Link should I use?

Use Public Link when ...	Use Private Link when ...
A link to the survey URL is posted to a website.	A unique survey link is auto-generated by REDCap.
The URL is sent via a standard e-mail client.	The e-mail list must be maintained within REDCap.
The survey URL is sent via an external mailing list.	Need ability to contact those who have not responded.
The user may forward the e-mail to someone else.	The survey is targeted for a specific set of individuals.
Each participant may need to respond to the same survey multiple times.	Each participant should respond to the survey only once.

Triggers & Notifications

A trigger can be enabled to provide notification via e-mail every time a participant completes a survey.

Project Setup => Modify Survey Settings



Not started

I'm done!

Triggers & Notifications (optional)

Set up triggers and notifications for your survey. Once any participant completes it. In the future, other kinds of triggers can be set up.

Go to [Triggers & Notifications](#)

Triggers & Notifications

The survey trigger notifies specified individuals each time a survey is submitted.

Set up triggers and notifications

You may use the settings below to add or edit triggers and notifications for this project. When done, click Save to save your changes.

Email notifications for survey responses:

If you or other users wish to be notified via email every time a participant completes the survey, select the users to be notified under each survey listed below.

Pre Screening Survey	<input type="checkbox"/>
	<input checked="" type="checkbox"/>

Close

“Save & Return Later” Option

This setting gives participants the option to save portions of the survey that are already answered and complete the survey at another time in the future. This capability is enabled via:

Project Setup => Modify Project Settings



Allow 'Save & Return Later' option for respondents?

A dropdown menu with the word "Yes" and a downward arrow.

This option provides respondents the ability to save their progress and return to the survey at a later date. If this option is enabled, respondents will be given a validation code to return to the survey.

“Save & Return Later” Button

After enabling this option, a “Save & Return Later” button will be displayed on the bottom of each survey form.

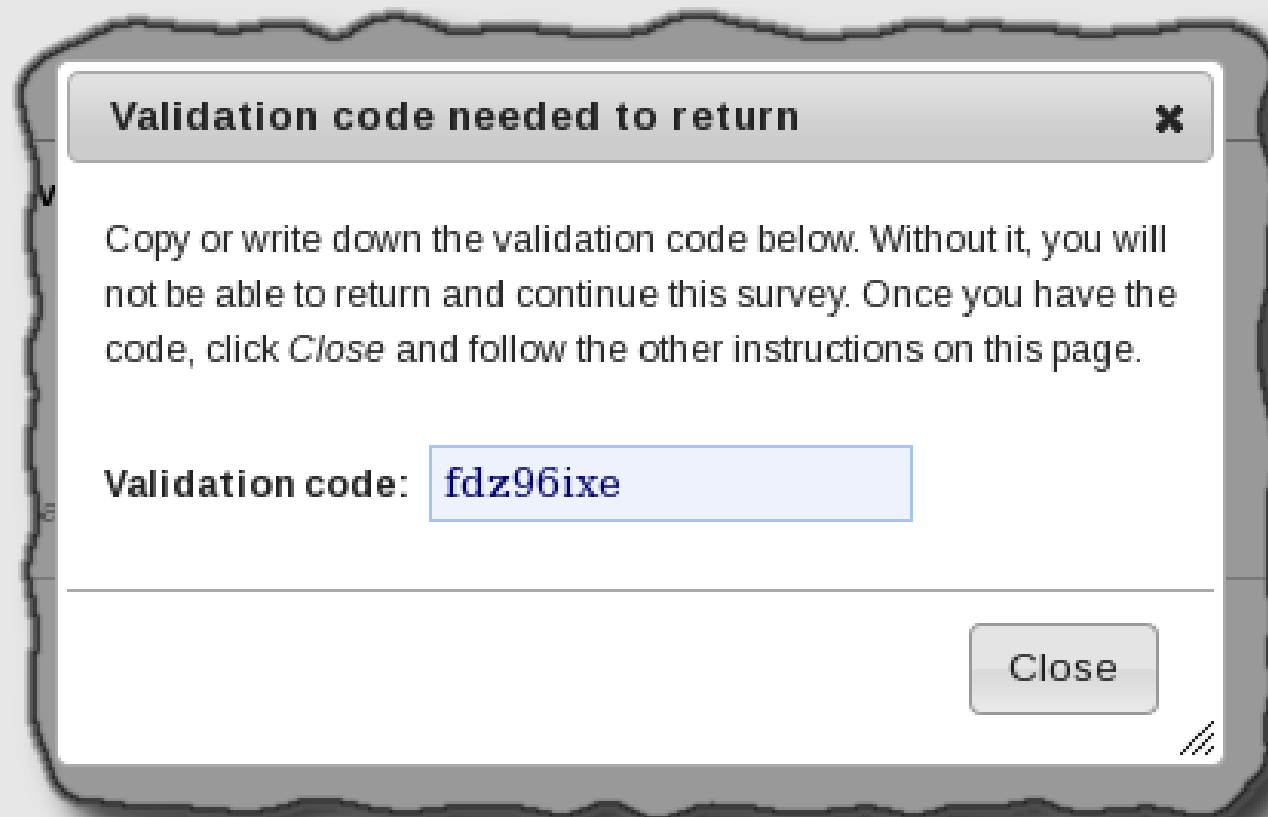


Save & Return Later



Validation Code Dialog

Press the “Save & Return Later” button to display a unique validation code that allows the participant to return and complete the survey in the future.



Validation Code Reminder

A final reminder of the validation code is displayed.

In addition, a link to the survey can be e-mailed to the participant.

Your survey responses were saved!

You have chosen to stop the survey for now and return at a later time and your **validation code**. See the instructions below.

1.) Validation Code

A validation code is ***required*** in order to continue the survey.

Validation Code

* The validation code will NOT be included in the email below.

2.) Survey link for returning

You may bookmark this page to return to the survey, OR your email address below. For security purposes, **the validation code** will be emailed to you soon afterward, please check your Junk Email folder.

* Your email address will not be stored

Or if you wish, you may continue with this survey again now.

Validation Code Dialog

In order to return to an incomplete survey, the participant must:

- 1. Return to the URL of the survey.**
- 2. Enter the validation code value.**

To continue the survey, please enter the validation code t

●●●●●●●●|

Submit Code



Validation Code Disadvantages

Before enabling the “Save & Return Later” capability, there are several issues to consider:

- 1. The additional “Save and Return” buttons add an extra level of complexity to the form.**
- 2. This capability may actually discourage the completion of forms by enabling well intentioned procrastinators to put off their submissions forever.**
- 3. The extra burden to record and recall the validation code and associated URL is placed on the participant.**
- 4. Questions regarding the validation code may result in a significant number of support requests.**
- 5. If the validation code is misplaced it can not be recovered by the researcher.**



Validation Code Alternatives

There may be several alternatives to the “Save & Return Later” option.

- 1. Consider making the survey simpler.**
 - a. Throw out redundant questions that ask the same question over and over again repeatedly.**
 - b. Eliminate questions that won’t or can’t be analyzed.**
 - c. Remove “interesting” questions that are outside the scope of the project.**
- 2. Break up the massive survey-to-end-all-surveys into multiple mini-surveys.**
- 3. Instead of a colossal survey for a broad population, generate a series of smaller surveys that target a more focused audience.**



Enabling View Survey Results

You can allow the participants to view previous survey results.

Project Setup => Modify Survey Settings



Allow survey participants to view aggregate survey results after completing the survey?

After completing the survey, participants can view ALL responses in aggregate graphical format and/or as

Display both Graphical Plots and Descriptive Statistics ▾

Additional settings:

10

Minimum number of responses required before participants are allowed to view aggregate data (recommended = 10).

☐

Do not show plots for questions lacking diversity in response values?
([What does this mean?](#))

Enabling View Survey Results

If this option is enabled, the “View Survey Results” button will be displayed.



In addition, a survey results code is generated so participant can return to the results page.

★ **Want to return to this page later?**

Write down your survey results code:

You can ONLY return to this page again if you have your survey results code. Please



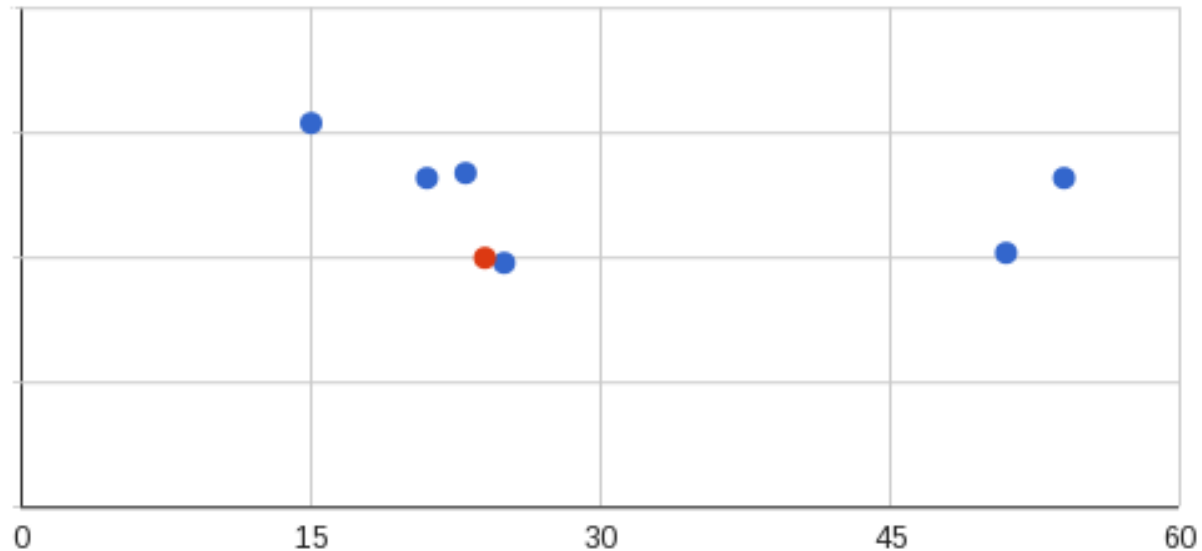
Survey Results: Scatter Plots

Age:: [Refresh Plot](#)

Total (N)	Missing	Unique	Min	Max	Mean	StDev	Percentile				
							.05	.10	.25	.50 Median	.75
6	1 (14.3%)	6	15.00	54.00	31.50	16.63	15.00	15.00	18.00	24.00	52.00

Lowest values: 15, 21, 23, 25, 51

Highest values: 21, 23, 25, 51, 54

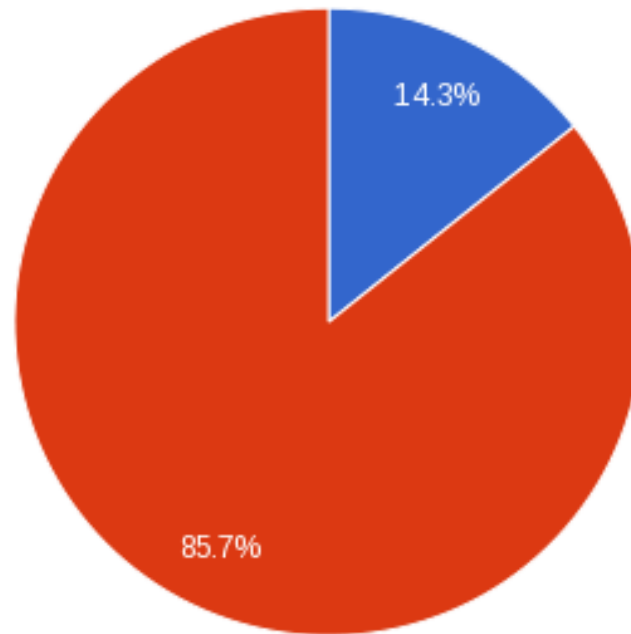


Survey Results: Pie Charts

Are you less than 18 years of age?: [Refresh Plot](#) View as Pie Chart ▼

Total (N)	Missing	Unique
7	0 (0%)	2

Counts/frequency: **Yes** (1, 14.3%), **No** (6, 85.7%)

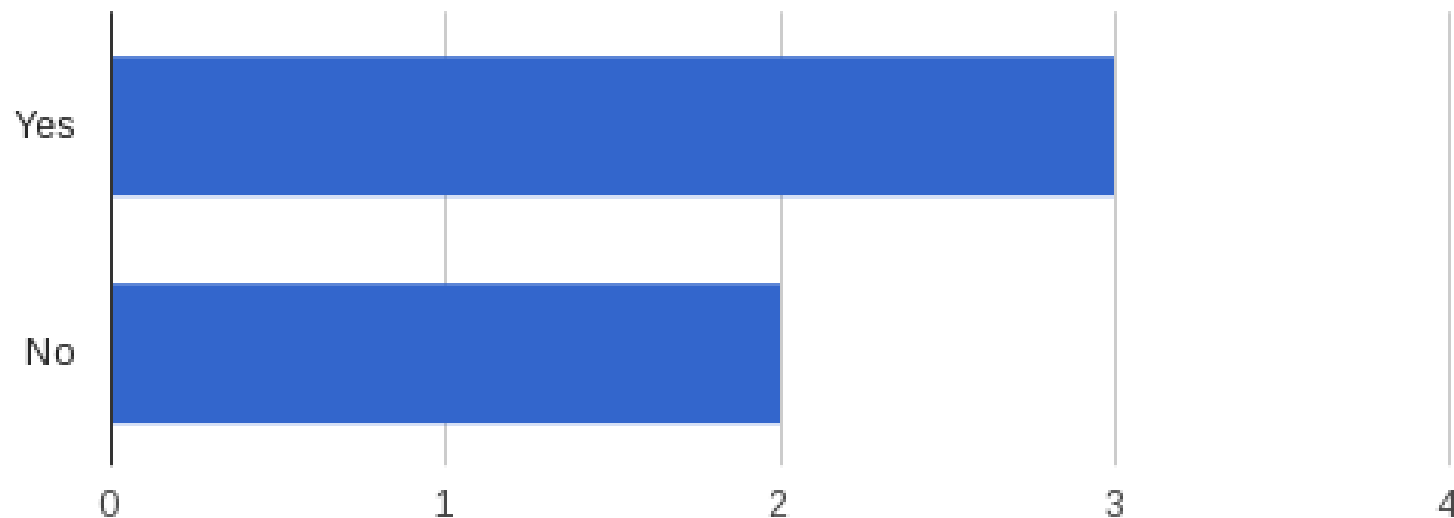


Survey Results: Bar Charts

Have you ever lived near water?: [Refresh Plot](#) [View as Bar Chart](#) ▼

Total (N)	Missing	Unique
5	2 (28.6%)	2

Counts/frequency: **Yes** (3, 60%), **No** (2, 40%)



Survey Status

The survey offline/active status toggle is available via the Project Setup tab.

 **Survey is currently offline**

Bring survey back online

The survey title is **Pre Screening Survey**

 **Survey is currently active**

Take survey offline

The survey title is **Pre Screening Survey**



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>

