



Exercise: Navigating the ClinEpiDB platform

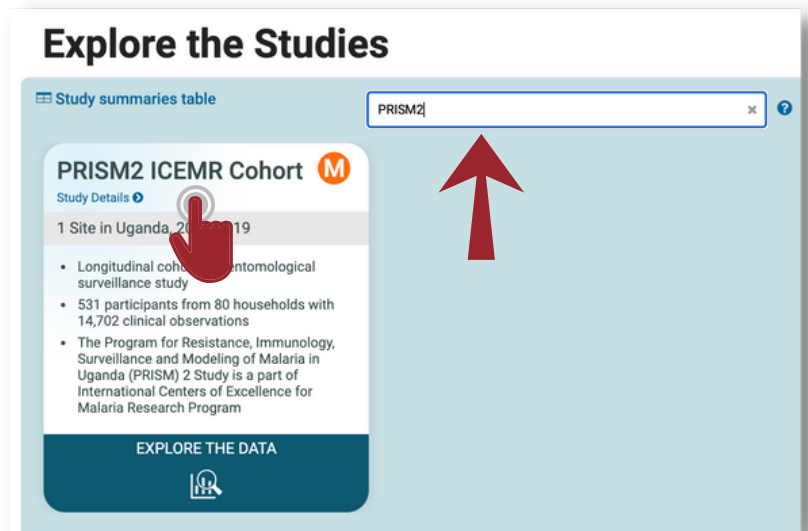


In this exercise, we will use the **PRISM2 ICEMR Cohort study** to navigate through the different features of the ClinEpiDB platform. Type your responses into the grey boxes. Scroll to the end of the exercise for answers.

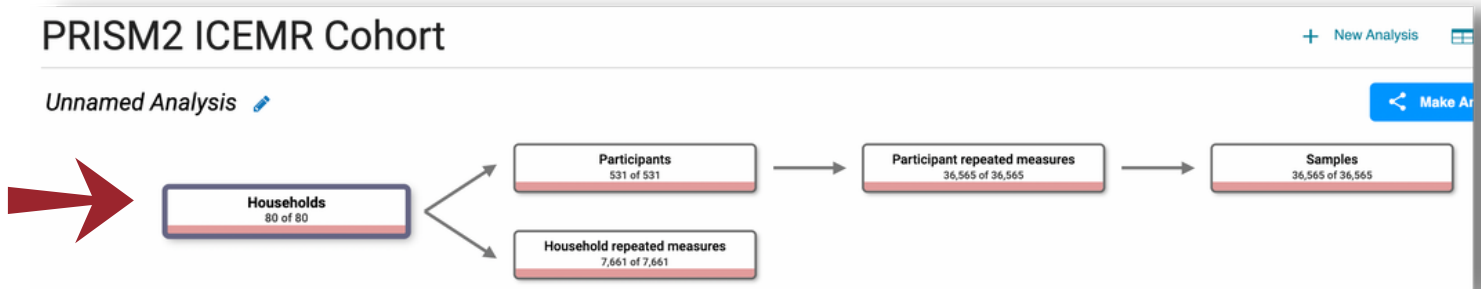
Start at the [home page](#).

In the Find Studies box (red arrow), search for **PRISM2 ICEMR Cohort**.

Locate the **study card** and click on the title of the study to start exploring this dataset.



1. Look at the **Dataset diagram** (red arrow) at the top of the page and examine the shape of the data.

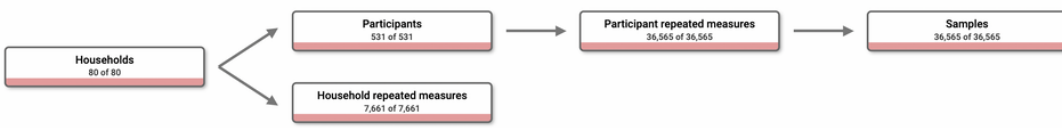


- There are participants in this study.
- There are participant repeated measures (clinic visits + entomology visits) in this study.

2. Click the **View study details** tab, scroll through the page, and answer the following:

PRISM2 ICEMR Cohort New Analysis My analyses

Unnamed Analysis Make Analysis Public



[View study details](#) [Browse and subset](#) [Visualize](#) [Notes](#)

Primary publication: Impact of vector control interventions on malaria transmission intensity, outdoor vector biting rates and Anopheles mosquito species composition in Tororo, Uganda. Musiime et al. Malar J 2019 Dec 27;18(1):445

Primary center: Grant Dorsey, University of California, San Francisco, CA, USA

Release # / date: AllClinEpiDB rel. 16, 2021-MAR-16

Summary: The Program for Resistance, Immunology, Surveillance and Modeling of Malaria in Uganda 2 (PRISM2) is a longitudinal cohort study. Households were recruited for a dynamic cohort if they had at least 2 members under the age of 10, no more than 9 residents, and no plans to move in the next 2 years. Mosquito collections were performed every 2 weeks, routine clinic visits occurred every 4 weeks, and participants attended a study clinic any time they became ill.

a. What was one of the study objectives?

3. Click the **Browse and subset** tab and scroll through the variable tree on the left.

[View Study Details](#) [Browse and Subset](#) [Visualize](#) [Download](#) [Record Notes](#)

Featured variables

- Participant repeated measure: Observation date
- Participant repeated measure: Observation type
- Participant repeated measure: Age
- Participant repeated measure: Malaria diagnosis and parasite status

[expand all](#) [collapse all](#)

- Observation date
- Observation type
- Age
- Age group

Age group
Original variable name: agecat

Check items below to apply this filter

36,565 (100%) of 36,565 Participant repeated measures have data for this variable

	Subset of Participant repeated measures	All Participant repeated measures	Distribution	%
<input type="checkbox"/> Age group	36,565 (100%)	36,565 (100%)		
<input type="checkbox"/> <5 years	9,821 (27%)	9,821 (27%)	<div style="width: 27%;"></div>	(100%)
<input type="checkbox"/> 5-15 years	15,131 (41%)	15,131 (41%)	<div style="width: 41%;"></div>	(100%)
<input type="checkbox"/> 16 years or older	11,613 (32%)	11,613 (32%)	<div style="width: 32%;"></div>	(100%)

a. What percentage of participant repeated measures are in the <5 years age group?

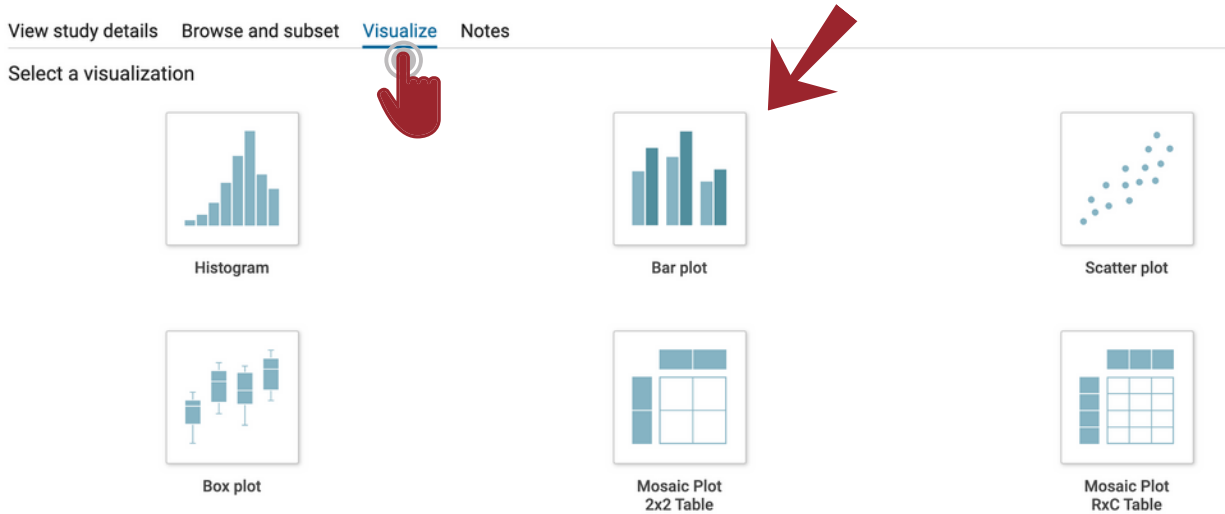
Hint: You can search for variables in the "find a variable" box in the left sidebar

b. What is the mean height of the participants?

c. Subset on Enrollment and Routine visits. How many of those visits are there?

Hypothesis: Plasmodium infection differs based on age

4. Click the **Visualize** tab -> New visualization, and choose the **bar plot** tool



For the main axis variable, choose **Malaria diagnosis and parasite status**. For facet, choose **Age group**. Under the plot, choose **proportion** instead of count.

a. Which age group had the highest proportion of asymptomatic infection?

Turn to the next page for detailed answers to this exercise!



1. Dataset diagram

- There are **531** participants in this study.
- There are **36,565** participant repeated measures (visits) in this study.



The dataset diagram at the top of the page is helpful for several reasons. It displays the various types of data collected in the study, such as data on communities, households, participants and samples, and their sample sizes. It indicates whether variables were collected once or at multiple timepoints over the study. Variables collected more than once are placed under "repeated measures". This dataset contains 36,565 repeated measures for 531 participants, which indicates that each participant was observed repeatedly over the course of the study.

2. View study details tab

- What was an objective of this study?

Objectives:

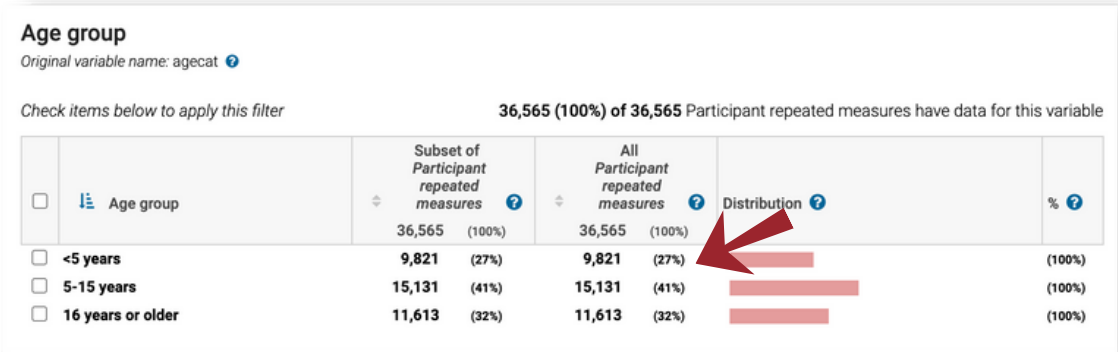
- Estimating the incidence of malaria, parasite prevalence, and the molecular force of infection among cohort study participants
- Characterizing factors that determine the malarial force of infection
- Determining factors that affect the duration, density, and clinical consequences of blood stage malaria infection
- Assessing the associations between overnight travel and the risk of malaria infection
- Estimating measures of transmission intensity including the human biting rate, sporozoite rate, and the entomological inoculation rate at the household level
- Characterizing the species composition of mosquito vectors and the host source of mosquito blood meals
- Identifying pathogens responsible for non-malarial febrile illness among cohort study participants

The study details page provides a wealth of information about the dataset, including links to publications, a summary of the objectives, study design and methodology, links to study documentation, and a listing of the study team.

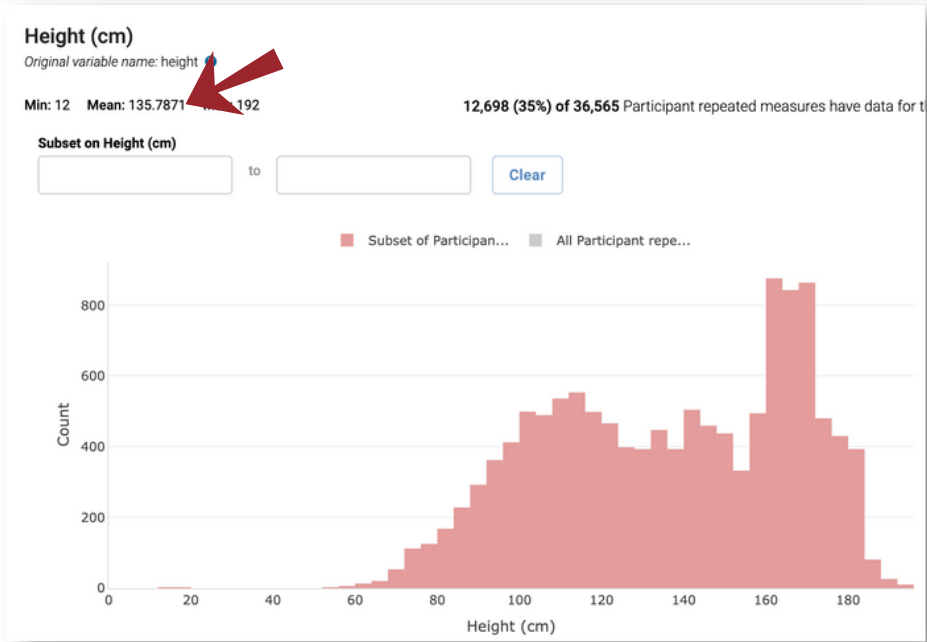
3. Browse and subset tab

- a. What percentage of participant repeated measures are in the <5 years age group? **27%**
- b. What is the mean height of the participants? **135.8 cm**
- c. Subset on Enrollment and Routine visits. How many of those visits are there? **12,696**

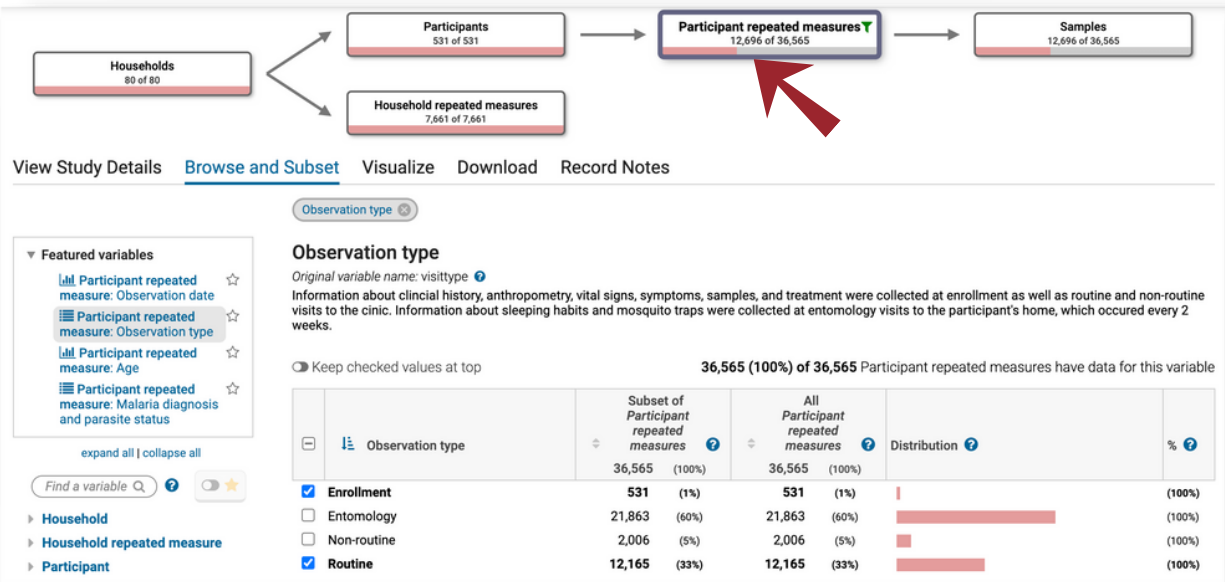
3a



3b

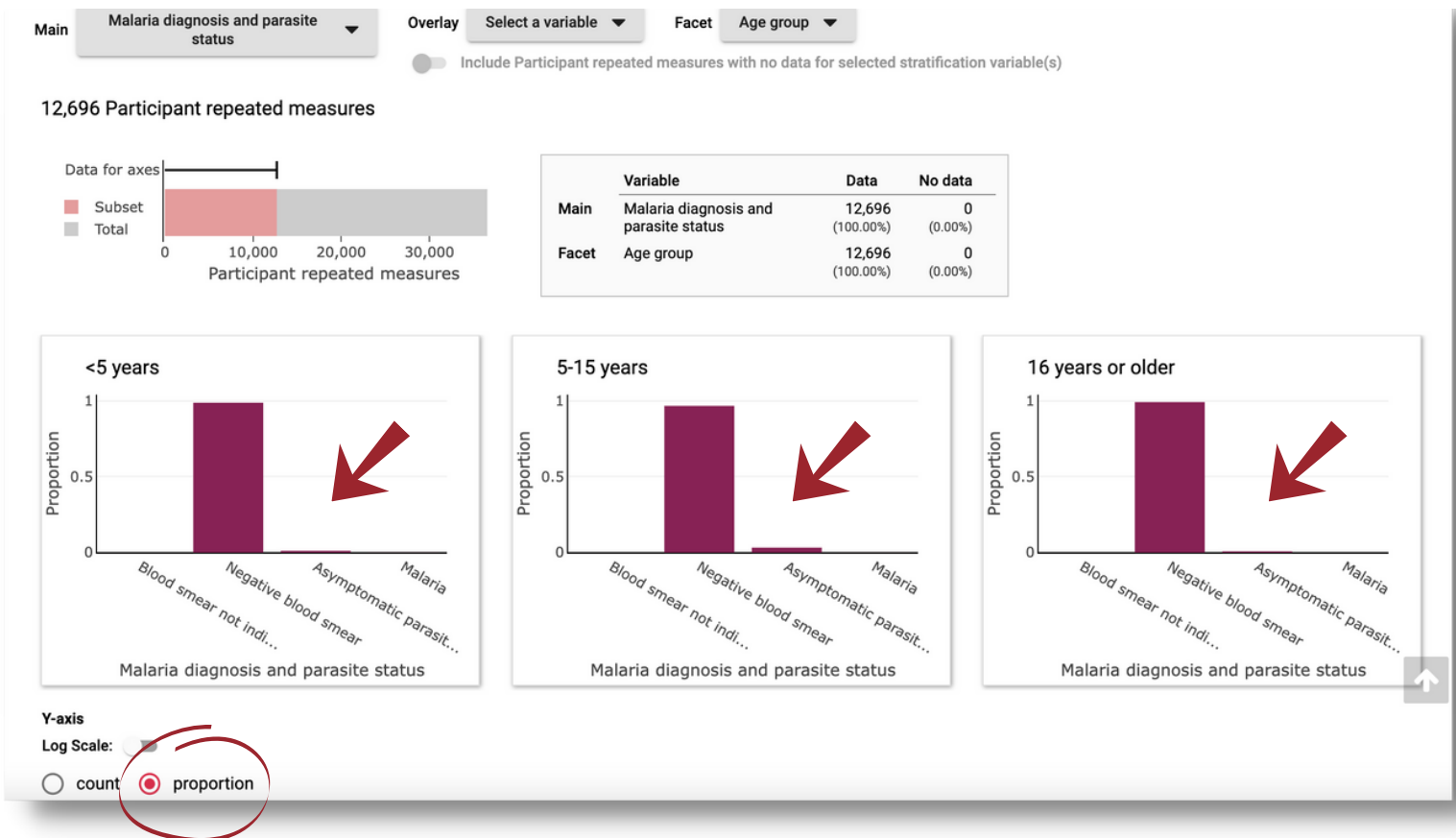


3c



4. Visualize tab

a. Which age group had the highest proportion of asymptomatic infection? **5-15 years**



Thank you for completing this exercise on navigating the ClinEpiDB platform! Please contact help@clinepidb.org with feedback or questions.