

KEEPING THE VACCINES COLD

Keeping vaccines cold is very, very important. If the vaccine isn't kept between 35-46 degrees F, the vaccine is considered non-viable and cannot be given to patients. Complete the activities below to see how hard it is to keep the temperature steady for the vaccines.

Activity One: Baseline

- a. Put a thermometer in the refrigerator.
- b. After five minutes, open the door and record the temperature. This will be our baseline, or the temperature at which things in the refrigerator should be kept.
- c. Close the door and Do not open the refrigerator!
- d. Fifteen minutes later, open the door and record the temperature.
- e. Make your observations

Data Box

Initial/Baseline Temperature:

Ending Temperature:

Observations:

Activity Two: Open and Close, Open and Close

- a. Over the next fifteen minutes, take turns opening and closing the refrigerator. Open it and look around for a bit. Pretend you are deciding what to have for a snack. Keep opening and closing and opening and closing going for fifteen minutes.
- b. At the end of fifteen minutes, record you data and your observations.
- c. Leave the door closed for a few minutes to let it return to the baseline temperature before moving on to the third activity.

Data Box

Ending Temperature:

Observations:

Activity Three:

- a. Open the door and leave it open for fifteen minutes.
- b. At the end of the fifteen minutes, record the temperature shown on the thermometer and make your observations.

Data Box:

Temperature:

Observations:

Summary:

What challenges do you think Aliy Zirkle and Martin Buser will face as they carry this vaccine down the trail to Nome?
