What are the areas of scientific consensus?

• Ambient air temperature information is more useful than surface/skin temperature in anticipating heat illnesses or deaths

• There are different ways in which temperature affects health outcomes
  – Daily temperature, heat waves, seasonal, long term

• Local consideration of metrics and thresholds aids effectiveness

• There are physiological limits to heat tolerance

• Some people and population groups are more susceptible to heat than others

• There are social factors that act as a mediator between heat and health outcomes for individuals
What are the major areas of uncertainty?

- In most cases, we don’t know what temperature thresholds are for deaths, illnesses, emergency calls, etc.
- We don’t know what the thresholds are for specific types of illnesses and people
- There is a big gap in research on social mediating factors (cohesion, capital, interactions, households)
- The exposure to heat is correlated with many other problems (including social vulnerabilities, utility costs, access to cooling resources, isolation, housing quality)
- Properties of outdoor landscapes are correlated to heat deaths/illnesses but we do not understand the mechanisms
- We don’t know what is happening inside structures and the full range of conditions that people experience
- How to communicate this science to policymakers and the general public
What is the most essential information?

• More interaction is needed with clinicians and practitioners
• Need better data (case definitions, surveillance) to reduce misclassification
• Need to work with practitioners on the best ways to communicate heat risks to the public and to increase transparency of science for relevant audiences
• We need direct resources to vulnerable groups (weatherization programs, parks, amenities, transportation, employer regulations)
• Development of heat response plans is opportunity to connect research community and political officials
• Closer collaboration with practitioner community to design and fund research that can support best practices and interventions