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Applied multi-stakeholder COVID-19 health research: The Tucson Experience

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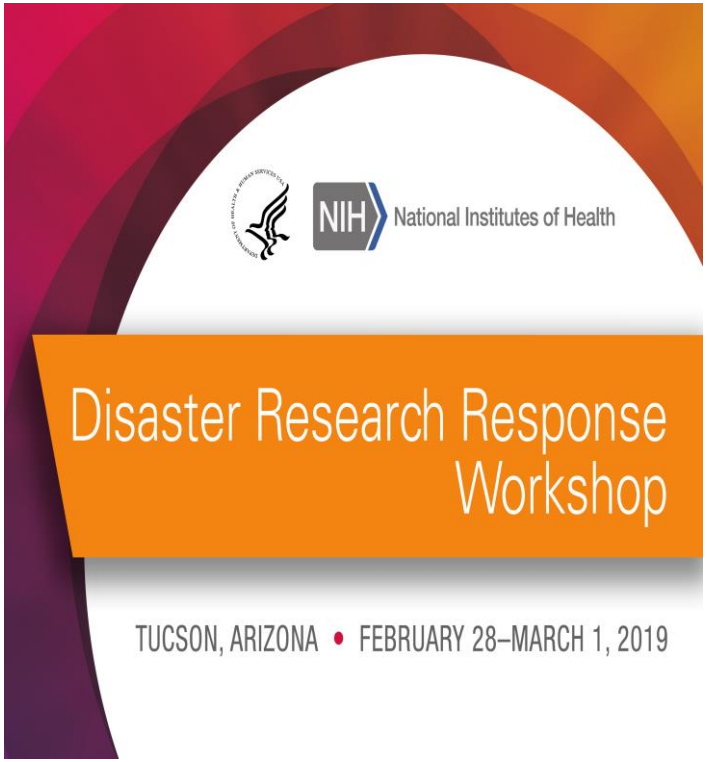
Disaster Research Response (DR2) Tucson Workshop (Feb. 2019)

Train Derailment Scenario

- Release of chemicals from rail cars
  - 1 mile 6000 people evacuated, 9 deaths reported
  - >32,000 within 2 miles
- Highly diverse vulnerable community
- **Issues:** short & longer-term health impacts, medical care, environmental contamination

Photo actual Tucson Derailment, July 2018



DR2 Tucson Training Workshop

Key Goals

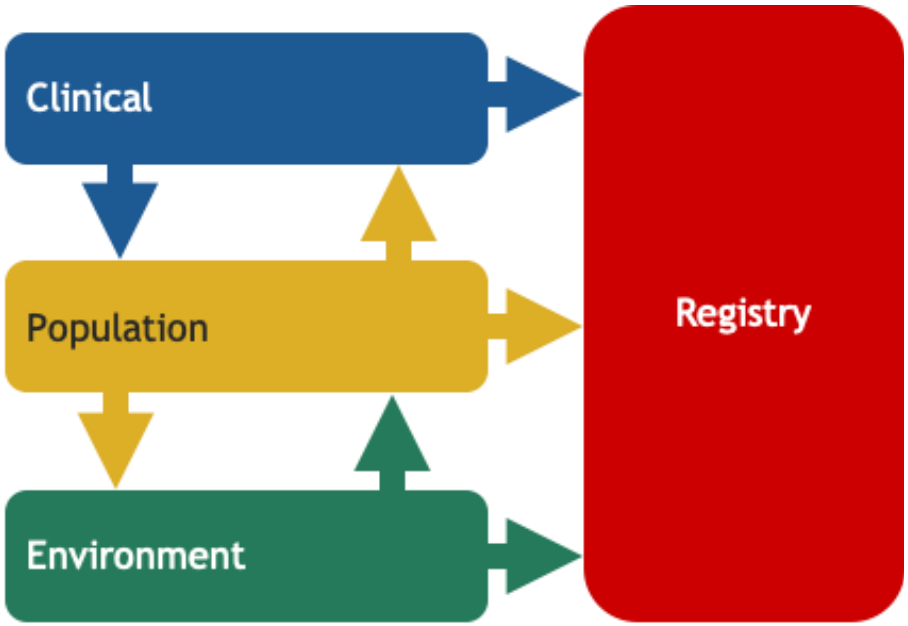
- **Population data and research** of impacted community
- **Clinical data and research** for treatment safety and efficacy
- **Integration** between hospital/health care and community data
- **Inclusion of IRB members**
- **Inclusion of diverse stakeholders** (120 Participants)
  - **Federal Agencies**: NIH, FDA, HHS/ASPR, FEMA, CDC, DOD
  - **Academia**: University AZ Departments; other universities
  - **State, County, City**: Public Health, Emergency Management, Fire, Environment, Hospitals and Clinics, Poison Control,
  - **NGOs**: US Clinical Trials Network, Worker Unions, Union Pacific Rail
  - **Community groups & Tribal Nations**

Lessons Learned: DR2 Tucson

- Locally led **multidisciplinary approach** adopted throughout the planning and implementation process included:
  - Environmental Health
  - Population Health/Epidemiology
  - Poison Control
  - Emergency/Acute Medicine
  - Pharmacy
  - Human Subjects Protection & Privacy Office
  - Translation & Interpretation
  - Students
  - Community Members

Lessons Learned: DR2 Tucson

- **Integration** of population & clinical response
  - Shared priorities
  - Shared participants
  - Shared data
  - Shared responsibility



Lessons Learned: DR2 Tucson

- Situated in **local**, real-world contexts
  - Established local guiding principles critical for future research
- Practical and **scalable infrastructure**
  - Streamlined & shortened time to COVID-19 response research
  - Collaborations & relationships existed with common goals & operating procedures
  - IRB & HIPAA collaboration expedited protocol reviews

Application to SARS-CoV-2: Guiding Principles

1. Coordinate data collection to **minimize participant burden**
   - Common or harmonized baseline questionnaires

2. Set up projects that allow ethical and legal **sharing** of data, participants, and results
   - Participants are asked if they are willing to be contacted for future research
   - Projects are "linked" in a way that reduces competition & benefits everyone

3. **Everyone is welcome**

Application of Lessons Learned: COVID-19 Response

Clinical

- Integrated inpatient & outpatient clinical registry built upon existing influenza surveillance
- Collaboration of family medicine, emergency medicine, and critical care
- Accompanying biorepository to support other researchers
- 302 outpatient & 425 inpatient enrolled

Population

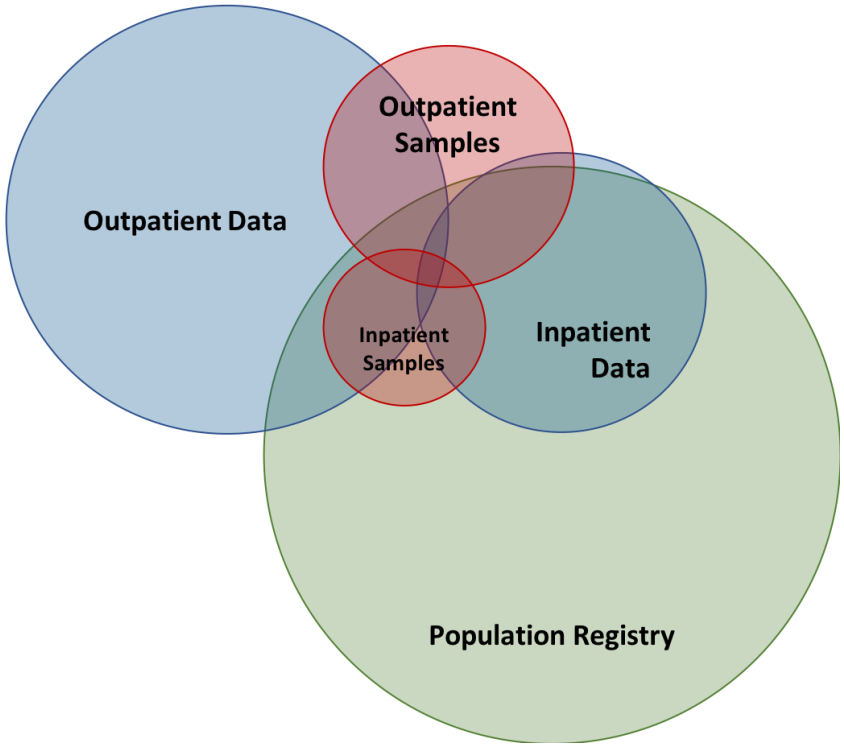
- Population-based cohort to understand short-term and long-term effects of COVID-19
- Collaboration of 6 colleges, 2 universities, and the health departments
- Collaborative recruitment & data collection
- 1,450 Enrolled

THE ARIZONA CoVHORT

Application of Lessons Learned: COVID-19 Response

Integration

- Collaborative recruitment
- Aligned instruments
- Ancillary study to link data streams



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