

5 Tips for Communicating Science:

Understand the nature of research

Research is an ever-evolving process. Each study builds upon previous research, gradually growing the body of knowledge about a topic. Study findings may contradict prior research or elicit more questions than answers. When the public expresses frustration or confusion about research, communicate clearly how each study adds just one more piece to the research puzzle.

Interpret research accurately

To accurately interpret research requires a basic understanding of the research process from generating hypotheses through interpreting results. It requires an understanding of research methods, data analysis, and basic statistics. It requires knowing the different types of research and which ones can demonstrate cause and effect and which ones can only show associations.

Create context

Clearly communicating science involves putting research findings into context. This includes examining one study's findings within the entire body of research; recognizing research findings may not generalize to other populations or to specific individuals; understanding the impact of environmental factors; and acknowledging the importance of realistic dose and application.

Beware of bias

Assume the potential for bias in the presentation of research. It is natural for researchers or science journalists to have viewpoints they wish to support. This can lead to presenting primarily favorable findings or a biased interpretation of results. Look for a discussion of results that describes the strength of the evidence, research limitations, and areas for further research.

Communicate findings clearly

Research is inherently confusing and difficult to understand. To make it more meaningful and relatable, provide real-life examples. Present data visually with carefully chosen graphics such as bar graphs, pie charts, and scatter plots. Highlight key findings and significant relationships. Infographics are an effective approach for summarizing main ideas and research findings.