Transdisciplinarity – what exactly are we talking about?

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Objectivity

✧ Bringing all relevant information to bear on a problem
✧ Understanding different ways of framing a problem
✧ Presenting the data on their own terms in order to affect outcomes

Realistic potential for providing usable assistance to inform public and private decision-making
Necessary data to understand and affect resiliency to disease/hazards:

- Individual level = KAP - knowledge, attitudes and practices regarding health hazard
- Social networks/key informants = connectivity among family, friends, other support
- Community level = socio-cultural norms, social capital, community cohesion
Place and Health Outcomes

- Necessary information to better understand place-based population health:
- Local level (home, school, work) and County, State, National level – what are available resources to mitigate impact of health hazard (policies, infrastructural resources, social services)?
- Where are the “hotspots”? 
Assessing Population Risk

- Knowledge of environmental stressor – i.e. symptoms of heat stress
- Exposure to risk
- Perception of risk
- Existing social capital – i.e. social networks
- Current coping mechanisms and their effectiveness – i.e. protective measures
- Barriers to reduction of risk
- Sources of information and behavioral responses to the environmental risk
How can we draw on individual, collective and institutional resources and competencies to adapt to and mitigate hazards?

With extreme heat, people may hear the advisory, but not understand necessary preventative steps – or not have the resources to take those steps……

Different interventions are required based on data that are not necessarily quantitative.
West Nile Virus Example

Effective information integration and use
AND
Why context matters
Human West Nile Virus Cases 2003
You Need to Protect Your Family From West Nile Virus

Contains DEET (N, N-Diethyl-meta-toluamide)

465475

Use spray that has DEET in it so mosquitoes do not bite your family.

Wear socks with long pants and sleeves outside and use spray with DEET on your clothes and bare skin.

Put spray with DEET on your hands and rub on your kid’s skin. Do not get in eyes and mouth.

People over 50 can die from West Nile Virus. Be sure to have them use spray with DEET.

Mosquitoes lay eggs in standing water in your yard. Pour it out.

If you see a dead bird do not touch it with your bare hands.
West Nile Virus Can Make You So Sick You Can Miss Work or Even Die

- Do not let mosquitoes bite you.
- Wear long pants, long sleeves, and socks when you are outside.
- Use spray with DEET in it on your clothes and bare skin.
- Use spray with DEET on your clothes and bare skin.
- Use spray with DEET on your hands and rub on your face. Do not get into your eyes or mouth.
- Wash your skin after you come inside.

Contains DEET (N, N-Diethyl-meta-toluamide) 465475
¡Evite Un Problema Grave!

**Evite enfermedades... protéjase con los repelentes:**

Los repelentes son productos para la piel y ropa que ayudan a prevenir picaduras. Siempre siga las indicaciones impresas en los productos.

**Los repelentes efectivos contienen:**
- DEET
- Picaridina (conocido como Icaridina en México)
- Oil of lemon eucalyptus

Es bueno que contengan DEET!

Si usa repelente, no olvide ponerlos en los brazos, piernas, y:
- Proteja a su familia
- Evitando picaduras de mosquitos.
- El uso de mangas largas y pantalones ayuda también.

**Los virus también pueden causar enfermedades más graves—a veces hasta la muerte. ¡Protéjase!**
Questions?

Thank you!