Examining Process and Outcomes of Nuisance Inspection and Abatement Conducted by Local Health Departments

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Educational Need

- Investigation of public health nuisances is limited by the applications of local public health services across the variation of Local Health Departments (LHDs)
- Direct Observation represents a research approach that expands understanding of the structure, process and outcomes of nuisance inspection and abatement

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Objectives

Participants will:

- Identify differences in process and outcomes resulting from variation of service delivery and Environmental Health Specialists (EHS) characteristics
- Explore practice variation of nuisance inspection and abatement through 6 LHDs
- Employ both direct student observation & abstraction protocol for investigation of nuisance inspection and abatements and the role EHS play
- Evaluate conduct and nature of inspection and abatement of public health nuisances that impact community health and safety through direct observation

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Expected Outcome

- Active dialogue and feedback about the role of direct student observation in building a more comprehensive understanding of the process and outcome of nuisance inspection and abatements, an essential public health services

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Direct Observation of Nuisance Abatement (DONA)

- Purpose: The study will seek to deepen understanding of the process and outcome of nuisance inspection and abatement across LHDs in the state of Ohio and their role in improving the environment, aiding investigation of hazards and providing education to prevent further occurrences

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Direct Observation of Local Public Health

- "In addition to practical trials, both well designed observational studies and alternative experimental and quasi-experimental designs can contribute important information on external validity and the impact of contextual factors."
  - Annu. Rev. Public Health 2007. 28:413–33

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DONA Methods

- Seven trained student observers were partnered with 27 environmental health specialists across six LHDs
- Each LHD provided student observers access during all steps of 167 nuisance inspection and abatement procedures
- Abstraction of 509 Nuisance inspection reports conducted in the past 12 months
- Development of an observational protocol through focus group and DELPHI process
- Inter-rater reliability was demonstrated in previous research

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Analyzing and Interpreting Results

- Comparative Case Study includes the use of direct observation, data abstraction, surveys & interviews with EHS
- Mixed Methods will be used to analyze the structured direct observations and data collected from field notes and abstraction forms

Crabtree BF, Miller WL. Doing Qualitative Research. 2nd Edition. Sage Publications. Thousand Oaks CA, 1999

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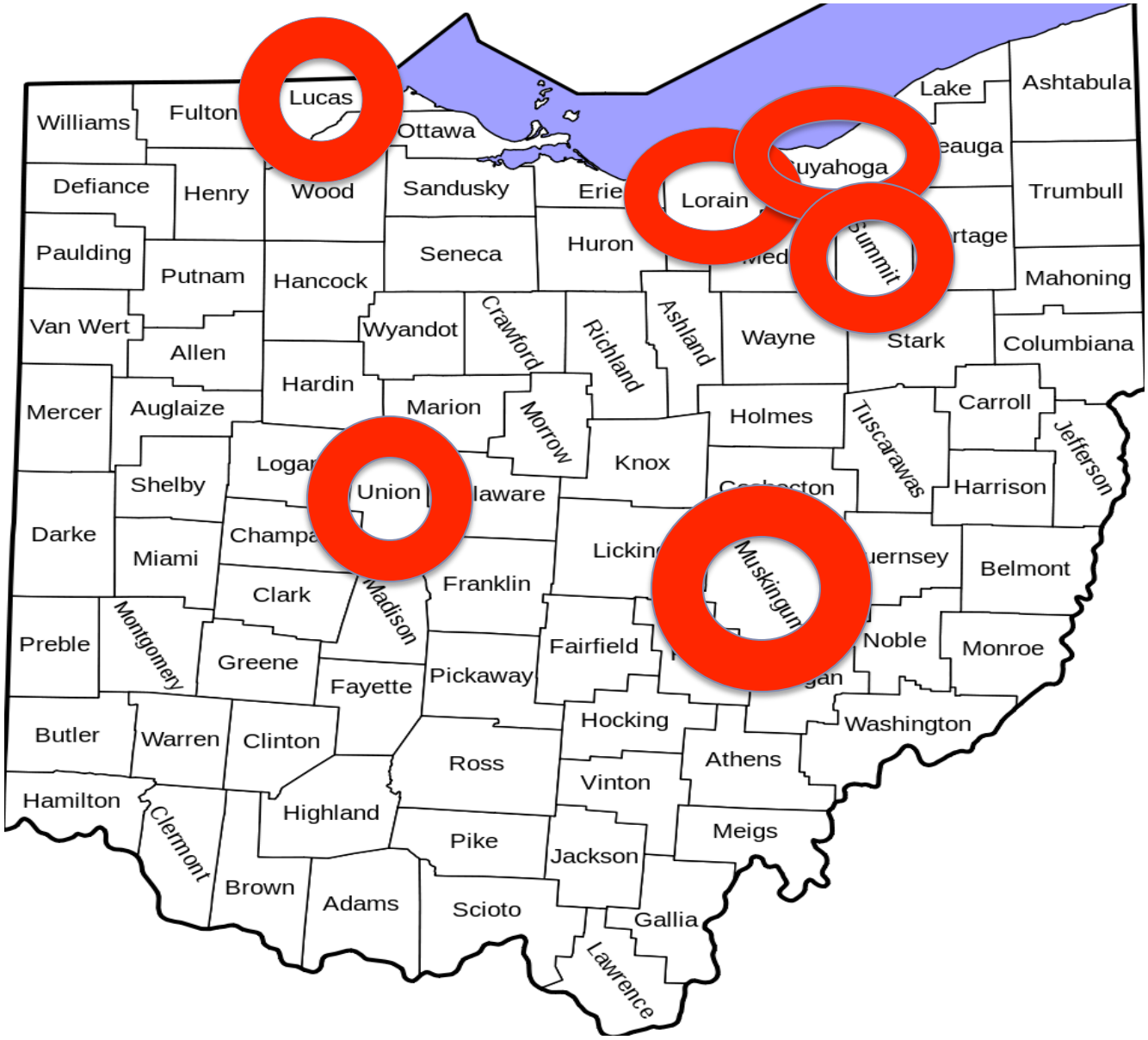
Results



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Top Nuisance Complaints*

1.	Property	32%
2.	Animal	29%
3.	Garbage or Solid Waste	28%
4.	Water	16%
5.	Air	15%
6.	Insect	14%
7.	Sewage	13%
8.	Other	11%
9.	Toxic (hazardous)	5%

*combined observation and abstraction (n=676)

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Source and Object of Complaints*

Resident re: other private property	28%
Unknown/Anonymous	22%
Resident re: own property	13%
Re: commercial property	11%
Renter re: rental property	11%
Government employee re: residential	7%
Re: public property	2%

*observation only (n=167)

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Direct Observation Process*

Prior to Inspection

- Mechanism of Contact by Complaint
  - Phone Call 66%
  - Email/Online 13%
  - Other 11%
  - Unknown 10%

*observation only

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Direct Observation Process

Prior to Inspection

- Effort Made to Contact Complainant Prior to Inspection
  - Yes 33%
  - No 67%

Direct Observation Process

During Inspection

- Person on Site (POS) Role
  - Homeowner 35%
  - Employee 28%
  - Renter 13%
  - Owner or Landlord 11%
  - Other 8%

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Direct Observation Process

During Inspection

- How did EHS locate POS
  - Spontaneous Discovery 50%
  - Knocking on Door 37%

Direct Observations Process

Nuisance Inspection Process	Valid Percent
During Inspection	
Informant	
Informant is also Complainant	26
Informant with conflict or argument	16
Informant raises voice in anger	13
EHS	
EHS gives Positive Feedback to POS	65
EHS take pictures	15
EHS gives Feedback in a Negative Manner	13
EHS Threatens punitive action	11

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Direct Observation Process

Nuisance Inspection Process	Valid Percent
After Inspection	
EHS gives clear feedback and assessment	91
EHS discusses improvement plan	78
EHS offers or conducts environmental health or safety education	62
EHS elicit questions	73
Nuisance remediated or did not require remediation	58
Nuisance partially or not remediated	42

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Direct Observation Outcomes

Nuisance Inspection Outcomes	Valid Percent
After Inspection	
Required further inspection	28
Required further discussion	23
EHS had special concerns	19
Resulted in written orders	18
Resulted in citation	15
Resulted in verbal warning	11

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Direct Observation Results

- **Government Departments Most Involved**
  - Housing 11%
  - Public Works/Service 6%
  - Police 4%

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Key Findings

- Two thirds of the time, complainants reported nuisances over the phone
- Top nuisance complaints involve property, animals, and garbage/solid waste
- Residential complaints regarding other private property accounts for about one third of nuisance complaints investigated
- Spontaneous Discovery of POS occurred in just over half of all nuisance inspections

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Key Findings

- 65 percent of the time, EHS gave positive feedback to POS
- 62 percent of the time EHS offered or conduct environmental health or safety education
- Most (58 percent) nuisances were remediated
  - When nuisances were not remediated, more than half of the complaints required further discussion or investigation
- Future analysis will investigate the extent of nuisance inspection and abatement processes varying across structural differences in LHDs

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Limitations

- Convenience sample of 6 diverse LHDs
- Limited number of EHS (n=27)
- No direct measure of inter-rater reliability

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Strengths

- Novel observational methodology
- Trained student observers
- Direct observation decrease error variation
- Retrospective abstraction component
- Mixed methods

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Thank You!

Questions, Comments or Insights

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