

## The Pets for Life as One Health Study: Results from the First Year of Data Collection

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UNIVERSITY of  
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GRADUATE SCHOOL OF SOCIAL WORK  
Institute for Human-Animal Connection



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1

## Institute for Human-Animal Connection (IHAC)

- Integrating social work expertise into human-animal interactions
- Teaching, practice, ethics and research
  - Animal-Assisted Social Work Certificate
  - Online professional development certificates



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2

## Two Focus Areas of IHAC Research

- Therapeutic Human-Animal Interactions
  - Animals as clinical engagement
  - Prison-based dog training
  - Residential treatment
- Animals in Communities
  - Incorporating social work in sheltering
  - Social/economic impacts of animal welfare policies
  - Impacts of companion animals on community health



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3

## The One Health Framework

- One Health is an underlying framework for IHAC
- Based on Traditional Ecological Knowledge
- Position animal health and welfare as integral components of community health and policy making



[https://en.wikipedia.org/wiki/File:One\\_Health\\_Triad.jpg](https://en.wikipedia.org/wiki/File:One_Health_Triad.jpg)



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### The Humane Society of the United States' Pets for Life

- Pets for Life addresses the inequity in animal welfare resources in communities experiencing poverty by removing barriers to accessing services, supplies and information



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5

### The Humane Society of the United States' Pets for Life

- Culturally competent person-centered outreach model
- Trust building and long-term relationships
- Since 2011
  - Programs in >40 communities
  - >185K pets and families served
  - ~0.5M medications, supplies and services



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### Pets for Life Operations Database Study

- Retrospective database analysis of >80,000 s/n surgeries in 38 Pets for Life sites (2012-2015)
- Race/ethnicity were not predictive of willingness to s/n



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### Pets for Life as an Opportunity to Study One Health

- Pets for Life and One Health
  - Highly focused resources on one domain
  - Breaks down barriers to access
  - Outreach model increases social cohesion
  - Anecdotal evidence
- Pets for Life as One Health Study**




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### Pets for Life as One Health Study – Presentation Overview

- Design and data collection
- Results of the Pet Inventory
- Development and implementation of the One Health Community Assessment
- Current status and upcoming analyses



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9

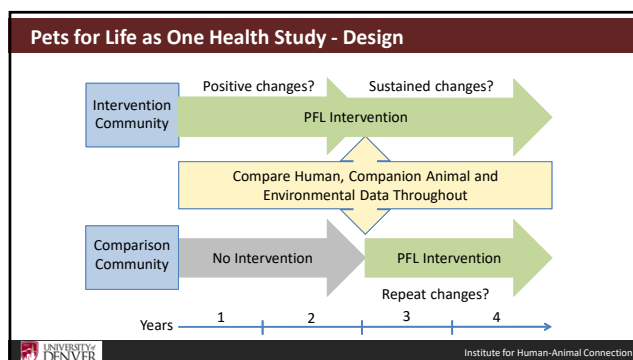
### Pets for Life as One Health Study

- Design and data collection



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10



11

### Pets for Life as One Health Study – Site Selection

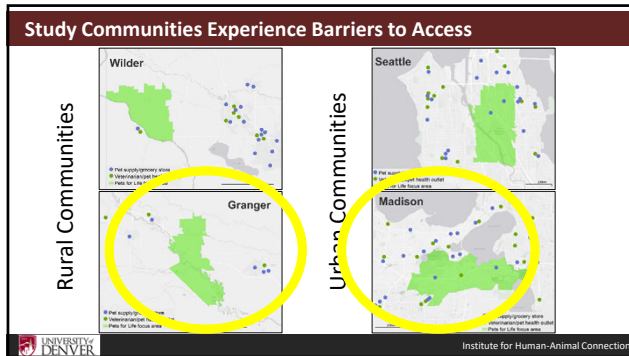
- 30 urban sites
- 50 rural sites in 27 counties

WA, ID, MT, ND, SD, MN and WI considered

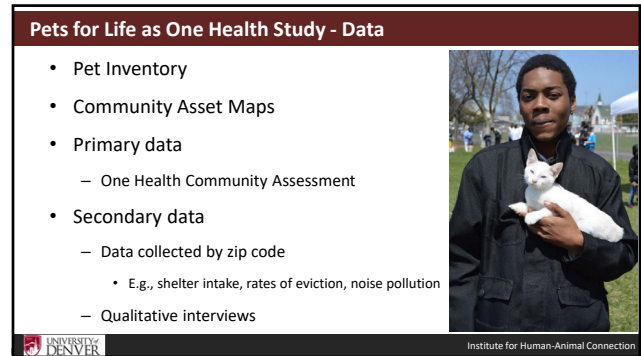
	Human Population	Poverty	Median Household Income	Race/Ethnicity	Unemployment	Educational Attainment
<b>Urban</b>						
Madison, WI (53713)	23,250	27.1%	\$36,961	43% White, 54% Non-White	6.4%	83% HS/29% B
Seattle, WA (98108)	24,700	21.0%	\$55,627	24% White, 69% Non-White	6.9%	77% HS/33% B
<b>Rural</b>						
Granger, WA (98932)	3,394	33.0%	\$40,962	10% White, 88% Latino	13.2%	50% HS/9% B
Wildier, ID (83676)	1,597	30.5%	\$33,953	23% White, 76% Latino	16.2%	57% HS/4% B

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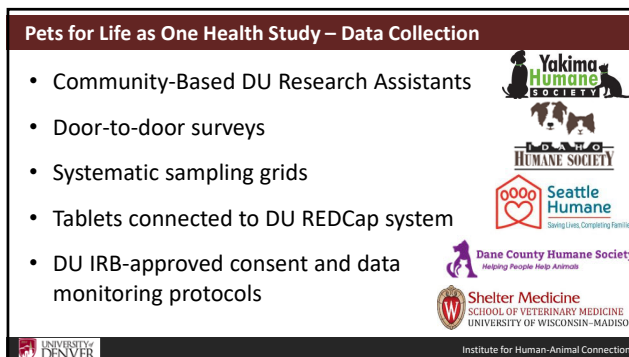
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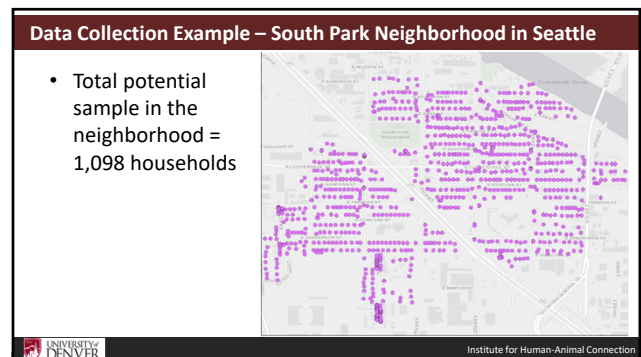
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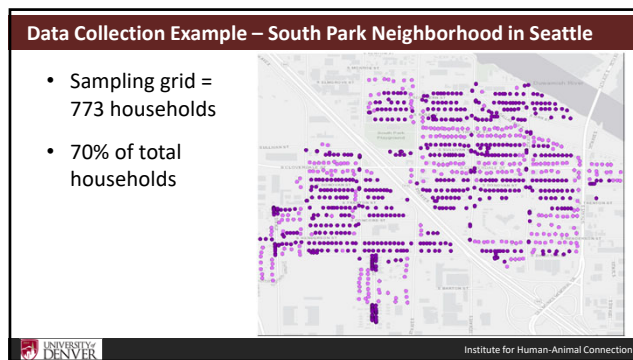
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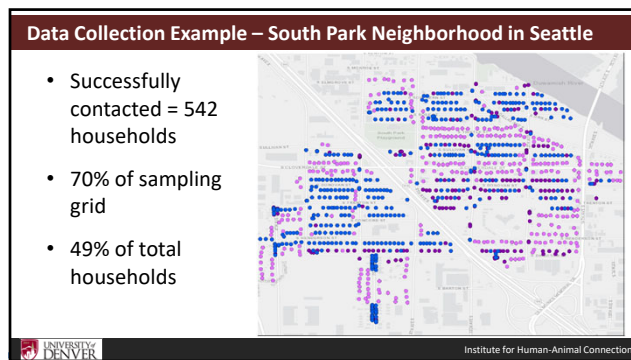
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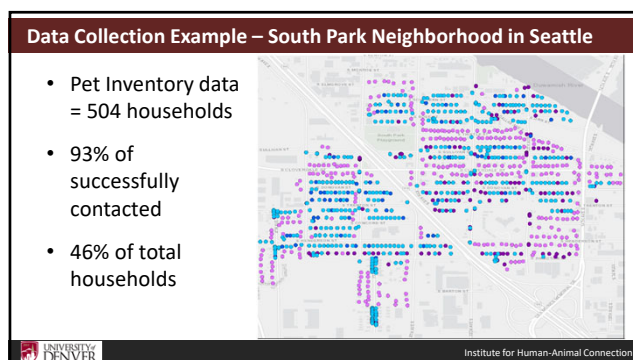
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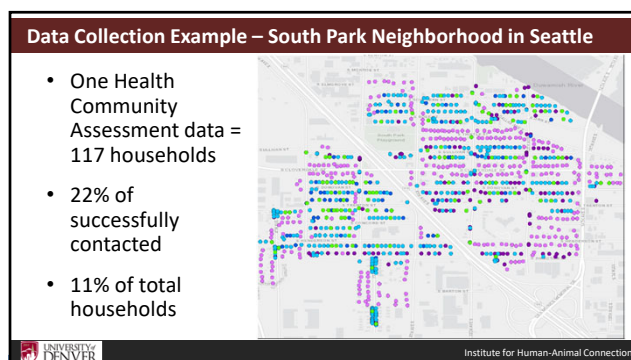
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18



19



20

### Pets for Life as One Health Study

- Results of the Pet Inventory



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21

### Pet Ownership at the Community Level

- Community-level data unavailable to assess factors that impact pet ownership
  - Urban and rural communities
  - Low poverty and high poverty communities
- Several national and state-level surveys
  - E.g., AVMA, APPA, Simmons National Consumer Survey, U.S. Census Bureau's Housing Survey
- Need detailed data on pet ownership in study sites to measure Pets for Life "dose"



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### Pet Inventory Survey

- Data from first two survey questions:
  - Do you have a pet? (Yes/No)
  - What kind of pets do you have? (Dog/Cat/Other/Multiple Species)
- Highest sampling density of pet ownership conducted in single U.S. communities to date
- Observed pets also counted, but not included in this dataset
- Data from additional questions, but smaller sample



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23

### 2018/19 Pet Inventory Results

Community	Participant HH/Total HH	HH with Pet	Measured Cat	AVMA Cat	Measured Dog	AVMA Dog
Granger, WA (98932)	509/86 (59.0%)	3.7/505 (6.0%)	16.7% (CI +/- 2.7%)	2.4%	53.2% (CI +/- 3.4%)	38.4%
Wilder, ID (83676)	292/47 (62.5%)	18.7/292 (6.4%)	22.1% (CI +/- 4.1%)	25.9%	5.4% (CI +/- 4.6%)	38.4%
Seattle, WA (98108)	820/9,56 (8.9%)	39.7/820 (4.8%)	21.1% (CI +/- 0.8%)	25.1%	28.7% (CI +/- 0.9%)	38.4%
Madison, WI (53713)	550/10,47 (5.3%)	104/550 (19.1%)	11.1% (CI +/- 0.8%)	5.4%	17.6% (CI +/- 0.9%)	38.4%

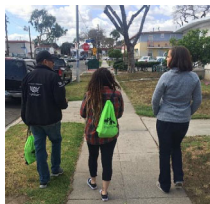


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24

### Pets for Life as One Health Study

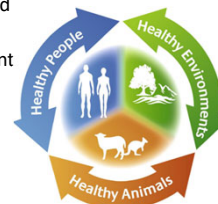
- Development and implementation of the One Health Community Assessment



25

### Measuring One Health

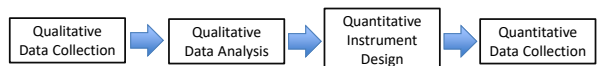
- No instrument specific to measuring One Health
- Most reported studies focused on isolated interconnections
- Needed to create a One Health instrument
  - Individual domains and interconnections
  - Community focused
  - Quantitative
  - Longitudinal



26

### One Health Instrument Design

- Exploratory sequential design
- Decenters definitions of health and access to reflect community perceptions



(Creswell and Plano Clark 2007)

27

### Exploratory Sequential Design - Interview Coding

- 20 interviews of residents in Denver Pets for Life site
  - ~30 minutes, English and Spanish
  - Broad questions about perspectives on community health and access to services
- Transcriptions coded for themes and language within five domains
  - Human Health, Animal Health, Environmental Health, Community-Wide Health and Perceived Links

28

### Exploratory Sequential Design – Instrument Design

- 170 statements across the five domains
- Likert scale: strongly agree > strongly disagree
- Pilot of 105 responses allowed initial validation
- **One Health Community Assessment**
- 115 scales in five domains
- English and Spanish versions



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29

### One Health Community Assessment – Example Scales

- Animal Health Domain
  - I can obtain pet care services in my preferred language.
- Human Health Domain
  - I have been satisfied with the health care services I have received.
- Perceived Links Domain
  - I would only give up my pet if I had no other option to provide necessary medical or behavior care.

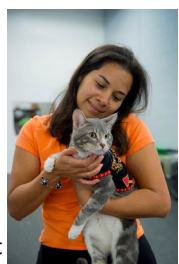


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### One Health Community Assessment – Year One Data

- 746 surveys completed
  - Madison = 211 (2.0% of households)
  - Seattle = 214 (2.3% of households)
  - Granger = 191 (22.2% of households)
  - Wilder = 123 (26.3% of households)
- Madison and Granger surveys conducted prior to Pets for Life contact



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### One Health Community Assessment – Year One Participation

#### Of attempted household contacts:

- No answer/ruled out rate = 59%
- Decline/ineligible rate = 18%
- Acceptance rate = 23%
  - 1st Contact: 54%
  - 2nd Contact: 28%
  - 3rd Contact: 18%



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### One Health Community Assessment – Reliability

- Cronbach's  $\alpha$  as a measure of internal consistency
  - Function of number of items and inter-item correlation
  - $>0.7$  = acceptable;  $>0.8$  = good;  $>0.9$  = excellent

Domain	Cronbach's $\alpha$
<b>Full Instrument</b>	<b>0.943</b>
Animal Health	0.894
Human Health	0.892
Environmental Health	0.817
Community Health	0.830
Perceived Links	0.802



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### One Health Community Assessment

- Unique quantitative measure of One Health through community perspectives
- Assesses community members' experiences around access to care
- Capable of measuring change over time
- Ongoing validation to establish generalizability



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34

### Pets for Life as One Health Study

- Current status

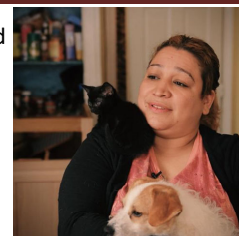


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35

### Pets for Life as One Health Study – Year Two Data Collection


- 597 year two surveys completed (October 2019)
  - 372 year 1 and year 2
  - 109 year 1 participants who still need to be contacted
  - 225 year two only
  - 534 English; 63 Spanish



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36

### Pets for Life as One Health Study – Secondary Data Collection



**Asset Maps & 2° Data**

<b>Associations:</b> Animal care groups Anti-crime groups Block clubs Business organizations Charitable groups Civic event groups Special needs groups Education groups Elderly groups Environmental groups	<b>Physical Space:</b> Gardens Parks Playgrounds Parking lots Bike paths Forest/Forest preserves Picnic areas Campsites Fishing spots Dock ponds
<b>Institutions:</b> Schools Universities Community colleges Youth Hospitals Libraries Social service agencies Nonprofits Museums Fire departments Media	<b>Local Economy:</b> Businesses Consumer expenditures Merchants Chamber of commerce Business associations Banks Credit unions Foundations Institutional purchasing power

**Individuals:**  
 Gifts, skills, capacities, knowledge and traits of:  
 Youth  
 Older adults  
 Artists  
 TANF recipients  
 People with disabilities  
 Students  
 Parents  
 Entrepreneurs

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37

### Pets for Life as One Health Study - Upcoming

- Detailed analysis of the pet inventory data in the 746 survey responses
  - Source of acquisition, indoor versus outdoor, etc.
- Initial statistical analysis of Y1 to Y2 change
- Further assessment of Spanish version of the One Health Community Assessment
- Comparison of the Pets for Life community outreach model to best practices in the social work literature

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38



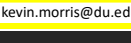
### We Are Very Grateful To Our Supporters



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39

### The Pets for Life as One Health Study Team

<b>University of Denver</b> Sloane Hawes Erin Flynn Jaci Gandenberger Jessica Sparks Phil Tedeschi >20 student RAs	  	<b>Pets for Life</b> Amanda Arrington Maria Saucedo Jason Schipkowski Ashley Anderson-Mutch Rachel Thompson Gabrielle Chapman
Timothy Jackson (Seattle) Angela Darbyson (Madison) Jyoni Shuler (Wilder) Jennifer Mendez (Granger)	<b>University Wisconsin</b> Sandra Newbury Stephanie Koester Gina Thompson	

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40