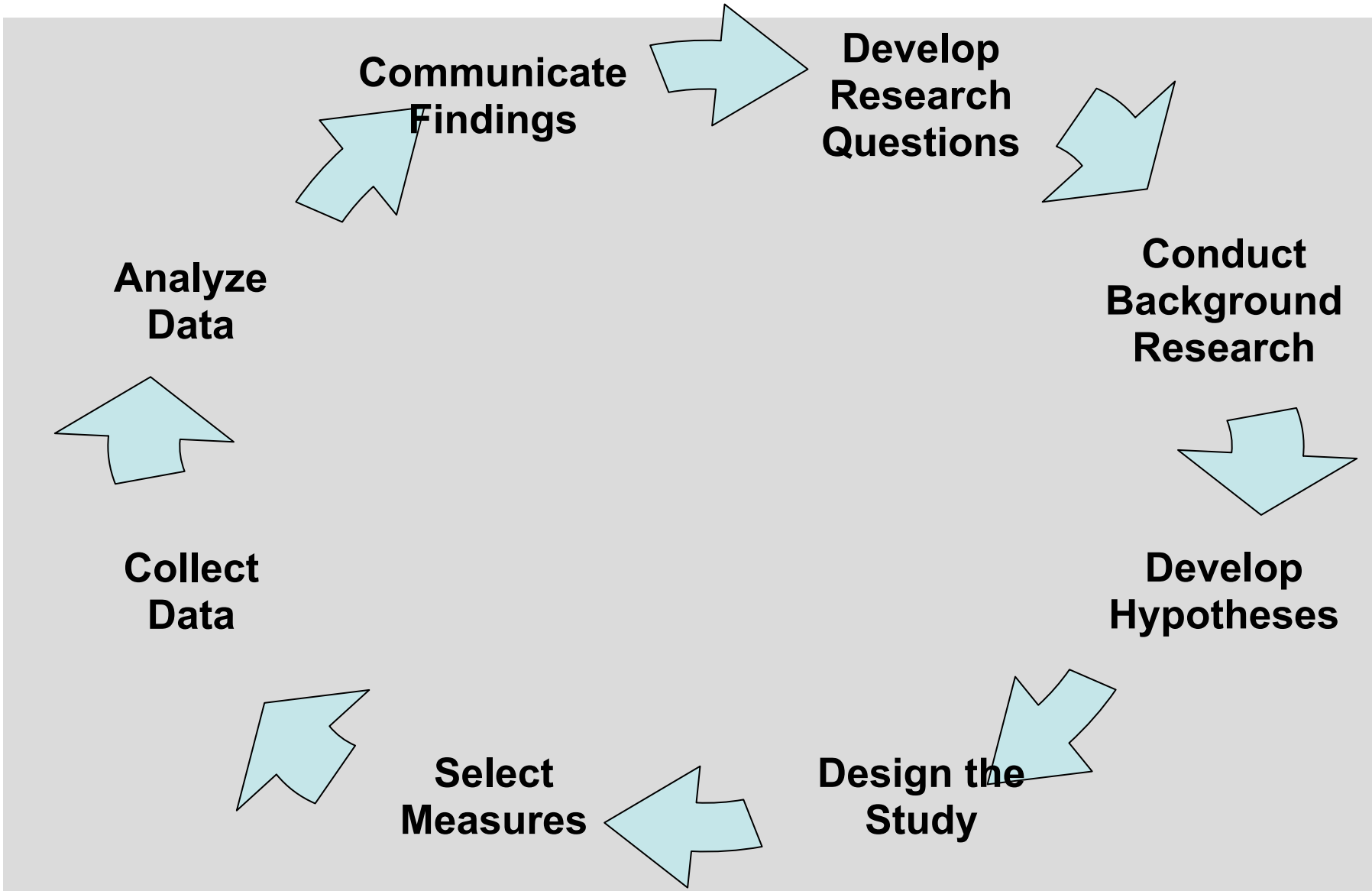
Building a Public Health Law Research Proposal Using the Scientific Method

February 2010
Jennifer Ibrahim, PhD, MPH
Temple University, Department of Public Health

Overview of the presentation



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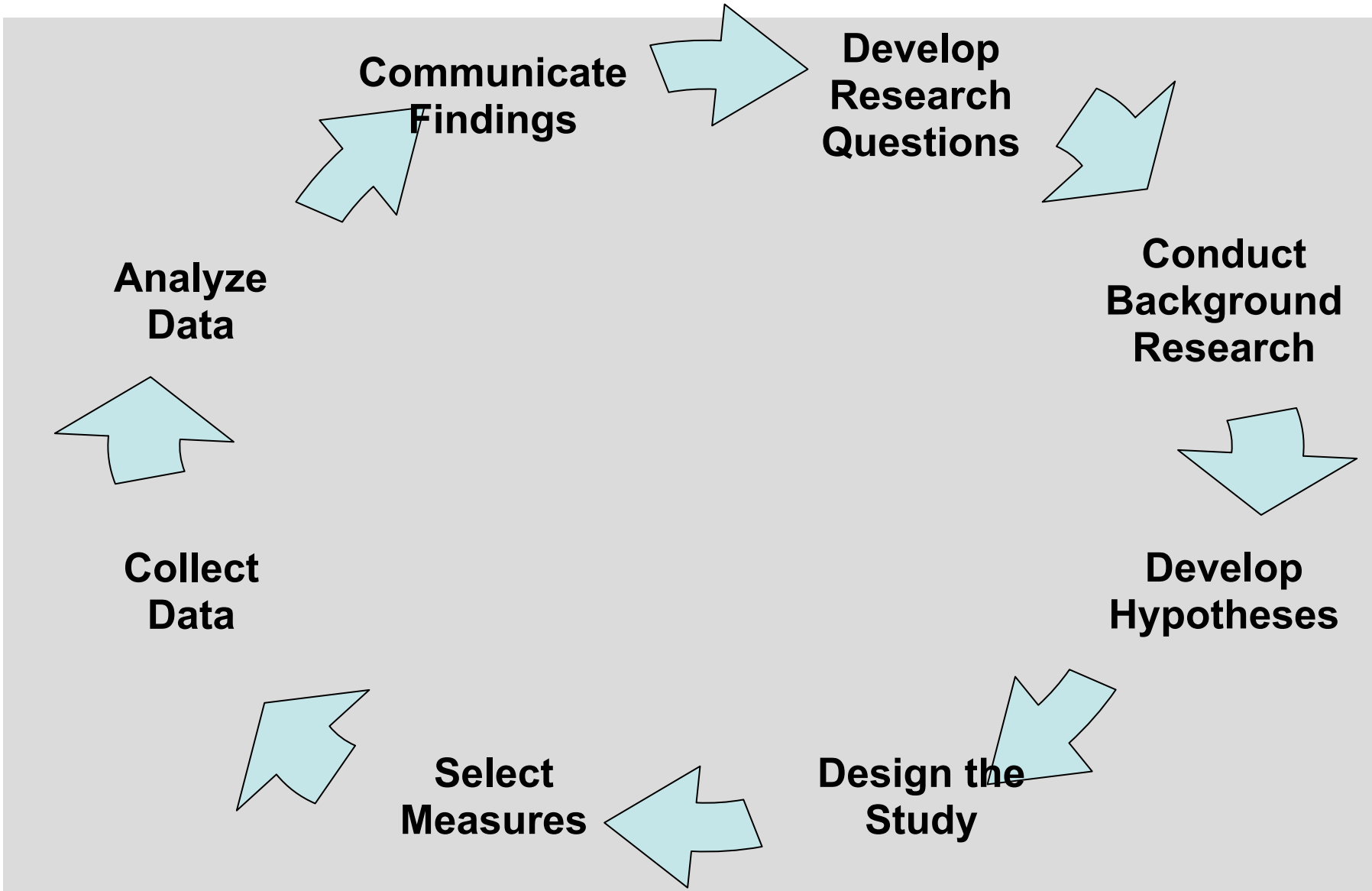
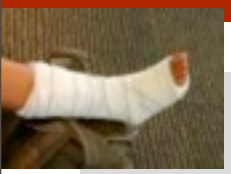


Develop Research Questions



What are important are interesting questions pertaining to your public health law topic?

Is there sufficient research with consistent findings? Are there contradictions or do gaps exist?

What are the important questions for policymakers or practitioners?

Research questions should focus on a specific aspect of the topic of interest and be answerable through systematic data collection and analysis.

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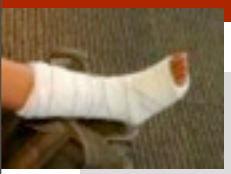

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Conduct Background Research

Be well-versed in the topic and understand where it fits in the existing body of literature. Innovation is good, but it must be grounded.

Describe how the proposed research goes beyond what has been done before.

Think about drawing from lessons learned in other topic areas and other disciplines.

Indicate how the study can advance the field of public health law research, policy and/or practice.

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Engage Your Audience

Get to know the players in the issue

Get to know the audiences that will use your work

- Policymakers
- Practitioners
- Advocates
- General Public

Engage these groups to help formulate meaningful and relevant research questions.

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Based on the background research, how do existing theories guide the hypotheses and variables of interest needed to answer the research question(s)?

- Consider legal, socio-legal, regulatory, economic and behavioral health theories, but be willing to explore other disciplines as well.

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Identify Specific Aims

State the specific aims of the study

- What will you actually be doing?
- Be succinct
- Do not justify, just state

- For example:
  - Specific Aim 1: To test the hypothesis that seat belt laws increase the likelihood of seat belt use by increasing the perceived threat of being fined as measured by X and the perceived benefit of being protected by the seat belt measured by Y.

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Develop a Logic Model

Use logic models or other means of graphic illustration to think through the relationship between the dependent and independent variables.

Describe *what* you will measure and *how* at each stage of the logic model.

Research Question: Do hands-free laws reduce likelihood of car-crash injuries / fatalities?

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Design the Study

State the study design and justify the selection

- Is it experimental or quasi-experimental?
- Is it observational or a mapping study?
- Is it mixed-methods?

It is important to be both *rigorous* and *innovative* in your approach and be certain that it is the best way to answer your research question.

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Describe key elements of the research design.

- For quantitative, include sampling plan, power analysis, define the dependent and independent variables, covariates, potential confounding factors and indicate the measures and data sources.

- For qualitative, identify approach (e.g. grounded theory, ethnography, phenomenology, case-study, narratives). Be sure to describe the protocol to recruit participants, describe dependent and independent variables, include the interview questions and indicate whether interview or focus group.

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Select Measures and Collect Data

Use measures that capture the intended constructs.

Describe the process for collecting or assembling data.

- For primary data collection, describe the process by which the data will be collected, including considerations like inter-coder reliability.
- For secondary data, discuss the merits of the dataset and how the data was collected.

	V1	V2	V3	V4
S1	2	1	1	2.5
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S3	1	.	2	6
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Test for Validity and Reliability

Consider threats to internal and external validity

Define tests for validity

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Analyze the Data

Quantitative

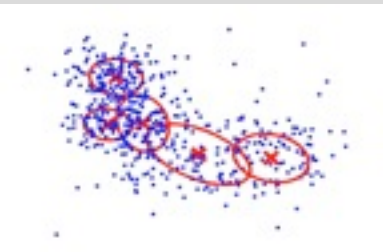
- appropriate statistical tests

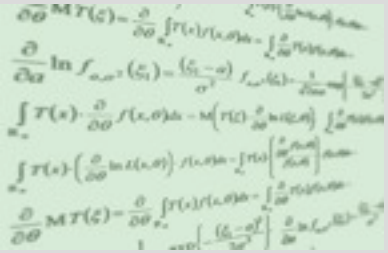
Qualitative

- describe systematic coding schema

Mixed-Methods

- describe both above plus data triangulation techniques





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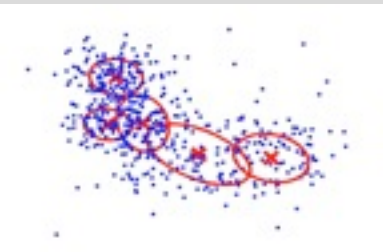

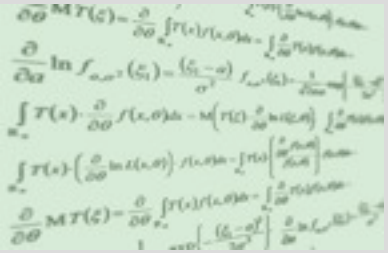

Communicate the Findings

Synthesis of the key findings

- Expected and unexpected outcomes
- Contributions to the evidence-base

Tailored communications

- What should be transferred to policy makers?
- To whom should research knowledge be transferred?
- By whom?
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For additional information on research methods for public health law research, please be sure to check the

Methods Modules and Commissioned Papers

sections of our website at:

www.publichealthlawresearch.org