

Gulf of Mexico Oil spill : *Of People and Pelicans*



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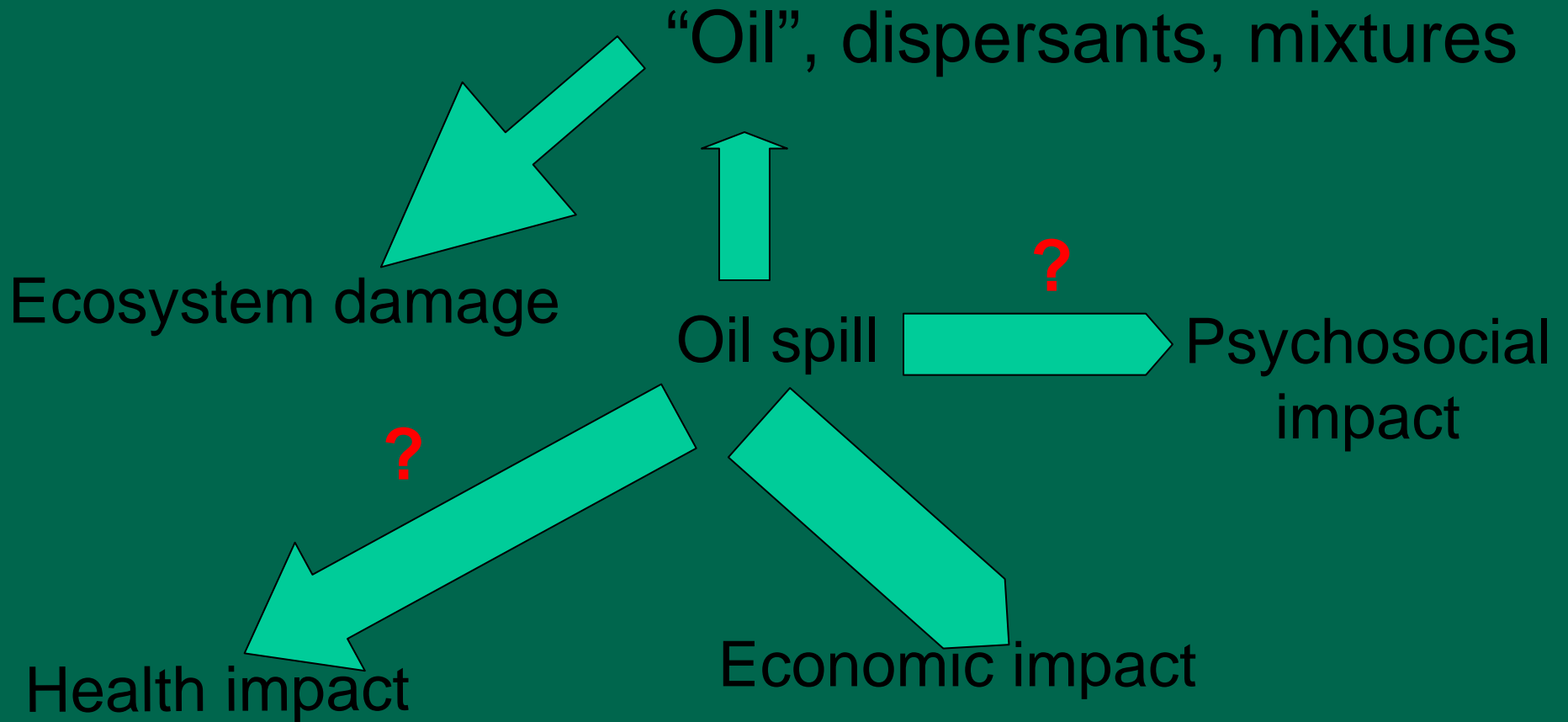
School of Public Health and Tropical Medicine



First things first....

- The spill is a disaster experienced by the community
- There is no substitution for local knowledge and expertise
- When workers hurt, families suffer
- Ecosystem health and community wellbeing are inextricably linked

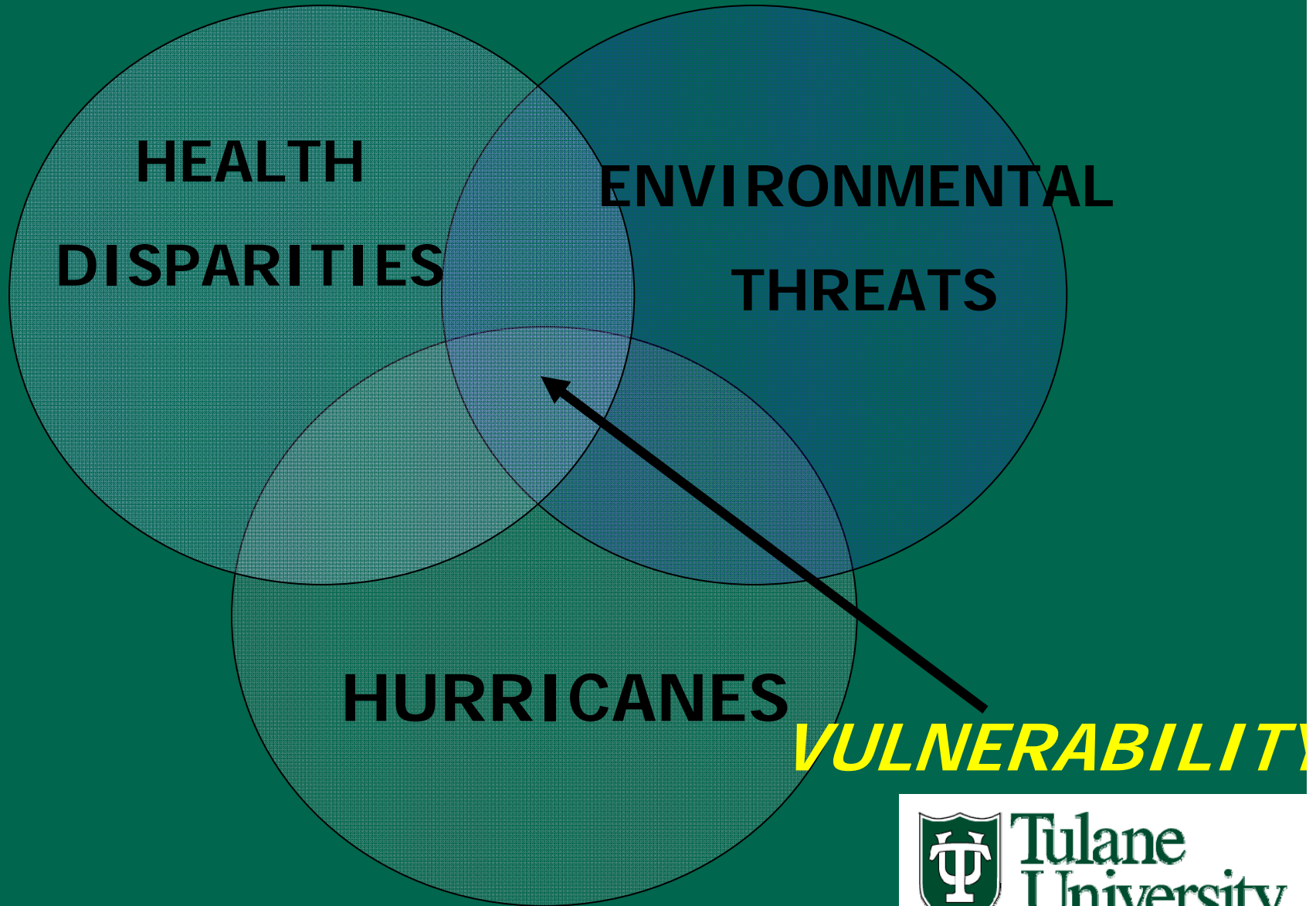
Gulf of Mexico Oil spill



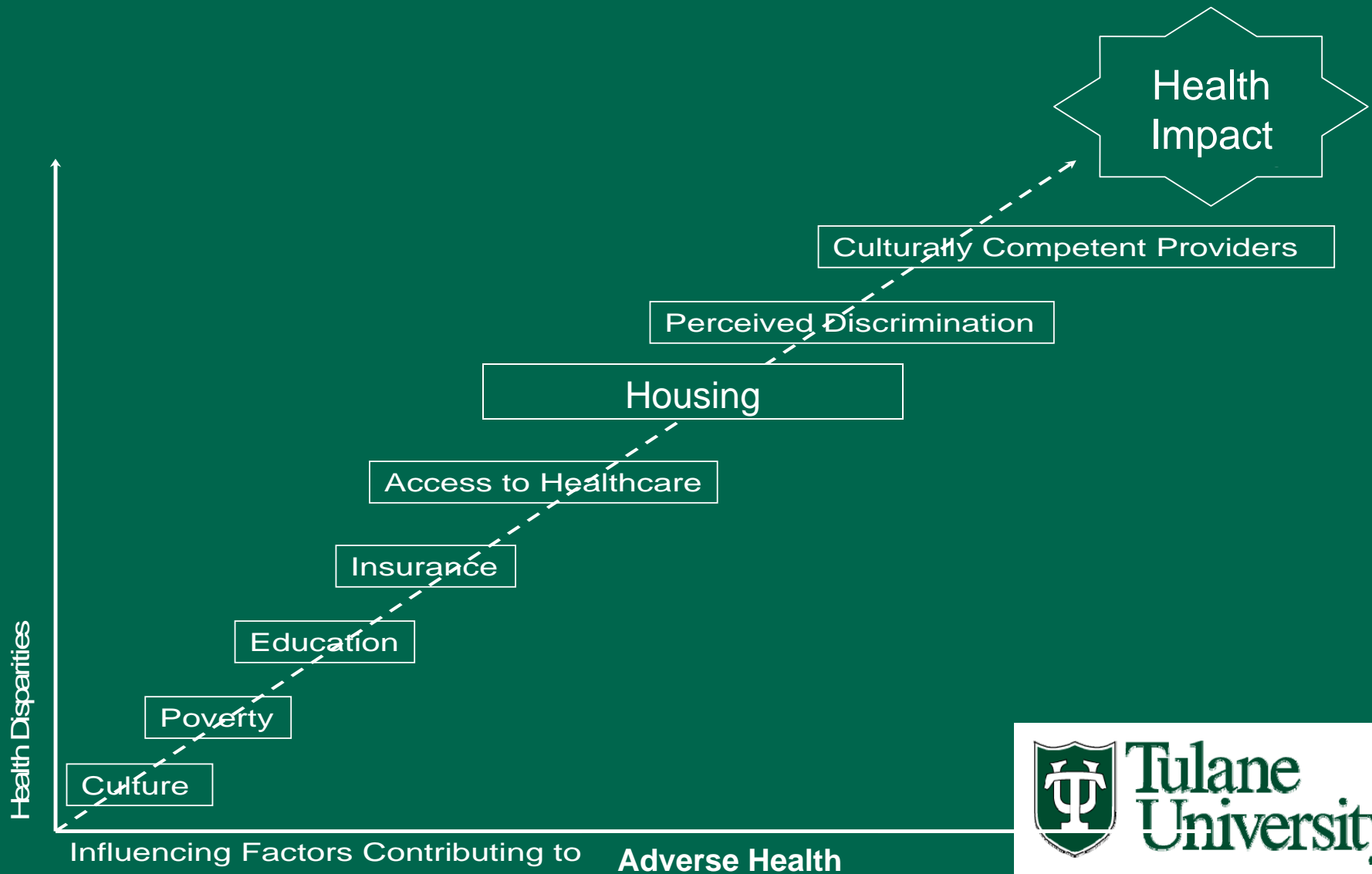
MORE THAN A WAVE OF OIL.....

BTEX		BP CONTRACTORS			TX
EPA	SHRIMP	COMMUNITIES	DHS	TAR BALLS	FL
	DHHS	DISPERSANTS	MS	NIOSH	
FDA	OYSTER	FISHERMEN		PAH	NOAA
	LA	WORKERS		PELICAN	
AL	BOOMS	VOLUNTEERS	CDC	MOUSSE	OSHA

RISK PARADIGM



GULF COAST COMMUNITIES UNIQUELY VULNERABLE



Completed Exposure pathway ?

Contaminant source



Environmental Media



Exposure Point



Exposure Route



Receptor/Population

Defining the populations at risk

- Gulf coast communities
 - Fishermen
 - volunteers
- Visitors
 - volunteers
- Special populations
 - Children
 - Individuals with existing health conditions
 - Elderly
 - Pregnant women



What we don't know

- Who is doing what ?
- What is their exposure?
- How will their health be affected?
- What role will historic health disparities play?
- Populations of concern
- Composition of contaminant mixture over time
- Cumulative risk
- Socio-ecological factors

A multi-prong health action plan

- *Characterize* the contaminants of concern in all environmental media over time
 - Toxicity essays; seafood toxicity monitoring
- *Fingerprint* the exposures
 - novel biomarkers of exposure
 - Real time exposure measurements
 - Geospatial modeling; Dose reconstruction
- *Protect* those most vulnerable
 - Long term monitoring; bio-specimen banking
 - Susceptibility biomarkers; gene-environment interaction
 - Psychosocial intervention
- *Communicate*: risk; health literacy
- *Educate*: health professionals; community
- *Disseminate*: just-in-time; just-in-case

Community health action guiding principles

- Synergistic with local assets
- Participatory
- Holistic-health disparities
- Culturally competent
- Transparent



