

# Creating a model world to address a research question

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# Step 0 (yesterday):

- Focus on a clear, concise research question.

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- Example:

What level of vaccination is necessary to eliminate domestic dog rabies in Tanzania?

# Step 1:

- *Identify the key outcome of interest for addressing your question.*

## Step 2:

- *Identify the processes that may affect the outcome of interest.*

## Step 3:

- *Identify relevant characteristics of individuals in your study system.*

## Step 4:

- *Identify what you think are the **most important** processes and characteristics among those identified above **for addressing your research question.***

## Step 5:

- *Reconcile your process and characteristic lists by identifying how the most important processes relate to the most important characteristics.*

## Step 6:

- *Construct a diagram that represents all of the individual characteristics and processes of interest.*

## Step 7:

- *Hand draw or print a clean, clearly labeled version of your model diagram and bring it with you to **tomorrow morning's 8:30am session.***

# Step 7:

- *Hand draw or print a clean, clearly labeled version of your model diagram and bring it with you to **tomorrow morning's 8:30am session.***
  - Use solid **labeled arrows** to represent the transitions into / out of / between states. Label all arrows into or out of a state with the rate for the process. If the arrow represents leaving a state (whether or not another state is entered), label the arrow with the *per capita* rate.
  - Use **dashed arrows** (pointing to transitions, not states) to indicate influences of one state on the rate of transition from another state.
  - Include a **key** for symbols/abbreviations.
  - Include your **research question.**



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<http://www.ici3d.org/MMED/tutorials/creatingAModelWorld.pdf>

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