

Unit 1: Community-Engaged Scientific Research

In this unit, you will learn about scientific research and why we do research.

Topic 1.1: What is scientific research?

We all have questions.

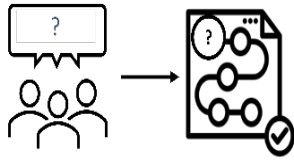


- What time will the bus come?
- Why do birds go south in the winter?
- How much does a new phone cost?
- Should I switch to self-directed services?

There are different ways to get answers to questions.

- You can look up information on the internet,
- Talk to an expert, a teacher, or religious leader, or
- Go to the library.

Sometimes you might want an answer to a question that someone else has *not* asked before like how to help people with developmental disabilities get good healthcare in their community.



You can answer new questions by doing **scientific research**.

Scientific research is when you look for an answer to a question by taking a step-by-step approach to gather information, or **data**. We do scientific research to find an answer that applies to a lot of people, not just a few.

When you do research, you make a plan to gather the information you need to answer your question. Then, you follow that plan step-by-step.



When you do research, it is important to follow your team's plan. Your team's plan is also called a **research protocol**.

You can find answers to your questions in different ways. You might gather information by asking people questions, or by getting information from their medical records.



We do research because good things, or **benefits**, can happen when we do it! Finding answers to important questions can make our communities better.

Research can also sometimes help the people who are in research. For example, research about what it is like to live with a disability can help doctors and therapists know what is most important to their patients.

Research is important because it helps us answer questions about the way the world works and the things that help people be healthy and live the lives they want. There are many examples of how research has helped communities.

- Research to make vaccines helps people all over the world be safer from diseases, like COVID-19 or chicken pox.
- Research can also help people learn about the strengths of people with disabilities.
- For example, research has shown the ways that people with disabilities are really great at work.

- People who are in research may also benefit. For example, they may feel proud that they helped. Or, they might have fun doing the research study.

Sometimes, researchers test out a new medical treatment. This is called an experimental treatment. The treatment might not work, but it also might work. If it works, then the experimental treatment helped the people in the research study.

When you use the step-by-step scientific research process, you can be more confident that the answer to your question is the real way things work, and not just someone's opinion or based on something that only happened a few times. There are different ways to do research. Some research is done with materials like metals and liquids. Other research is done with animals, and some research is done with people. In this training, you will be learning about doing research with people.