



2.4.3 Designing Contact Data Forms

This page provides step-by-step instructions for incorporating participant contact details (e.g., name, email, mobile number, address, etc.) into a form in OC4, using both the Form Designer and the Form Template. **Overview** When you capture contact information in a form (for example, allowing a participant to update their phone number or email), OpenClinica 4 supports this through the special **contactdata** mechanism. **Important:** Contact data items behave differently from ordinary form data. They are stored in a **participant contact record** rather than in the study's clinical data set, and they are subject to **stricter access controls**. For more information on how contact data behaves in Study Runner, refer to [Understanding Contact Data](#).

Access & Role Considerations

- If **any version** of a form includes a **contactdata** item, the form is treated as a contact form.
 - By default, Clinical Research Coordinators (CRCs) and Investigators can view and edit contact forms. Manual permission tags can be used to override this default, granting access to non-CRCs/Investigators or revoking access for CRCs/Investigators. For details, see [Managing Form Access and Permissions](#).
 - Contact data is stored as part of the participant record rather than as form data. Because of this, including contact data in form outputs would be redundant and may create a misleading impression of what was entered on a specific form. As a result, extract and API behavior differ from standard data forms.
 - See [Understanding Contact Data](#) for retrieving participant contact and clinical data.
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Using Form Designer for Contact Data Items

For general instructions, see [Using Form Designer](#).

1. In **Study Designer**, open your form in **Form Designer**.
 2. Add a **Text** or other suitable item for each contact field you want to collect (for example, First Name, Email Address, Mobile Number).
 3. **Remove Item Group Name**—contact-data items cannot be placed in an item group.
 4. Set **Use as External Value** to **contactdata**.
 5. Select the type of contact data you are collecting from the available options:
 - **firstname**
 - **lastname**
 - **email**
 - **mobilenumber**
 - **secondaryid**
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Using Form Template for Contact Data Items

For general instructions, see [Using the Form Template](#).

1. In the **Survey** sheet, add a row for each contact field.
2. For each row, set:
 - **type** = the data type (for example, **text**)
 - **label** = the question text (for example, **Mobile Phone Number**)
 - **name** = the internal variable name (for example, **mobile_number**)
 - Used for referencing the item within the form (for example, relevant logic on another item to check whether it is blank or filled in)
 - **bind::oc:external** = **contactdata**
 - **bind::oc:itemgroup** = blank. Contact data items cannot be included in item groups.
3. Add the column **instance::oc:contactdata** and enter one of the allowed values shown below.
4. Configure other columns as needed (for example, **required**, **relevant**, etc). Note: Constraints for contact-data items are **automatically applied** by the system.
5. Upload the file through the **Form Card > Upload** button and preview the form.

Formatting and Automatic Constraints

When a field is defined as **contactdata**, OpenClinica automatically applies type-specific constraints to ensure format and data quality. These constraints are system-enforced—you do **not** need to define them manually in the Form Template.

Data Type	Item Type	Automatic Constraint
firstname	text	String length ≤ 35 characters
middlename	text	String length ≤ 35 characters
lastname	text	String length ≤ 35 characters
email	text	String length ≤ 255 characters and must match the following regular expression: <code>^[A-Za-z0-9!#\$%&*+/?^_`{}~]+(?:\.[A-Za-z0-9!#\$%&*+/?^_`{}~]+)*@(?:[A-Za-z0-9](?:[A-Za-z0-9-]*[A-Za-z0-9])?)\.[A-Za-z0-9](?:[A-Za-z0-9-]*[A-Za-z0-9])?\$</code>
mobilenumber	text	String length ≤ 17 characters and must match the following regular expression: <code>^\+[0-9]{1,3} [0-9]{1,14}\$</code> Accepts either a full international format (e.g., +1 5551234567) or a 10-digit number (assumed country code +1).
streetaddress1	text	String length ≤ 155 characters
streetaddress2	text	String length ≤ 155 characters
country	text	String length ≤ 155 characters
city	text	String length ≤ 155 characters
state	text	String length ≤ 155 characters
postalcode	text	String length ≤ 35 characters
fulldob	date	(Date field; format defined by system locale—no explicit length constraint.)
secondaryid	text	String length ≤ 35 characters
hospitalnumber	text	String length ≤ 35 characters

Note: Mobile phone number is stored internally along with country code (for example +123 456789012345). Once a value has been collected, on either the form or from the Participant Details screen, it will be displayed in that format with country code (including +1 before US phone numbers). Participants can enter phone numbers in either of the following formats:

- + followed by country code, space, and number (e.g., +1 5551234567)
- A 10-digit number (automatically assumed to be U.S. +1)

Notes on Constraints

- The constraint, constraint message, and constraint type are automatically populated when the item is identified as **contactdata**.
- If additional validation is needed (for example, regional phone number formats), use a separate constraint expression and validate thoroughly.
- For mobile numbers, OpenClinica automatically stores the number with a “+” prefix and country code.

Example: Template Configuration

type	name	label	bind::oc:external	instance::oc:contactdata	required
text	first_name	First Name	contactdata	firstname	yes
text	last_name	Last Name	contactdata	lastname	yes
text	email_address	Email Address	contactdata	email	yes
text	mobile_phone	Mobile Phone Number	contactdata	mobilenumber	no
text	mailing_street1	Street Address Line 1	contactdata	streetaddress1	no
text	mailing_city	City	contactdata	city	no
text	mailing_postal	Postal / ZIP Code	contactdata	postalcode	no

Summary and Best Practices

- Use **bind::oc:external = contactdata** and the appropriate **instance::oc:contactdata** code for each contact data item.
- Do not group contact-data items within an item group.
- Validate key fields (e.g., email format, phone number) and mark required appropriately.
- Do not add custom constraints that conflict with the system's automatic rules.
- Test the form in a test environment using the same role permissions that will apply in production.

Approved for publication by Kate Lambert. Signed on 2025-12-12 9:43AM

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