# Using Ethnographic Methods for Survey Sample Design in a Community-based Participatory Study of Occupational Health among Immigrant Poultry Processing Workers

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# JUSTA (Justicia y Salud para los Trabajadores Avícolas)

- Community-based participatory research
  - Wake Forest University School of Medicine
  - Workers United of Western North Carolina
- Specific aims include
  - Documenting exposures and outcomes of stressors among poultry workers and their families
  - Developing culturally and linguistically appropriate educational materials and implementing programs that prevent or reduce exposure to physical and social occupational stressors

# Data Needs

- Valid data on worker occupational injuries to
  - Document exposures and outcomes
  - Develop educational program
- Companies deny access to worksites
- Data collection required to be “scientific”
  - Design appropriate education programs
  - Political environment
- Survey design
  - 6 counties where workers employed by 3 companies live
  - Representative sample of 200 workers

# Hard-to-Reach Populations

- Populations considered hidden or hard-to-reach for public health research share two characteristics
  1. No sampling frame exists for the population, so its size and boundaries are not known.
  2. Members of the population have strong privacy concerns because population membership involves stigmatized or illegal behavior.

# Latino Poultry Processing Workers, a Hard-to-Reach Population

- No sampling frame exists for Latino immigrants, particularly those with specific occupations, like poultry processing.
- Latino immigrants have strong privacy concerns.
  - Many without documents
  - Those with documents are often harassed
  - Experience with authorities in countries of origin often involved intimidation
  - Experience discrimination from authorities in US
  - Pronounced anti-migrant climate in many areas
- Public health investigators may be “the government.”
  - ICE has used worker safety training to apprehend undocumented workers in North Carolina.
- Workers do not want to be seen by their employers as causing trouble.

# Ethnographic Methods for Identifying a Sample: (1) Ethnographic Presence

- Long term community involvement
- Local residence
- Shopping, eating, and visiting at tiendas
- Community volunteerism and participation
  - Community events
  - Attending church
- Technical assistance to community organizations
- Research and data collection addressing community concerns

# Ethnographic Methods for Identifying a Sample: (2) Key-Informant & In-depth Interviews

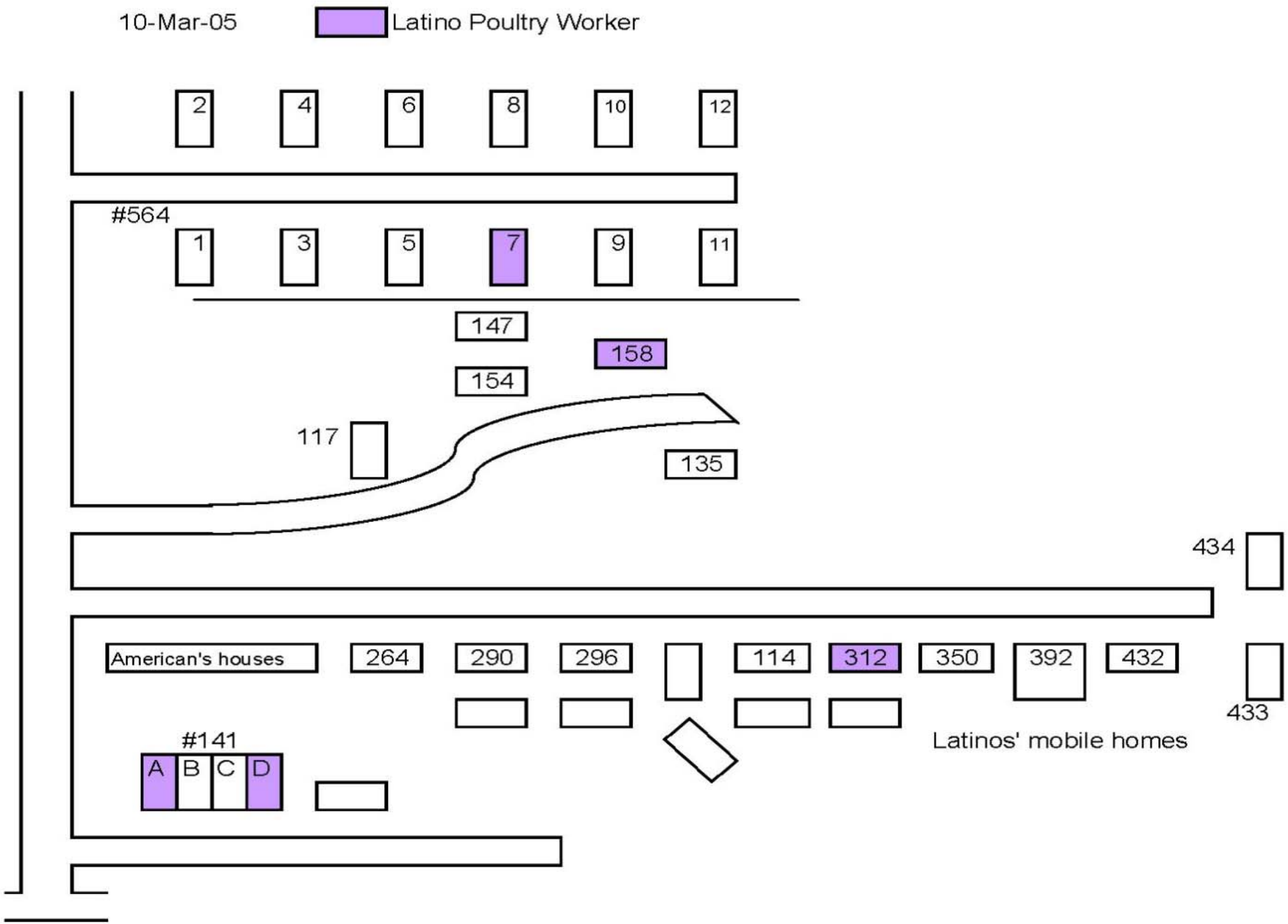
- Key-informants
  - Service providers
  - Clergy
  - Tienda owners
  - Community activists
- In-depth interview participants
  - Poultry workers
  - Service providers
- Content included
  - Population characteristics
  - Location of neighborhoods
  - Location of isolated residences

# Ethnographic Methods for Identifying a Sample: (3) Participant Observation

- Windshield surveys
- Establishing the characteristics of Latino neighborhoods and households
  - Number of bicycles
  - Type of TV satellite dish
- Map neighborhoods

# Results of Ethnographic Methods

- Poultry workers live in segregated neighborhoods and in isolated households
- Familiarity with communities
  - Location, composition and size of Latino neighborhoods
  - Lists of isolated Latino households
- Familiar to trusted community leaders and service providers



# Sample Design

- Neighborhoods – 2/3s of sample
  - List of neighborhoods
  - Number of poultry worker households in each neighborhood
  - Specify number of interviews per neighborhood (proportionate to number of households)
  - Specify random order in which households in each neighborhood were contacted
- Isolated households – 1/3 of sample
  - Randomly select households for interviews

# Results

- Sample of 200
  - 101 men
  - 99 women
- Geographic distribution
  - 100 in county with largest poultry worker population
  - 50 each in each of two groups of counties with smaller poultry worker populations

# Conclusions

- The survey sample identified and recruited provided scientifically reliable and valid information used to
  - Document work-related exposures and occupational health problems
  - Design educational materials for health care providers
  - Argue for changes in occupational health regulations
- Ethnographic methods within this CBPR project facilitated sample development in this hard-to-reach population
- CBPR collaborations take substantial time to develop and maintain, but they support the conduct of valid and reliable science.