



## Clay County Health Department 2016 Community Assessment for Public Health Emergency Response (CASPER)

**Background:** The Clay County Medical Reserve Corps (MRC) received a “Challenge Award” from NACCHO in April 2016. The project was designed to use MRC volunteers to conduct a CASPER to identify health perceptions in our community and assess resilience and emergency preparedness. CASPER is a CDC designed tool that involves interviewing citizens door-to-door in sampled households about their public health needs. While CASPER was originally developed to assess community needs after natural disasters or emergencies, recently, they have been used in non-emergency settings as a way to collect accurate and timely data about a community. Local Health Departments are required to complete a Community Health Assessment (CHA) once every five years. The CASPER meets several CHA requirements including: convening a community health committee, developing a community health plan, soliciting input from the public on perceptions of community health problems, and defining the most meaningful community health problems. The idea behind this project was to simultaneously meet four goals:

1. Gain valid, representative data on community preparedness, health behaviors and community health perceptions to use in our community health assessment. Use the survey results to identify public health needs in our community.
2. Build the capacity of our MRC unit, and expand into using volunteers in non-emergency public health initiatives.
3. Exercise our emergency preparedness capabilities including: volunteer management, public information and warning, operational coordination and volunteer health and safety. The CASPER

was used as a functional exercise for Clay County Health Department incident command staff and allowed MRC volunteers and incident command to exercise together.

4. Disseminate health information and prevention messages to the community. Educational information on a variety of health services in Clay County was distributed to every household where an interview was attempted.

Clay County is a rural community located in southern central Illinois. The total population of Clay County is approximately 13,766. In the Robert Wood's Johnson County Health Rankings, Clay County is ranked 80 out of 102 for health outcomes, and 92 out of 102 for length of life. One of the purposes of the CASPER was to gain more county-level health information to try to understand why.

**Materials and Methods:** Clay County Health Department (CCHD) conducted a CASPER that covered all of Clay County May 20<sup>th</sup>-May 25<sup>th</sup>.

The survey tool was developed with input from many local stakeholders including hospital administration, health care providers, long-term care facility administration, law enforcement, emergency management officials, school district administration, community members and more. Two survey development meetings took place, one with the Health for Generations Coalition and one with the Local Emergency Planning Committee. A question bank was provided to attendees with questions from CDCs CASPER toolkit, Oakland County's CASPER Questionnaire, 2011 and 2007 Clay County Community Health Survey and the 2015 Illinois Behavior Risk Factor Surveillance Survey. An affinity brainstorming activity was used to narrow down to 30 questions that represented most interests. All questions were worded to the household level, and vetted through CDC Health Studies Branch, Disaster Epidemiology team. The survey consisted of 6 sections: basic household information, household emergency plans, home and neighborhood safety, nutrition and physical activity, access to healthcare services and Clay County's overall health. No personally identifying information was collected.

The standard CASPER methodology as explained in the CASPER toolkit (version 2.0) was used to select clusters and households. CDC used Geographic Information Systems software to randomly select 30 clusters (census blocks) with probability proportional to the number of housing units. In our case, 29 clusters were selected because one cluster was selected twice. Since Clay County is very rural, census blocks had to be combined because there were so few households in each census block. Still, one of the clusters had less than seven households, making the total possible number of interviews for our CASPER 204.

Interview teams randomly selected seven household from each of their assigned clusters once they arrived at a random starting point within the cluster. In the cluster that was selected twice, the interview team randomly selected 14 households. Interview teams were provided detailed maps of their clusters. Teams assigned to rural clusters were also given google maps directions and a county 911 map to make it easier to find their cluster. Teams were instructed to select households by systematically selecting houses every 'n<sup>th</sup>' household (where 'n' is the total number of households divided by seven).

A one hour training session on selecting households, interview techniques, safety precautions, and tracking methods was given on Friday, May 20<sup>th</sup> to the 11 two/three person interview teams, and on Saturday, May 21<sup>st</sup> to the 10 two/three person interview teams. Teams consisted primarily of Clay County Medical Reserve Corps volunteers and Clay County Health Department staff and family members.

Residents of the selected households who were at least 18 years of age or older were considered eligible to participate. Teams were instructed to get verbal consent from the resident before proceeding with the interview. Teams distributed bags with information about public health and health services to all households, regardless of whether or not they participated in the survey. Teams were instructed to complete confidential referral forms if they encountered urgent needs, and forward them to CCHD for immediate follow up.

Epi Info 7 was used for the data entry and analysis. A weighted cluster analysis was used to generate projected number of households, weighted percentages and 95% confidence intervals. To account for the probability that the responding household was selected, we created sampling weights based on the total number of occupied houses according to the 2010 Census, the number of clusters selected, and the number of interviews completed in each cluster. This weight was used to calculate all weighted frequencies and percentages presented in this report. The contact rate was calculated by dividing the completed interviews by the total number of household where contact was attempted. The cooperation rate was calculated by dividing completed interviews by the total number of households where contact was made. The completion rate was calculated by dividing the number of completed interviews by 204 (the goal for completed interviews in this CASPER).

The CASPER on Friday, May 20<sup>th</sup> and Saturday, May 21<sup>st</sup> was used as a functional exercise for the Clay County Health Department incident command staff. It tested four core capabilities:

1. Responder Safety and Health (PHEP #14): safety officer checking pre and post deployment health safety assessments, and conducting safety presentation
2. Volunteer Management (PHEP #15): setting up a volunteer reception center, and assigning roles based on incident command, properly setting up volunteer demobilization desk
3. Emergency Operations Coordination (PHEP #3): incident commander performs duties of volunteer center director, safety officer performs duties of safety trainer
4. Emergency Public Information and Warning (PHEP #4): proper promotion and media management before and during event

**Results:** Over the weekend of May 20<sup>th</sup> and 21<sup>st</sup> 2016, interview teams were able to conduct 149 interviews. 20 additional interviews were conducted the following week (May 23<sup>rd</sup> – May 25<sup>th</sup>), for a total of 169 interviews, yielding a completion rate of 83% (Table 1). The 169 interviewed households were a sample of the 6,404 total households in Clay County. Unweighted frequencies, and projected population estimates based on weighted analyses can be found in (Table 2-11).

On Friday, May 20<sup>th</sup>, 2016, 24 people conducted surveys in 11 teams. On Saturday, May 21<sup>st</sup>, 2016, 20 people in 10 teams conducted surveys. In total, 21 MRC volunteers participated, which is 51% of our entire MRC unit. Six new volunteers signed up for MRC to participate in the CASPER. Over the weekend, our MRC unit contributed approximately 105 volunteer hours.

Clay County Health Department bags with educational information were distributed to approximately 300 households across the county. The bags included information on a variety of topics including: mosquito prevention, hepatitis risk, recommended immunizations, allergies, diabetes, mental health, WIC, tobacco Quit Line, P.L.A.Y. program, breastfeeding, and CCHD home health and hospice.

Teams completed interviews at 44% of households approached, and 80% of households where the door was answered (Table 1). The majority of households were single family homes (79%). Over half of households interviewed had one or two occupants (62%). About one quarter of households had five or more occupants (26%), with eight occupants being the highest.

*Emergency Preparedness (Table 2-4):*

Nearly all households have a working smoke detector (97.1%), with less having a working Carbon Monoxide detector (76.9%). In general, most households have basic emergency supplies. For every emergency item, more than half of all households reported having adequate supplies, including: non-

perishable foods for three days (95.0%), drinking water (besides tap) for three days (69.0%), a seven day supply of medication for each person who takes prescriptions meds (71.1%), and a first aid kit (70.1%). More than half of households with pets responded that they have adequate food and water for their pets for three days (63.9%).

The most frequently reported sources of information that people rely on to stay up to date on emergencies were radio, TV, text message, word of mouth, and social media. If a large scale disaster happened in our community, more than half of Clay County households reported that they would try to evacuate to a friend/family/or 2<sup>nd</sup> home outside of the area (65.8%). 9.0% (projected 556 households) reported that they would go to an American Red Cross, church or community shelter. A similar number (7.4 %, projected 457 households) did not know where they would go.

While most households would evacuate 5.8% (358 projected households) said that they would not evacuate. The most common reasons reported that might prevent someone from evacuating were concerns about pets/livestock, and concerns about leaving property.

#### *Health Issues and Functional Needs (Table 5-6):*

The most common reported health conditions in Clay County were hypertension/heart disease (59.19%), asthma/COPD/emphysema (28.68%), and diabetes (22.46%). The majority of households have at least one member taking daily medication (71.7%), and several reported that at least one member uses a wheelchair/cane/walker (13.1%).

#### *Home and Neighborhood Safety (Table 7):*

Just over half of households think that there is adequate road space or sidewalks to walk or bike safely in their neighborhood (57.4%). Few households know that their home has been tested for Radon (13.37%). Most responded that their house had not been tested (67.7%) or that they did not know if it had ever been tested (18.9%).

The majority of households use protective measures protect themselves from mosquitos (73.9%), mainly using repellent (61.4%).

#### *Nutrition and Physical Activity (Table 8-9):*

On average, households reported that they ate a meal from a restaurant or food vendor two times in the last seven days (Figure 1). 6.3% of households reported eating out all seven of the last seven days.

The majority of households (79%) said that nothing prevents them from eating nutritious foods. For households that ate at a restaurant or other food vendor four or more days in the last seven, the majority say that nothing prevents them from eating nutritious foods (Figure 2). The next most commonly reported barrier was “don’t want to” (15.0%). Other barriers were not reported often enough to make conclusions, but include: local selection quality, expensive and time for preparing.

On average, households reported that members of their household performed at least 30 minutes of physical activity on three of the last seven days. A large group in the population exercised all seven of the last seven days (34.6%), and the next highest group did not exercise any of the last seven days (24.07%), (Figure 3).

Just over half of households said that nothing prevented them from exercising (59%). Of households where members exercised three days or less, 38% said nothing prevented them from exercising, 18% said that they don’t want to exercise. Other barriers included physical disability, health concerns; don’t have time, and expensive (Figure 4).

*Access to Health Care (Table 10):*

Most Clay County households use a doctor’s clinic for their primary and ongoing medical care (86.0%). 6.4% use the hospital emergency room for all of their care, and a few use other facilities such as urgent care/walk-in clinic and military. The majority of households do not have any problems with getting medical attention (82%). The most common reported barriers to seeking medical attention were: cost/lack of or insufficient coverage (33%), inconvenient provider office hours (17%), and unable to get an appointment (17%), (Figure 5).

Over half of households reported that a health care provider has not discussed early detection cancer screenings or cancer risk with any member of their household (61.7%).

16.3% of Clay County households have at least one member who has tried to quit smoking cigarettes within the last 12 months.

A little more than half of Clay County households have at least one member who is not covered by dental insurance (54.5%).

*Clay County Overall Health (Table 11).*

As a whole, most residents think that Clay County is on the healthy side of the spectrum (Figure 6). When asked an open ended question about the most important health problems in Clay County, cancer was reported more than twice as many times as anything else (n=89). The other top reported concerns were obesity/physical activity and nutrition (n=41), heart disease/hypertension (n=40), illegal drug use (n=19), environmental concerns (n = 19) and diabetes (n=18). Many other concerns were brought up in this open ended question including access to health care, alcohol use, infrastructure for health, financial stress, teen risky behavior, and mental illness. Examples of the responses categories are listed in table 11.

**Discussion:** The CASPER met the stated goals by providing a rapid assessment of public health needs in Clay County. The information can be used to generate recommendations for emergency management and public health decision makers. It can be incorporated into Clay County's Illinois Project for Local Assessment of Needs (I-PLAN) to help determine health priorities for the next five years.

In addition to the valuable data collected, the CASPER provided an excellent 'real life' volunteer management and incident command activity. It tested our volunteer management plan, so that if an emergency happened in our community that required setting up a volunteer reception center to handle a much larger number of volunteers, CCHD incident command staff would already have some experience. It also built disaster epidemiology capacity for CCHD staff and for our Medical Reserve Corps (MRC) unit.

*Data analysis:*

To create sampling weights, information from the 2010 Census was used to determine the household probability of being selected. Some areas may have experienced population changes since 2010, and thus, Census data may not be representative of the current population in those areas. Changes in population since the previous census may result in less reliable generalizations of weight analyses to the sampling frame. The discrepancy between 2010 Census and the current status would not, however, affect the unweighted frequencies presented in this report. The contact rate, 44%, indicates that the field interview teams had to sample more households within the cluster to complete the necessary number of interviews, and this additional sampling might affect the representativeness of the results. In other words, interview teams completed, on average, one interview for every two- to-three houses

selected. Additionally, there is no available information from a baseline or comparison group that can be used to interpret the household level percentages reported.

*Feedback on survey:*

Interview teams provided feedback on the survey. Several interviewers reported that they felt uncomfortable asking the question about mental illness, especially in a small community where they often knew the person they were interviewing. This data is most likely an underestimate, and not useable.

Interviews reported different experiences asking people about evacuating. Many people asked follow up questions, for example: “does the disaster take out the power? Because if I have power, I would get my information from Facebook, but if I don’t have power I would get my information from a weather radio”. There was no way to record these discrepancies on the survey tool, and interviewers were not provided any additional information on the hypothetical evacuation scenario, so they all answered these kinds of questions differently.

The question related to walking/biking safely question was answered and interpreted differently by people who live in town and people who live in the rural areas. In the rural areas where there are no sidewalks, several interviewers reported that people were confused about how to answer the question.

*Feedback on process:*

CCHD staff made significant efforts to inform the community about the CASPER beforehand on the radio, on social media, in the newspaper and through employers and community groups. Many interviewers reported that residents had heard of the survey and were expecting people to knock on their door. There seemed to be a gap in our public information because many people in Flora had heard about the survey, but most people in the rural areas had not. This was not formally recorded in any way, but would have been an excellent evaluation of our public information capacity.

Recruiting volunteers was difficult. Almost all volunteers were either already affiliated with the Clay County MRC or were CCHD staff and family members. We decided to allow high school students to be able to participate as long as they were in a team with their parent or guardian, or if they were in a team with two adults. In general, volunteers had a positive experience. The most commonly reported volunteer feedback from evaluation forms were that it was hard to navigate the rural clusters, better maps were needed, and some rural roads were in very poor condition. Another common suggestion was



having less paperwork, and conducting the survey at different times- possibly weeknights when more people would be home. More often comments were positive about the experience, with many volunteers reporting things such as “I learned that people are friendly”, “It was fun. People are fun to talk to! and “Very eye opening experience”.

An after action report and improvement plan was written for the functional exercise component, with suggestions for improving CCHD’s spontaneous and affiliated volunteer management plan.

*Overall health of Clay County:*

While Clay County is ranked poorly in comparison to other counties in Illinois for health outcomes and length of life, Clay County residents think that Clay County is fairly healthy. The last open-ended question asking “What do you think are the top three health problems in Clay County?” yielded many interesting and insightful comments. Asking an open ended question does not fit into the traditional CASPER method, designed to provide generalizable estimates and statistics. By using the CASPER methodology to randomly select households, this question offered a unique opportunity for citizens who might not typically participate in the community or the health department to provide anonymous feedback to decision makers on public health in the community.

Many of the responses did not list specific health outcomes, but instead described things that could be classified more as “social determinants” as the most important health problems in Clay County. Examples include “lack of afterschool activities”, “lack of opportunity for employment with health benefits”, “ too many fast food restaurants”, and “availability of specialized medical physicians and equipment”. Many Clay County residents seem to be aware that improving the health of a community requires working to improve these types of social factors that impact health outcomes.

**RECOMMENDATIONS** on the basis of the results of the CASPER, the following actions are recommended:

**For Emergency Management:**

**1. Continue promoting community and individual household disaster preparedness.**

The Federal Emergency Management Association (FEMA) 2012 National Study estimated that 52% of respondents had disaster supplies in their home. Clay County is beating the average; emergency preparedness supply estimates are higher than 52% in every category! 95.0% of households have adequate non-perishable food for the next 3 days, 69.0% of households have adequate drinking water (besides tap) for the next 3 days, 63.9% of households with pets have adequate food and water for their pets for the next 3 days. 71.1% of households have a 7 day supply of medication for each person who takes prescription medicine, and 70.1% of households have a first aid kit that they could take with them if they had to leave quickly. Especially in a rural location, where it may take several days to get assistance in a large scale disaster, it is important that residents have their own emergency supplies. Continue promoting community and individual household disaster preparedness using these positive social norms messages.

**2. Utilize radio and text message alert systems during a disaster.**

The majority of households (64.2%) report that radio would be one of their main sources of information to keep their household up to date on an emergency event in our community. Using text message was also commonly reported (36.9%). Consider building stronger relationship with WNOI and using them as a key emergency partner. Their text alert system may be especially useful during a disaster if the power was out. Consider exploring other text alerting systems or methods for emergency communication.

**3. Plan according to sheltering needs.**

The results estimate that approximately 555 households would go to a shelter if they had to evacuate. The average household has 2.5 occupants, so shelters should be prepared to accommodate approximately 1,387 individuals if a disaster affected the entire county. An additional 457 households do not know where they would go, so there is a high chance that they would end up at a shelter. Shelters should be set up for medical care and other functional needs of the community. The results estimate that 35 households who plan to go to a shelter use home health care, another 35 households have a member who uses an oxygen supply, and 35 households have a member who uses a wheelchair, cane or walker. 69 households who plan to go to a shelter use transportation services.

#### **4. Make pet-friendly shelter options.**

75% of households who plan to go to a shelter if a large scale disaster or emergency required them to evacuate, have pets (approximately 416 households). Concerns for pets/livestock were the most reported reasons that might prevent people from evacuating.

#### **5. Plan for the chance that several households will not evacuate.**

About 5.8% of surveyed households (projected 358 households) said that they would not evacuate. A variety of reasons were given such as concern about pets/livestock, concern about leaving property, concern about personal safety, health problems, lack of transportation, and lack of trust in public officials.

#### **For Health for Generations Coalition:**

#### **6. Heart Disease/Hypertension**

Almost 60% of households in Clay County have a member with heart disease or hypertension (59.2%). It is listed as one of the top three health problems that Clay County citizens are most concerned with. Heart disease is the leading cause of death in the United States. As Clay County is ranked 92 out of 102 counties in Illinois for length of life, heart health education should become a priority.

#### **7. Cancer**

Cancer is the number one health problem that Clay County residents are concerned with. It was reported more than twice as many times as any other health problem. 34.1% of households reported that a healthcare provider has never discusses cancer risk or early detection cancer screenings. And, 4.2% of household did not know. Even though significant work has been done to promote cancer screenings, there still appears to be a knowledge gap. Education on early detection cancer screening recommendations and available services should be continued for citizens and medical providers.

#### **8. Respiratory Illnesses**

The County Health Ranking data estimates that 17% of Clay County adults smoke. Our results estimate that 16.3% of Clay County households have members who have tried to quit smoking in the last 12 months. It could be concluded that the majority of Clay County smokers are trying to quit, so tobacco cessation services should be promoted. Tobacco also adds to the cancer risk in our community. 28.7% of households have a member with asthma, COPD or emphysema, making respiratory illness the second most common self-reported illness in Clay County. Additionally, about 86.7% of household either have not or don't know if they have been tested for Radon. Radon is the second (after smoking) leading cause of lung cancer. One survey respondent even said that one of

the top 3 most important health problems in Clay County is “not enough education to community on how to live with respiratory problems”.

## **9. Access to Care**

About 398 projected households use the hospital emergency room for their primary and ongoing medical care. While most households say that nothing prevents them from seeking medical attention, about 18% of households did report a barrier. The most common things preventing households from seeking medical attention were cost or lack of or insufficient coverage, inconvenient provider hours and unable to get an appointment. In the open ended question, many households listed things related to access to health care services as one the most important health problem in Clay County, including: mental health services availability, lack of specialized physicians and equipment, cancer care out of area, and not enough dental services for children and adults.

## **10. Physical Activity**

79% of households say that nothing prevents them from eating nutritious foods. Of the households that ate a meal from a restaurant or food vendor 4 or more times in the last 7 days, 70% said that nothing prevented them from eating nutritious foods, and 15% said that their barrier for eating nutritious foods was just that they don't want to.

More emphasis should be directed towards promoting physical activity. No one exercised in the last 7 days in 24.1% of households. For households that exercised 3 or less days in the last 7 days, most said that nothing prevents them from exercising (38%) or because they don't want to (18%) (Total= 56%). The other people said their main barriers were not having enough time, or a physical disability or health concern. A few households indicated that they did not exercise because there were no options for people who live in the country other than walking or biking on the roads and they felt that it was not safe. In total, 35.8% of surveyed households did not think that their neighborhood had adequate road space to walk and bike safely.

**Table 1. Response Rates**

	<b>Percentage</b>	<b>Definition</b>
<b>Completion Rate</b>	83%	<i>Number of completed interviews / number of interviews goal</i>
<b>Cooperation Rate</b>	80%	<i>Number of completed interviews / all houses where contact was made (including completed interviews, incomplete interviews, and refusals)</i>
<b>Contact Rate</b>	44%	<i>Number of completed interviews / number of houses where contact was attempted (including completed interviews, incomplete interviews, refusals, and non-respondents)</i>

**Table 2. Emergency Supplies**

		Frequency (n=169)	Projected households	Projected %	95% CI
<b><i>Does your household currently have....</i></b>					
<b>A working smoke detector</b>					
	Yes	164	6009	97.1%	94.5 - 99.6
	No	1	30	0.5%	0.5 - 1.5
	Don't Know	3	109	1.8%	0 - 2.1
<b>A working Carbon Monoxide detector</b>					
	Yes	129	4759	76.9%	69.8 - 84.0
	No	31	1130	18.3%	11.3 - 25.2
	Don't Know	8	259	4.2%	0.8 - 7.5
<b>Adequate drinking water (besides tap) for the next 3 days</b>					
	Yes	109	4248	69.0%	59.9 - 78.1
	No	58	1882	30.5%	21.3 - 39.8
	Don't Know	1	30	0.5%	0 - 1.5
<b>Adequate non-perishable foods for the next 3 days</b>					
	Yes	160	5853	95.0%	91.5 - 98.6
	No	6	223	3.6%	0.8 - 6.5
	Don't Know	2	84	1.4%	0 - 3.4
<b>Adequate food and water for your pets for the next 3 days (for households with pets)</b>					
	Yes	100	3937	63.9%	54.0 - 73.8
	No	20	711	11.5%	5.7 - 17.3
	Don't Know	1	53	0.9%	0 - 2.6
<b>A 7 day supply of medication for each person who takes prescription meds</b>					
	Yes	121	4380	71.1%	62.7 - 79.5
	No	14	726	11.8%	3.7 - 19.8
	Don't Know	2	84	1.4%	0 - 3.4
<b>A first aid kit that you could take with you if you had to leave quickly</b>					
	Yes	114	4317	70.1%	61.5 - 78.6
	No	48	1568	25.5%	17.7 - 33.3
	Don't Know	6	274	4.5%	0 - 8.9

**Table 3. Emergency Plans**

	Frequency (n=169)	Projected households	Projected %	95% CI
<b><i>If an emergency or large scale disaster happened in our community...</i></b>				
<b>What would be your household's main source of information to keep up to date on the event</b>				
Radio	107	3974	64.2%	53.1 - 75.3
Tv	83	3101	50.1%	37.8 - 62.5
Text Message	70	2286	36.9%	26.1 - 47.8
Word of Mouth	54	2111	34.1%	23.2 - 45.0
Social Media	42	1714	27.7%	18.4 - 37.0
Internet Site	35	1102	17.8%	9.4 - 26.2
Automated Call	19	572	9.2%	2.4 - 16.1
Local Newspaper	14	502	8.1%	3.2 - 13.0
Other	11	353	5.7%	2.5 - 8.9
Church	8	241	3.9%	1.1 - 6.7
<b>Where would your household evacuate?</b>				
Friends/family/2nd home outside of area	107	4051	65.8%	57.0 - 74.5
American red cross, church or community shelter	16	556	9.0%	4.3 - 13.7
don't know	15	457	7.4%	1.5 - 13.4
hotel or motel	11	388	6.3%	2.3 - 10.3
would not evacuate	11	358	5.8%	2.1 - 9.5
other	8	350	5.7%	0.7 - 10.6
<b>What might prevent your household from evacuating?</b>				
N/A - would evacuate	110	3848	62.5%	50.7 - 74.3
Concern about pets/livestock	16	686	11.1%	0 - 17.4
Concern about leaving property	11	539	8.8%	1.2 - 16.3
Other	6	259	4.2%	0 - 8.2
Don't Know	5	170	2.8%	0 - 5.2
Concern about personal safety	4	168	2.7%	0 - 5.6
Health problems	4	129	2.1%	0 - 4.3
Lack of transportation	4	112	1.8%	0 - 3.7
Lack of trust in public officials	4	91	1.5%	0 - 3.7
Nowhere to go	3	127	2.1%	0 - 4.5
inconvenient/expensive	1	30	0.5%	0 - 1.5

**Table 4. Shelter  
Considerations**

	<b>Frequency (n=16)</b>	<b>Projected households</b>
<b>For households who intend to go to an American red cross, church or community shelter in an emergency....</b>		
Use home health care	1	35
Use an oxygen supply	1	35
Use a wheelchair/cane/walker	1	35
Use transportation services	2	69
Have pets	12	416



**Table 5. Health Issues**

	Frequency (n=169)	Projected households	Projected %	95% CI
<b><i>Have you or a member of your household ever been told by a healthcare professional that he/she has...</i></b>				
<b>Asthma/COPD/Emphysema</b>				
Yes	51	1767	28.7%	21.5 -35.9
No	116	4358	70.7%	63.2 - 78.3
Don't Know	1	36	0.6%	0 - 1.7
<b>Diabetes</b>				
Yes	33	1391	22.5%	14.0 - 30.9
No	136	4800	77.5%	69.1 - 86.0
<b>Developmental Disability</b>				
Yes	9	294	4.8%	1.5 - 8.0
No	160	5896	95.3%	92.0 - 98.5
<b>Hypertension/heart disease</b>				
Yes	76	3664	59.2%	49.2 - 69.2
No	93	2527	40.8%	30.8 - 50.8
<b>Immunosuppressed</b>				
Yes	9	327	5.3%	1.1 - 9.5
No	159	5833	94.2%	90.0 - 98.4
<b>Physical Disabilities</b>				
Yes	26	935	15.1%	8.1 - 77.9
No	143	5256	84.9%	22.1 - 91.9
<b>Psychosocial/mental illness</b>				
Yes	11	395	6.4%	2.2 - 10.6
No	158	5795	93.6%	89.4 - 97.8

**Table 6. Functional Needs**

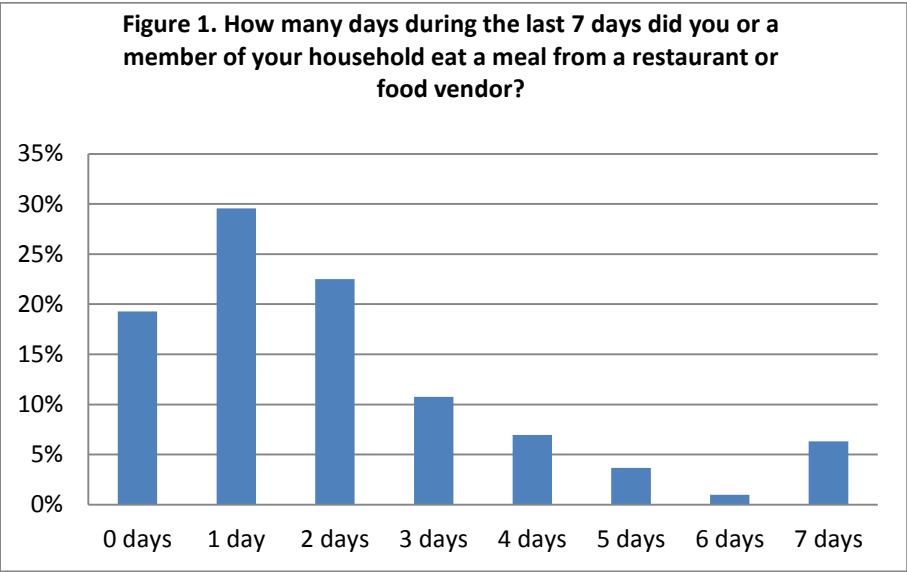
	Frequency (n=169)	Projected households	Projected %	95% CI
<i>Do you or does any member of your household use...</i>				
<b>Daily Medication (other than birth control or vitamins)</b>				
Yes	121	4380	71.0%	61.6 - 80.0
No	47	1780	28.8%	19.4 - 38.1
Don't Know	1	30	0.5%	0 - 1.5
<b>Dialysis</b>				
Yes	1	30	0.5%	0 - 1.5
No	168	6160	99.5%	98.5 - 100.5
<b>Home Health Care</b>				
Yes	5	202	3.3%	0.2 - 6.4
No	164	5988	96.7%	93.6 - 99.8
<b>Oxygen Supply</b>				
Yes	11	431	6.7%	2.9 - 11.1
No	158	5760	93.0%	88.9 - 97.1
<b>Wheelchair/cane/walker</b>				
Yes	22	811	13.1%	6.4 - 19.8
No	147	5380	86.9%	80.2 - 93.6
<b>Transportation services</b>				
Yes	4	146	2.4%	0 - 5.5
No	165	6044	97.6%	94.5 - 100.7
<b>Other type of special care</b>				
Yes	3	155	2.5%	0 - 5.5
No	163	5962	96.3%	92.9 - 99.6

**Table 7. Home and Neighborhood Safety**

	<b>Frequency (n=169)</b>	<b>Projected households</b>	<b>Projected %</b>	<b>95% CI</b>
<b>Does your household think there is adequate road space or sidewalks to walk or bike safely in your neighborhood?</b>				
Yes	102	3551	57.4%	46.4 - 68.4
No	62	2213	35.8%	25.8 - 45.7
Don't Know	2	427	6.9%	0 - 16.7
<b>Has your household been tested for radon?</b>				
Yes	21	828	13.4%	5.9 - 20.9
No	115	4188	67.7%	57.0 - 78.3
Don't Know	33	1175	19.0%	10.0 - 28.0
<b>Does your household do anything to protect yourselves from mosquitos?</b>				
Yes	127	4576	73.9%	64.3 - 83.6
No	41	1544	24.9%	15.1 - 34.7
Don't Know	1	71	1.2%	0 - 3.5
<b>if YES, what type of protective measures?</b>				
Wearing repellent	108	3804	61.4%	50.9 - 72.0
Eliminating standing water	38	1227	19.8%	11.0 - 28.7
Wearing protective clothing	17	498	8.1%	0.2 - 15.9
Other	22	876	14.2%	5.2 - 23.0

**Table 8. Nutrition**

	Frequency (n=169)	Projected households	Projected %	95% CI
<b>How many days during the last 7 days did you or a member of your household eat a meal from a restaurant or food vendor?</b>				
0 days	27	1193	19.3%	9.9 - 28.7
1 day	52	1831	29.6%	22.6 - 36.5
2 days	37	1392	22.5%	14.2 - 30.8
3 days	19	665	10.8%	5.3 - 16.2
4 days	12	430	7.0%	2.8 - 11.1
5 days	7	226	3.7%	1.0 - 6.3
6 days	2	61	1.0%	0 - 2.4
7 days	13	391	6.3%	2.5 - 10.2



**MEAN= 2.1834 days**  
**MEDIAN= 2 days**

**What prevents your household from eating nutritious foods?**

N/A - nothing prevents

**(n=169)**  
134

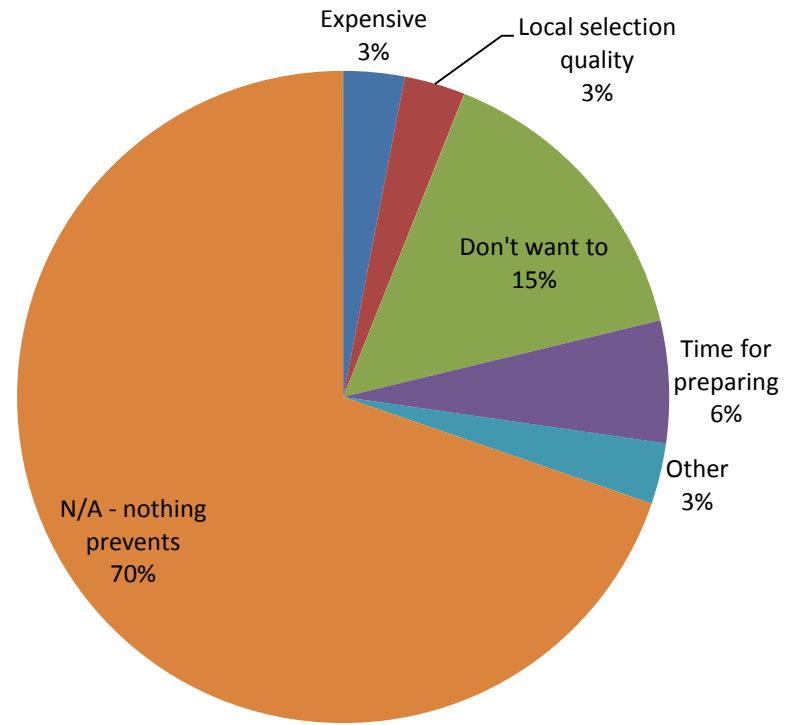
**For households that ate at a restaurant or other food vendor 4 or more day in the last 7 days...**

**(N=34)**

*What prevents your household from eating nutritious foods?*

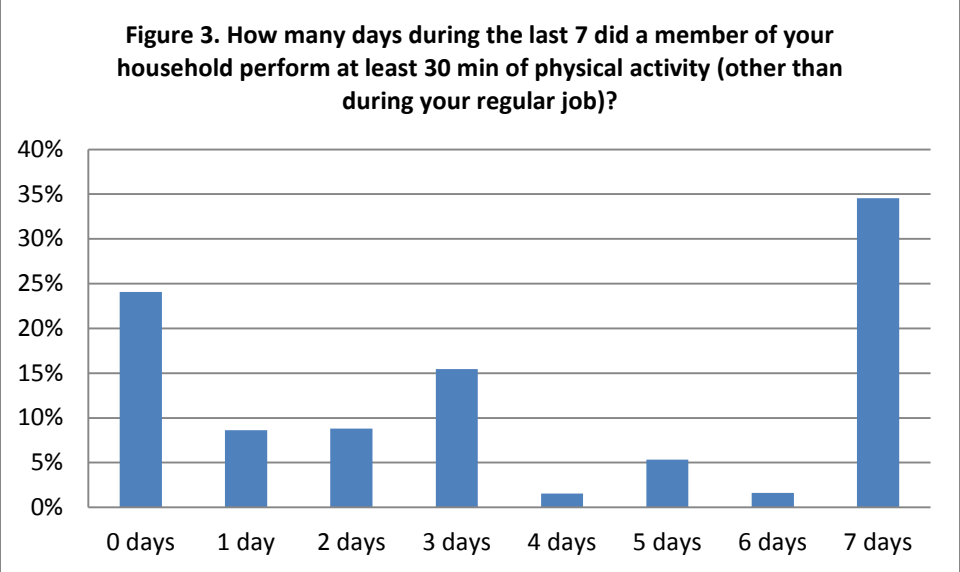
Expensive	1
Local selection quality	1
Don't want to	5
Time for preparing	2
Other	1
N/A - nothing prevents	23

**Figure 2. For households that ate our 4 or more days, what prevents your household from eating nutritious foods?**



**Table 9. Physical Activity**

	Frequency (n=169)	Projected households	Projected %	95% CI
<b>How many days during the last 7 did a member of your household perform at least 30 min of physical activity (other than during your regular job)?</b>				
0 days	42	1425	24.1%	16.5 - 31.7
1 day	15	510	8.6%	4.2 - 13.0
2 days	14	522	8.8%	4.3 - 13.4
3 days	26	914	15.4%	8.4 - 22.5
4 days	3	91	1.6%	0 - 3.9
5 days	10	315	5.3%	1.2 - 9.5
6 days	3	97	1.6%	0 - 3.5
7 days	50	2045	34.6%	23.3 - 45.8



**MEAN=3.38 days**  
**MEDIAN=3 days**

**What prevents your household from exercising?**

**(N=169)**

N/A - nothing prevents

99

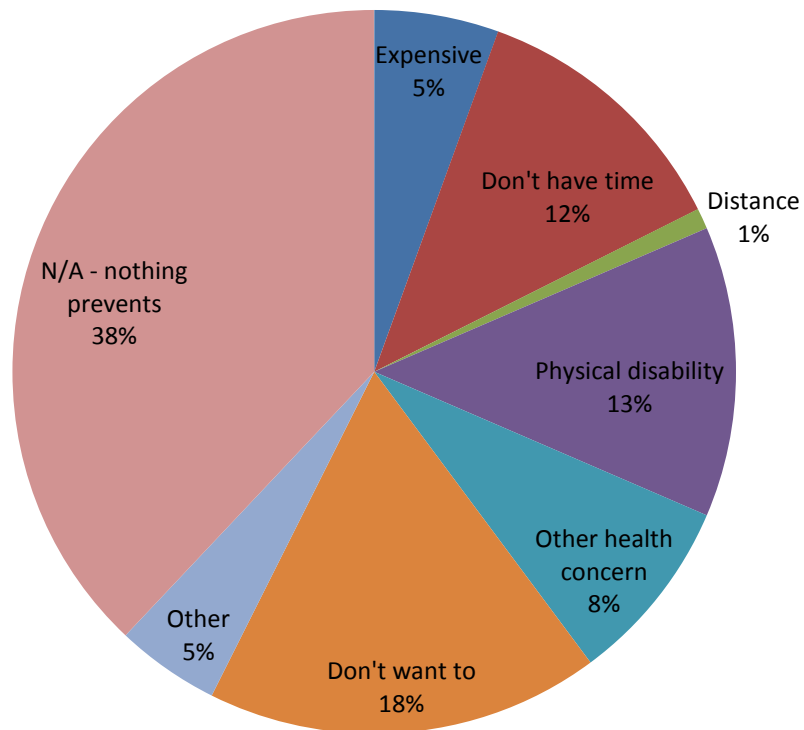
**For households where members exercise 3 days or less in the last 7 days...**

**(N=97)**

*What prevents your household from exercising?*

Expensive	6
Don't have time	13
Distance	1
Physical disability	14
Other health concern	9
Don't want to	19
Other	5
N/A - nothing prevents	41

**Figure 4. For households where members exercised 3 days or less in the last 7 days, what prevents your household from exercising?**



**Table 10. Access to Health Care Services**

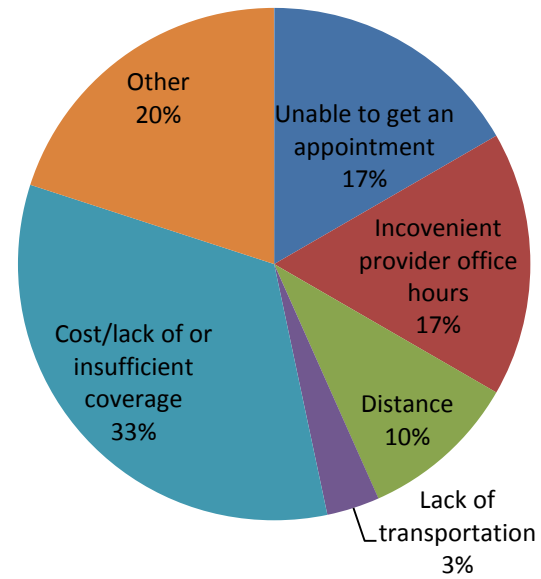
	Frequency (n=169)	Projected households	Projected %	95% CI
<b>Who does your household use for primary and ongoing medical care?</b>				
Doctor's Clinic	145	5325	86.0%	78.6 - 93.4
Hospital ER	11	399	6.4%	1.2 - 11.7
Military	5	165	2.7%	0.4 - 5.0
Other	4	139	2.3%	0 - 4.5
Urgent Care/ Walk-in	3	91	1.5%	0 - 3.2
Don't Know	1	71	1.2%	0 - 3.5
<b>Has a healthcare provider ever discussed cancer risk or early detection screenings?</b>				
Yes	98	3823	61.7%	51.6 - 71.9
No	65	2111	34.1%	24.0 - 44.2
Don't Know	6	257	4.2%	0.5 - 7.8
<b>Have any members of your household tried to quit smoking cigarettes within the last 12 months?</b>				
Yes	29	1011	16.3%	9.5 - 23.2
No	138	5119	82.7%	75.9 - 89.5
<b>Are there any members of your household not covered by dental insurance?</b>				
Yes	75	2616	42.3%	33.3 - 51.3
No	88	3374	54.5%	45.3 - 63.7
Don't Know	3	104	1.7%	0 - 4.1



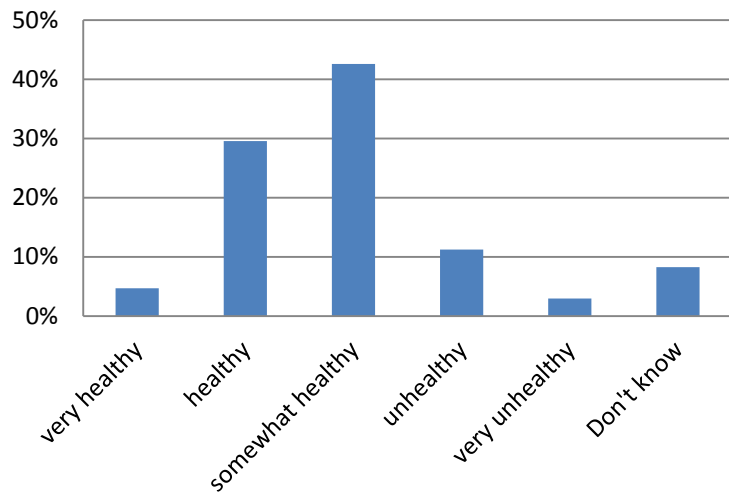
**What prevents your household from seeking medical attention?**

Unable to get an appointment	5
Inconvenient provider office hours	5
Distance	3
Lack of transportation	1
Cost/lack of or insufficient coverage	10
Other	6
N/A-nothing prevents	138

**Figure 5. For households that indicate a barrier to seeking medical care, what prevents your household from seeking medical attention?**



**Figure 6. Would you say Clay County is...**



**Table 11. What do you think are the 3 most important health problems in Clay County?**

	Frequency	Examples:
Cancer	89	
Obesity / Physical Activity and Nutrition	41	Not working out, lack of good diet, overweight, too much soda, obesity
Heart Disease/Hypertension	40	
Illegal Drug Use	19	meth, marijuana
Environmental	19	chemicals and pesticides in water supply, air quality, environmental toxins, mercury, mold, chemical waste, mosquitoes, factory contamination, sanitation, restaurants, pesticides, flood waters, farm chemicals
Diabetes	18	
Tobacco / Smoking	17	
Access to Health Care	11	mental health services availability, physicians, specialized physicians and equipment (i.e. MRI), cancer care out of area,
Alcohol Use	9	
Infrastructure	7	Roads not wide enough, transportation, not enough daycare facilities, lack of gyms, too many fast food restaurants, lack of infrastructure for exercise
Respiratory Illnesses	6	COPD, emphysema
Financial Stress	6	cost of insurance, lack of work, low income
Mental Illness	5	
Flu/viruses	4	
Elder Care	4	aging population, elder care needs
Allergies	4	
Teen Risks	4	teenage pregnancy, lack of activities after school, teen nutrition, lack of after school food options
Lack of Education	3	lack of education, lack of knowledge on preventative measures
Dental Care	2	
Strokes	2	
Crime	1	theft
Blood clots	1	
Stress	1	



**Now we would like to ask you a few questions about safety in your home and neighborhood**

**Q17:** Does your household think there is adequate road space or sidewalks to walk or bike safely in your neighborhood?  
 Yes  No  DK  R

**Q19:** Does your household do anything to protect yourselves from mosquitoes?  
 Yes  No  DK  R

**Q18:** Has your household ever been tested for Radon?  
 Yes  No  DK  R

**IF YES,** What type of protective measures are you using?  
 Wearing repellent  Wearing protective clothing  
 Eliminating standing water  Other

**Now we would like to ask a few questions related to nutrition and physical activity**

**Q20:** How many days during the last 7 days did you or a member of your household eat a meal from a restaurant or other food vendor? \_\_\_\_\_

**Q22:** How many days during the last 7 days did you or a member of your household perform at least 30 minutes of physical activity (other than during your regular job)? \_\_\_\_\_

**Q21:** Is there anything that prevents your household from eating nutritious food? *Read all options (check all that apply)*  
 Local availability  Time for preparing  
 Expensive  Other\_\_\_\_  
 Local selection quality  N/A- nothing prevents  DK  
 Don't want to  R

**Q23:** Is there anything that prevents your household from exercising? *Read all options (check all that apply)*  
 Expensive  Distance  Other\_\_\_\_  
 Don't have time  Physical Disability  N/A- nothing prevents  
 Limited gym options  Other health concern  DK  
 Don't want to  R

**Now we would like to ask a few questions about access to healthcare services**

**Q24:** Who does your household use for primary or ongoing medical care? *Read all options (check only one)*  
 Hospital ER  Doctor's clinic  Other\_\_\_\_  
 Urgent Care/walk-in clinic  Military  DK  Refused

**Q26:** Has a health care provider ever discussed cancer risk or early detection cancer screenings with you or a member of your household?  
 Yes  No  DK  R

**Q25:** What prevents your household from seeking medical attention? *Read all options (check all that apply)*  
 Unable to get an appointment  Lack of transportation  
 Inconvenient provider office hours  Cost/lack of or insufficient coverage  Other\_\_\_\_  
 Distance  N/A – nothing prevents  DK  R

**Q27:** In the past 12 months, how many members of your household have tried to quit smoking cigarettes (or using a tobacco product)? \_\_\_\_\_

**Q28:** Are there any members of your household not covered by dental insurance?  
 Yes  No  DK  R

**Finally, we have 2 questions about Clay County's health overall**

**Q29:** How would you rate Clay County as a "healthy community"?  
 Would you say Clay County is... *(Read all options)*  
 Very healthy  DK  
 Healthy  R  
 Somewhat healthy  
 Unhealthy  
 Very unhealthy

**Q30:** What do you think are the 3 most important health problems in Clay County? *(open ended. List only 3)*