Community Assessment for Public Health Emergency Response (CASPER)

Mineral County, Nevada – November 2018

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Executive Summary

A Community Assessment for Public Health Emergency Response (CASPER) was conducted within Mineral County, Nevada from November 1, 2018 – November 3, 2018 to evaluate the emergency preparedness capabilities and public health needs of its communities. The goal of the CASPER was to assess the following:

1. Health status of residents who are medically fragile or chronically ill, and how that status may affect evacuation plans in emergency situations;

2. Emergency supply availability within households to determine the survival window of residents if they are unable or unwilling to evacuate during a disaster;

3. Identify the preferred method of receiving information during disaster situations in order to find the most effective method of notification and information dissemination in future emergencies;

4. Residents' emergency and/or evacuation plans, using the results to develop recommendations for Mineral County Emergency Management procedure improvements and best practices; and

5. Identify recruitment strategies and engage community volunteers who understand the area demographics.

Mineral County's remote location combined with the surrounding harsh desert environment, local chlorine plant, National Army Weapons Depot, and railroad system make it highly susceptible to natural and man-made disasters. This assessment offered an opportunity to realistically examine threat levels and preparedness capabilities of the community. Results indicate that the county's residents are somewhat prepared for an emergency but would greatly benefit from creating improved personalized emergency plans, practices, and gathering of necessary materials. Recommendations for county stakeholders based on the findings include:

- Strengthened emergency preparedness plans;

- Assistance programs;

- Improved emergency communications; and

- Collaborative relationships between county stakeholders and tribal stakeholders.

Background

Rural communities face a unique set of challenges regarding emergency preparedness and response, ranging from remote geographic location to scarce resources (i.e. equipment and infrastructure). Disasters with a prolonged lifespan severely impact response agencies by consuming both their time and resources[1]. When these agencies are overwhelmed, they lack the capacity to adequately respond to local emergencies, leaving much of their population vulnerable to the worsening effects of a disaster treated with minimal response. In an effort to prevent this from occurring, rural communities should adopt a whole community approach to preparing for and responding to disasters[1]. The whole community approach involves multiple community agencies, stakeholders, and community members joining forces to collaborate on preparedness efforts. Mineral County was the first rural county in the state of Nevada to partner with State Public Health Preparedness (PHP) to assess its communities' capabilities to plan for a whole community approach to preparedness.

Mineral County has a modest population of 4,456[2] persons and spans approximately 3,813[2] square miles. It is the fourth smallest county within the State of Nevada, comprising 0.0015% of the total state population[2]. This rural county is located two-hours south of the State Capital of Carson City, and includes the county seat of Hawthorne, as well as four outlying areas: Schurz, Walker Lake, Luning and Mina. The County's remote location combined with a geography of flat, rocky terrain creates an environment prime for flooding from the surrounding lake and river, as well as earthquakes, severe wind, and wildfires. Due to this combination of possible threats and a lack of access to immediate resources, it is imperative that emergency preparedness efforts are made to mitigate the effects of a future disaster.

In order to collect information on the public health needs and emergency preparedness capabilities of households, members of the Mineral County Local Emergency Planning Committee (LEPC) chose to utilize a Community Assessment for Public Health Emergency Response (CASPER). CASPER was designed by the Centers for Disease Control and Prevention (CDC) to provide quick, reliable household-based public health information at low-cost during the event of a natural or man-made disaster[3]. Although the CASPER was originally designed to be implemented throughout the lifecycle of an emergency, it may also be used in a pre-disaster preparation phase in which the public health needs of a community are not well known[3]. The Mineral County CASPER was conducted in a non-emergency setting to assess emergency preparedness capabilities of residents that were previously unknown.

Methodology

The Division of Public and Behavioral Health determined that the Mineral County CASPER was not considered research, as it was considered a community assessment that provided unique, nongeneralizable data to a specific locale, and therefore was exempt from human subject review by the Nevada Institutional Review Board[4].

Design

A typical CASPER design consists of a two-stage sampling methodology. During the first stage, 30 clusters within the designated sampling frame are randomly selected with their probability proportional to the estimated number of households in each cluster; essentially clusters with a higher number of housing units within them are more likely to be selected[3]. In the second stage, seven housing units within each of the 30 clusters are systematically selected for conducting interviews. The housing units are chosen by dividing the total number of housing units in each cluster by seven, revealing the "n" number (e.g. 28 total households are in the cluster, divided by seven, results in an n=4). That "n" is then

used as the counting interval between households (e.g. n=4, every fourth household is selected for interview) until seven interviews are completed in each cluster.

Methodology defined in the CASPER 2.0 Toolkit[3] was used to determine the sampling frame for Mineral County. The sampling frame consisted of 15,285 housing units verified by the 2010 U.S. Census[2]. Due to limited resources (e.g., teams, time) and the minimal population within the county, the assessment was modified to accommodate a 28x7 cluster design. Modifications to the design were approved via consultation with a CDC Subject Matter Expert (SME). In a typical CASPER, the goal number of households to reach is 210 (30 x 7 = 210). With the assessment changed to 28x7, the end goal was then 196 interviews (28 x 7 = 196). Random selection was used to determine the housing units within each cluster. To reduce confusion during the survey process, sample households were preselected by the Incident Commander (IC) using the approved interval methodology. Random households within each cluster were selected as the starting point, and the CASPER lead then counted each cluster's "n" to determine all seven housing units. The Incident Commander (IC) also determined replacement households using the methodology described in the toolkit[3]; teams were supplied with lists and maps of chosen households, as well as their substitutions.

Process

With assistance from State PHP, Mineral County stakeholders conducted the CASPER November 1st-3rd, 2018. On November 1st, teams surveyed households from 2:00pm – 6:00pm. On November 2nd and 3rd, teams surveyed households from 9:00am-5:00pm, with an hour lunch break in between morning and afternoon shifts. A two-hour just-in-time training was provided the first day of the CASPER (November 1st). Training content included an overview of the goals and purpose of CASPER, logistics, safety, communications plans, survey and consent letter content, and proper tracking form use. There were a total of 16 volunteers throughout the assessment, with four teams the first day, and six teams the second and third days. Two-person interview teams were assigned to two or three clusters each day and

instructed to attempt the pre-selected households and pre-selected replacement households prior to calling into Incident Command (IC) for additional replacements. Contact with households were attempted three separate times before replacements were attempted. Each team was equipped with a binder containing a list of pre-selected households, detailed maps, tracking forms, paper surveys, and paper handout flyers.

An IC structure was employed as the organization method for the assessment. The CASPER leader held the role of Incident Commander (IC). The role of Assistant Incident Commander (AIC) alternated between designated support staff members.

Mineral County Police Department was notified of the dates, times and clusters in which the assessment was being conducted. The Hawthorne Fire Station was used as the Incident Command Post (ICP) each day of the assessment. County stakeholders involved in the planning process included the county's emergency manager, fire department, police department, community health nurse, hospital emergency management, amateur radio, independent news, army base fire, county commissioner, search and rescue, etc. All stakeholders are current members of the county's Local Emergency Planning Committee (LEPC).

During the assessment, all potential respondents were handed a consent letter with additional information about the CASPER, as well as contact information for the CASPER Incident Commander (IC) if any questions arose. Teams were instructed to wait for verbal consent before starting the survey. Following the survey, respondents were given a flyer containing emergency kit information to help them start preparation on their own emergency kits. Respondent requirements included being 18 years of age or older, as well as residing in the household they completed the survey on behalf of at the time of the interview.

Materials

Volunteer teams were equipped with green vests containing "CASPER Volunteer" labels in each plastic vest pocket, as well as a lanyard and badge identifying them as official volunteers. Each team was given a blue bag with the CASPER logo on the side. Each bag contained a clipboard, pens, pencils and a binder filled with a communications information document; lists of pre-determined households; detailed cluster maps; and paper copies of the tracking form, survey and emergency kit handout. The bag also contained a pocket to hold each team's 800MHz radio. Teams were encouraged to regularly hydrate; volunteers were provided snacks and water bottles prior to departing for each shift and during each break.

Survey

With assistance of State PHP personnel, LEPC members developed a two-page questionnaire for the CASPER (Appendix I). The survey included questions on household demographics, emergency preparedness status, supplies, and plans, medical and health needs, and barriers to effective communication during emergencies. Additionally, there was the inclusion of four standardized statewide questions. These questions were designed and approved by Nevada's three Local Health Authorities (LHAs) and State PHP, resulting in agreement they be included in all Nevada CASPERs. These four state-wide questions determined preference for evacuation locations, main source of receiving emergency information, household emergency supplies, and reasons that may prevent the household from evacuating in an emergency.

Communications

Private 800 MHz radios with closed-communication channels were provided by State PHP. Each team was given one radio; all volunteers were taught how to use the radios. Teams were instructed to use channel "NV PHP" only and to keep radios on at all times. Interview teams were required to update IC when arriving in clusters, completing surveys, inability to access households, in need of replacement households, encountered a safety hazard, took breaks, and when leaving clusters. Cell phones were used as a back-up source of communication, and as a way to track the location of team members for safety purposes using the "Find my Friends" cell phone application. A document containing Incident Command (IC) team staff cell phone numbers was also placed in each team binder. For emergencies, teams were directed to contact 911 immediately and notify Incident Command (IC) after.
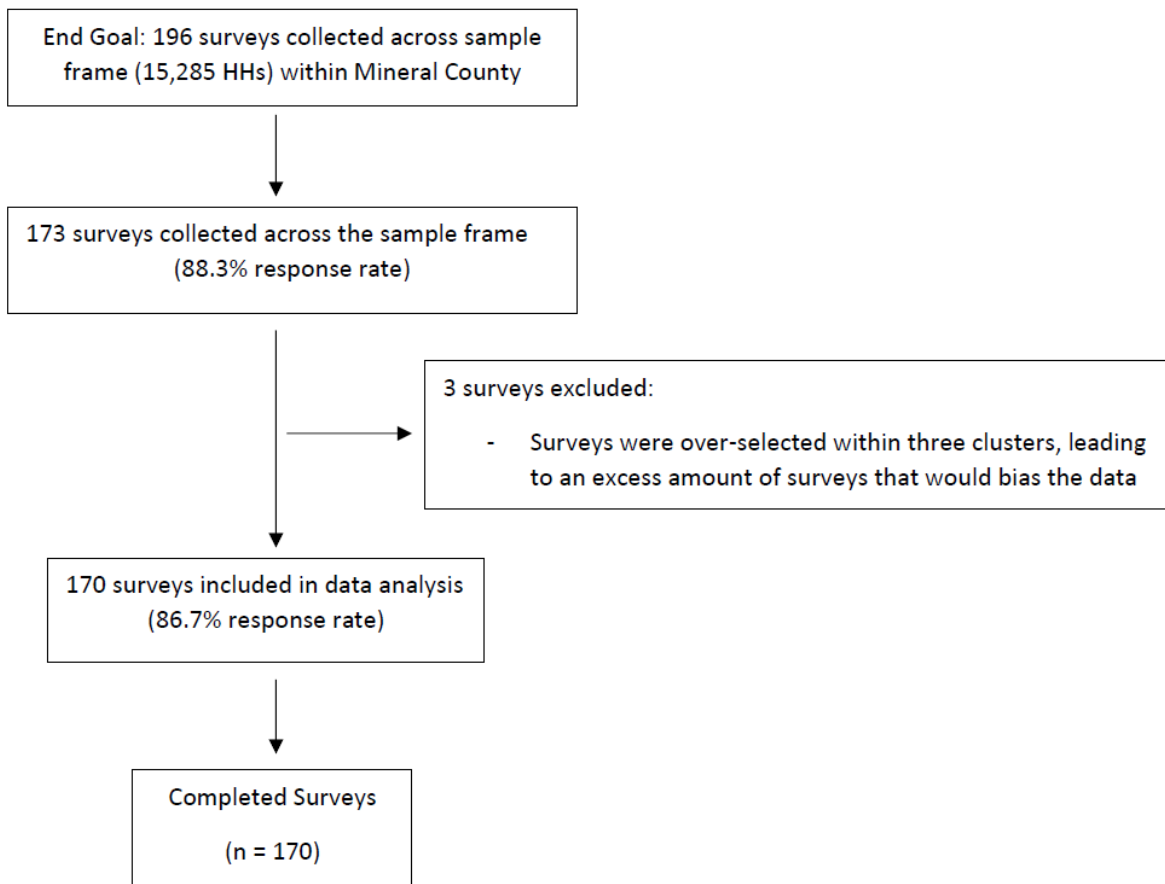
Data Analysis

For the data analysis portion of the CASPER, all data was entered and analyzed by "Epi Info" software version 7.2.2.6. Each variable was assigned a weighted value and 95% confidence interval to avoid biased estimates[3]. Variables with four or less responses were not weighted during analysis. Interview teams collected a total of 173 surveys; however, three of the surveys were traced to clusters in which seven interviews had already been completed. The issue was linked to several tracking forms being incorrectly filled out, leading to confusion among volunteers. The three extra surveys were discarded so as not to bias the results (Figure 1). The completion threshold for surveys was determined to be 80.0% of all questions answered per survey. Surveys with less than 80.0% of questions completed would have been discarded. The total collected survey count was 170 completed surveys.

Chart variables were measured using frequency, projected household numbers, percentage of households, and 95% Confidence Intervals. The frequency represents the number of households that responded to each variable, out of a total of 170. Projected households estimate how many households

within the sampling frame of 15,285 responded to each variable. The percentage of households is the estimated percentage of the population that responded to each variable. A 95% Confidence Interval (CI) is a range of values that are likely to encompass the true value (i.e. household percentage) of responses collected for each variable.

Figure 1. Survey Extrapolation

Results

Response Rates and Demographics

Mineral County teams conducted a total of 170 interviews out of a possible 196 (28x7 adjusted sample frame, refer to *'Design'* pg. 8) over the course of three days, yielding a completion rate of 86.7% (Table 1). Interview teams completed surveys in 59.4% of the households approached (contact rate), and out of

the households with an eligible respondent answering the door, 85.0% completed a survey (cooperation rate) (Table 1). The data collected is valid and therefore representative of Mineral County's entire population.

Per the assessment results, approximately 61.0% of residents in Mineral County are homeowners, while 18% rent the household they reside in (Table 2). Almost half of all residents, 49.7%, are satisfied with their housing situation. While a portion of respondents felt uncomfortable providing their monthly rent or mortgage payment and refused, 47.0% of respondents pay between $0-500 each month. In the majority of households (68.7%) at least one or more members are between the ages of 18-64 years old, 37.1% of households had one or more members aged 65 years or older, and 26.9% of households have at least one or more children between two and 17 years of age (Table 3). Only 6.1% of households have at least one child under two years old[±].

Table 1. Response Rates

Rate Type		Percentage (%)	Description
Contact Rate	170/286	59.4	The proportion of all households (HH) at which contact was attempted and an interview was successfully completed[3]
Completion Rate	170/196	86.7	Represents how close teams came to collecting the goal number of interviews[3]
Cooperation Rate	170/200	85.0	The percentage of HH in which contact was made and the HH agreed to an interview[3]

Table 2. Household (HH) Demographics

	Frequency (n=170)	Projected HH (n= 15,285)	% of HH	95% CI
Type of structure				
Homeowner	100	8,716	61.0	47.89 – 74.15
Apartment	5	390	2.7	0.00 – 7.33
Multi-family Home	1	--	--	--

[±] Total percentages for each age range were determined through a separate data analysis table not included in this report. Table 3 was chosen in order to show a breakdown of how many people in each household fell within each age range.

Rental	32	2,566	18.0	9.51 – 26.41
Refusal	32	2,522	17.7	4.47 – 30.84
Level of Satisfaction with Housing Situation				
Extremely Satisfied	37	3,008	21.1	12.45 – 29.66
Satisfied	85	7,104	49.7	37.33 – 62.14
Neutral	10	1,170	8.2	0.03 – 16.35
Dissatisfied	3	--	--	--
Extremely Dissatisfied	2	--	--	--
Refused	33	2,599	18.2	4.89 – 31.51
Monthly Rent or Mortgage Payment				
$0-500	76	6,717	47.0	35.71 – 58.34
$501-1,000	43	3,564	25.0	16.05 – 33.85
$1,001-1,500	9	702	4.9	0.00 – 10.75
$1,501-2,000	1	--	--	--
Don't Know	2	--	--	--
N/A	2	--	--	--
Refused	37	2,911	20.4	7.22 – 33.55

Table 3. Age Demographics for HH Members

Number of persons living in HH within age ranges	Frequency (n=170)	Projected HH (n=15,285)	% of HH	95% CI
0 – 2years old				
0 persons	159	13,413	93.9	89.22 – 98.58
1 person	10	793	5.6	0.90 – 10.20
2 people	1	--	--	--
2 – 17 years old				
0 persons	123	10,447	73.1	64.78– 81.50
1 person	21	1,695	11.9	7.68 – 16.05
2 people	18	1,505	10.5	5.18 – 15.89
3 people	7	559	3.9	1.24 – 6.58
4 people	1	--	--	--
18-64 years old				
0 persons	52	4,478	31.3	24.06 – 38.64
1 person	38	3,299	23.1	16.53 – 29.66
2 people	65	5,307	37.2	29.11 – 45.19
3 people	13	1,014	7.1	2.40 – 11.79
4 people	2	--	--	--
65 years or older				
0 persons	108	8,983	62.9	55.34 – 70.43
1 person	36	2,962	20.7	14.78 – 26.69
2 people	26	2,340	16.4	10.44 – 22.32

Household Health Needs and Barriers to Access

A high percentage of households reported needing daily medication other than birth control or vitamins (69.5%); this represents more than any other health assistance need (Table 4). Almost twenty-two percent (21.9%) of households reported needing a wheelchair, cane or walker to assist with mobility. Respondents proved the most common barriers to communication during an emergency are impaired vision and impaired hearing, with almost equivalent percentages of 20.3% and 20.2% respectively (Table 5).

While 79.6% of households reported ability to access medical/health care within Mineral County, among those who reported inability to access medical/health care within Mineral County responded they are more likely to access care in either Reno (55.9%) or other locations (49.9%), including Fallon (Table 6). The most common reported barrier to receiving medical/health care within the county is a lack of services and/or providers, represented at 25.1% (Table 7). The lack of services and providers may pose additional problems in the event of an emergency in which medical and health care experts are needed to triage and stabilize casualties.

Table 4. HH Health Needs

Household Needs	Frequency (n=170)	Projected HH (n=15,285)	% of HH	95% CI
Daily Medication*				
Yes	117	9,934	69.5	63.10 – 75.99
No	53	4,350	30.5	24.01 – 36.90
Dialysis				
Yes	5	390	2.7	0.00 – 6.71
No	165	13,894	97.3	93.29 – 101.25
Caregiver				
Yes	8	655	4.6	0.58 – 8.59
No	162	13,629	95.4	91.41 – 99.42
Oxygen Supply				
Yes	19	1,852	13.0	4.88 – 21.06
No	151	12,432	87.0	78.94 – 95.12
Wheelchair/cane/walker				
Yes	35	3,125	21.9	15.77 – 27.98
No	135	11,160	78.1	72.02 – 84.23
Formula/bandages/diapers±				

	Frequency	Projected HH	% of HH	95% CI
Yes	16	1,261	8.8	4.77 – 12.88
No	154	13,023	91.2	87.12 – 95.23
Service animals				
Yes	4	--	--	--
No	164	13,772	96.4	93.23 – 99.60
Don't Know	2	--	--	--

*Other than birth control or vitamins
±Special formula/bandages/diapers for newborns, infants, toddlers, or elderly populations

Table 5. HH Members' Barriers to Effective Communication During Emergencies

Type of Barriers	Frequency (n=170)	Projected HH (n=15,285)	% of HH	95% CI
Impaired Vision				
Yes	32	2,904	20.3	13.30 – 27.36
No	138	11,381	79.7	72.64 – 86.70
Impaired Hearing				
Yes	33	2,884	20.2	15.04 – 25.34
No	137	11,400	79.8	74.66 – 84.96
Developmental/cognitive disability				
Yes	7	546	3.8	0.00 -7.64
No	163	13,738	96.2	92.36 – 99.99
Difficulty understanding English				
Yes	4	325	2.3	0.00 – 5.80
No	166	13,959	97.7	94.20 – 101.25
Difficulty understanding written material				
Yes	10	793	5.6	1.28 – 9.82
No	160	13,491	94.4	90.18 – 98.72

Table 6. Where Does HH Receive Medical/Healthcare

	Frequency (n=170)	Projected HH (n=15,285)	% of HH	95% CI
Does HH have access to care in county				
Yes	140	11,366	79.6	69.62 – 89.52
No	26	2,606	18.2	8.68 – 27.81
Don't Know	2	--	--	--
Refused	2	--	--	--
If NO, where does HH go to receive care*				
Carson City	7	6,328	41.4	5.74 – 77.07
Reno	12	8,544	55.9	27.39 – 84.47
Douglas	0	--	--	--
Out of State	0	--	--	--
Other**	13	7,627	49.9	33.86 – 65.90
Do Not Access Care	3	--	--	--
Don't Know	0	--	--	--

*n=35 respondents
**Includes Fallon

Table 7. Barriers Preventing HH from Receiving Medical/Healthcare

	Frequency (n=170)	Projected HH (n=15,285)	% of HH	95% CI
Reasons for Prevention				
Services are too far	10	806	5.6	1.60 – 9.68
Lack of services/providers	38	3,587	25.1	11.56 – 38.66
No Transportation	10	793	5.6	0.93 – 10.18
Expensive	19	1,560	10.9	4.54 – 17.30
Other*	25	1, 976	13.8	5.54 – 22.12
Don't Know	8	637	4.5	1.23 – 7.69
N/A	60	4,926	34.5	20.64 – 48.33

*Includes "not applicable/no issue/none", "recently moved", "can't get insurance/no insurance", "all of the above".

Emergency Preparedness

Only 38.0% of households felt they were well prepared for an emergency, while 48.9% of households felt somewhat prepared for an emergency (Table 8). A high percentage of households (83.8%) said they would evacuate if public authorities announced a voluntary evacuation due to a large-scale disaster (Table 9). While 13.3% of households said they would evacuate, the primary reason for not evacuating would be 'other' (15.1%), which included multiple responses inclusive of but not limited to: first responder jobs preventing household members from leaving, "depends on situation," etc. (Table10). Additional reasons for prevention of evacuation include: would NOT evacuate (11.1%), health problems (8.9%) and concern about personal safety (8.3%).

During an emergency, half of all households (50.9%) would evacuate to either family, friends, or a second home outside the area if evacuation was necessary. A smaller portion of residents would evacuate to a hotel or motel (13.7%). Households that responded "other" (13.8%) said they would take an RV or camper to a designated safe place or cross state lines, evacuate to Fallon, and evacuate to the fire or police department (Table 11).

In regards to training to assist households in preparation for emergency situations, 47.7% of households had at least one or more members trained in CPR within the last five years. Additionally, 40.9% of households had one or more members trained in first aid (Table 12). Families with children ranging in age from newborns to 17 years old comprised the majority of respondents with first aid and CPR training. Approximately 17.3% of households had at least one member trained in Community Emergency Response Team (CERT) training.

When it came to emergency supplies and plans, almost all households (90.4%) had a three-day supply of food per person per day. A significant number of households (69.2%) also had a three-day supply of water per person per day. Households were asked if a seven-day supply of medication was available for each person in the household taking medication. Of the 170 households surveyed, 65.2% had that supply available. Most households were equipped with multiple escape routes out of their neighborhood (82.8%), as well as copies of important documents (71.4%). However, most households were limited in having designated meeting places both inside (30.6%) and outside (29.5%) their neighborhoods, as well as a written list of phone numbers of people to contact in emergencies (44.3%) (Table 14). Over half of all households were also equipped with an emergency supply kit (67.2%) and first aid kit (66.5%) that were kept in designated areas within the household (Table 13).

For household safety measures, over a quarter of the population (32.6%) has a working generator, and of those, 57.4% have a three-day fuel supply for their generator (Table 15). A large percentage of the population (83.0%) have a working smoking detector installed within the household. About half of all households (48.5%) having a working carbon monoxide detector, as well as a working fire extinguisher (76.8%) and backup heat source (59.3%).

Table 8. HH preparedness status

	Frequency (n=170)	Projected HH (n=15,285)	% of HH	95% CI
Preparedness Status				
Well Prepared	66	5,434	38.0	29.95 – 46.14
Somewhat prepared	83	6,991	48.9	42.31 – 55.58
Not at all prepared	17	1,547	10.8	5.01 – 16.65
Don't Know	4	--	--	--

Table 9. Would HH evacuate for voluntary evacuation notice

	Frequency (n=170)	Projected HH (n=15,285)	% of HH	95% CI
Would HH Evacuate				
Yes	143	11,971	83.8	76.68 – 90.93
No	9	715	5.01	1.75 – 8.26
Don't Know	18	1,599	11.2	4.39 – 17.99

Table 10. What would prevent HH from evacuating in an emergency

	Frequency (n=170)	Projected HH (n=15,285)	% of HH	95% CI
Reasons for preventing HH from evacuating				
Other*	26	2,116	15.1	7.87 – 22.28
N/A – Would evacuate	22	1,861	13.3	3.77 – 22.75
N/A – Would NOT evacuate	17	1,560	11.1	2.01 – 20.21
Concern about personal safety	15	1,170	8.3	2.51 – 14.15
Concern about leaving property	13	1,157	8.2	2.51 – 14.15
Concern about leaving pet(s)	13	1,053	7.5	2.16 – 12.84
Lack of transportation	13	1,014	7.2	1.88 -12.57
Refused	16	1,261	8.8	2.34 – 15.32
Health Problems	12	1,248	8.9	2.79 – 14.99
Lack of trust in public officials	8	624	4.4	0.46 – 8.43
Concern about traffic jams	5	403	2.9	0.00 – 8.43
Expensive	4	--	--	--
Inconvenient	3	--	--	--
Nowhere to go	3	--	--	--

*Include jobs preventing from leaving i.e. work search and rescue/law enforcement/firefighter, not enough time to collect personal items, scared people, family, no reason, depends on situation

Table 11. First place HH would evacuate to due to disaster/emergency

	Frequency (n=170)	Projected HH (n=15,285)	% of HH	95% CI
Evacuation Options				
Family/Friends/2nd Home Outside Area	88	7,275	50.9	40.78 – 61.08
Other*	25	1,976	13.8	8.27 – 19.39
Hotel/Motel	24	1955	13.7	7.07 – 20.31
Don't Know	15	1,454	10.2	4.10 – 16.27
American Red Cross/Church/Community Shelter	15	1,378	9.6	4.45 – 14.84
N/A – would not evacuate	3	--	--	--

*Other responses include fire station/police department, out of town, use RV to leave, basement, Fallon, depends on disaster

Table 12. In the past 5 years, has anyone in the HH been trained in:

Trainings	Frequency (n=170)	Projected HH (n=15,285)	% of HH	95% CI
First Aid				
Yes	68	5,844	40.9	31.07 – 50.75
No	102	8,441	59.1	49.25 – 68.93
CPR				
Yes	80	6,811	47.7	37.31 – 58.05
No	90	7,474	52.3	41.95 – 62.69
CERT				
Yes	31	2,475	17.3	11.36 – 23.29
No	139	11,809	82.7	76.72 – 88.64
Don't Know				
Yes	2	--	--	--
No	168	14,115	98.8	97.11 – 100.52
Refused				
Yes	1	--	--	--
No	169	14,206	99.5	98.33 – 100.58

Table 13. HH emergency supply kits in designated areas

	Frequency (n=170)	Projected HH (n=15,285)	% of HH	95% CI
Emergency Supply Kit				
Yes	115	9,592	67.2	56.98 – 77.32
No	55	4,692	32.8	22.68 – 43.02
First Aid Kit				
Yes	113	9,449	66.5	58.64 – 74.39
No	56	4,757	33.5	25.62 – 41.36
Refused	1	--	--	--

Table 14. Current HH emergency supplies and plans

	Frequency (n=170)	Projected HH (n=15,285)	% of HH	95% CI
3-day Supply Food (per person)				
Yes	155	12,919	90.4	85.44 – 95.45
No	13	1,209	8.5	3.40 – 13.53
Don't Know	1	--	--	--
Refused	1	--	--	--
3-Day Supply Water (per person)				
Yes	118	9,898	69.2	60.89 – 77.70
No	50	4,231	29.6	21.03 – 38.21
Don't Know	2	--	--	--
7-Day supply medication				
Yes	112	9,309	65.2	58.32 – 72.02
No	23	2,145	15.0	8.57 – 21.46
Don't Know	1	--	--	--
N/A	34	2,753	19.3	12.23 – 26.31
Meeting places within your neighborhood if separated				
Yes	54	4,365	30.6	22.24 – 38.87
No	85	7,432	52.0	41.36 – 62.70
Don't Know	4	--	--	--
N/A	27	2,176	15.2	8.27 – 22.20
Meeting places outside your neighborhood if separated				
Yes	52	4,215	29.5	19.63 – 39.39
No	89	7,737	54.2	44.38 – 63.96
Don't Know	2	--	--	--
N/A	27	2,176	15.2	8.27 – 22.20
Multiple escape routes out of neighborhood				
Yes	143	11,828	82.8	73.76 – 91.85
No	22	1,859	13.0	6.11 – 19.91
Don't Know	4	--	--	--
Refused	1	--	--	--
Copies of important documents				
Yes	122	10,198	71.4	61.57 – 81.21
No	46	3,917	27.4	17.46 – 37.39
Don't Know	1	--	--	--
Refused	1	--	--	--
Written list of phone numbers of people to contact in emergencies				
Yes	76	6,334	44.3	37.25 – 51.44
No	92	7,782	54.5	47.95 – 61.00
Don't Know	1	--	--	--
Refused	1	--	--	--

Table 15. HH safety measures

	Frequency (n=170)	Projected HH (n=15,285)	% of HH	95% CI
Working Generator				
Yes	54	4,652	32.6	24.10 – 41.04
No	113	9,398	65.8	56.94 – 74.65
Don't Know	3	--	--	--
If YES, 3-day supply of fuel*				
Yes	32	8,773	57.4	40.57 – 74.22
No	19	5,747	37.6	20.34 – 54.83
Don't Know	2	--	--	--
Refused	1	--	--	--
Working Smoke Detector				
Yes	140	11,854	83.0	76.21 – 89.76
No	27	2,184	15.3	9.07 – 21.50
Don't Know	3	--	--	--
Working Carbon Monoxide Detector				
Yes	84	6,934	48.5	37.556 – 59.53
No	76	6,336	44.3	35.57 – 53.15
Don't Know	7	572	4.0	1.27 – 6.74
Refused	3	--	--	--
Working Fire Extinguisher				
Yes	130	10,966	76.8	68.49 – 85.05
No	38	3,149	22.0	14.21 – 29.88
Don't Know	1	--	--	--
Refused	1	--	--	--
Backup Heat Source				
Yes	101	8,476	59.3	50.27 – 68.40
No	68	5,731	40.1	31.00 – 49.24
Don't Know	1	--	--	--

*n=54 respondents

Communications

A majority of households preferred television (43.1%) as their main source of receiving information during an emergency. Several households also indicated that they preferred to receive information via text message (23.9%) (Table 16). It is important to note that while these options may be the most convenient way to receive information during an emergency, they also rely solely on a source of electricity that may be compromised during an emergency. In regards to whom households would trust for reliable information during an emergency, 46.3% said law enforcement, followed by 24.2% relying on a family member or neighbor to relay information to them, and 11.9% reporting local news (Table 17).

Table 16. HH main source of receiving information during an emergency

	Frequency (n=170)	Projected HH (n=15,285)	% of HH	95% CI
Preferred method of communication				
TV	70	6,159	43.1	34.16 – 52.08
Text Messaged	42	3,417	23.9	17.36 – 30.48
Automated call	17	1,414	9.9	4.71 – 15.09
Social Media	13	1,045	7.3	3.48 – 11.15
Other*	11	897	6.3	2.93 – 9.63
Neighbor/Family/Friend/Word of Mouth	7	546	3.8	0.35 – 7.29
AM/FM Radio	5	416	2.9	0.48 – 5.35
Internet	4	--	--	--
Local Newspaper	1	--	--	--

*Includes Facebook, HAM radio, sheriff's department, scanners, medical alert system, WEA Alert

Table 17. Who would HH trust for reliable information during an emergency

	Frequency (n=170)	Projected HH (n=15,285)	% of HH	95% CI
Emergency Information Providers				
Law Enforcement	79	6,612	46.3	39.90 – 52.67
Family Member/Neighbor	40	3,456	24.2	16.69 – 31.709
Local News	21	1,703	11.9	6.90 – 16.94
Other*	15	1,318	3.9	0.76 – 7.07
Local Public Health Department	7	559	3.9	0.76 – 7.07
Don't Know	3	--	--	--
Governor's Office	3	--	--	--
Physician/Medical Professional	2	--	--	--

*Includes: all of the above, combination of above, military guards, emergency manager, local authorities, HAM radio, Facebook, local broadcast system, none

Pets

Nearly sixty-seven percent (66.9%) of all households have pets in Mineral County. When households were asked what they would do with their pets if they needed to evacuate, an overwhelming majority (95.0%) responded they would take their pets with them. Earlier in the survey, households were asked to provide the main reason that would prevent them from evacuating during an emergency and 7.5% of households responded, "concern about leaving pets" (Table 10). Examining the data further, 13 households responded to both "yes" to having pets and "concern about leaving pets" during an

evacuation, which translates to 7.6% of households who have pets would possibly not evacuate during an emergency due to concern about leaving their pets behind.

Table 18. HH pet status, pet evacuation plans

	Frequency (n=170)	Projected HH (n=15,285)	% of HH	95% CI
Does HH have pets				
Yes	113	9,553	66.9	58.87 – 74.88
No	57	4,731	33.1	25.12 – 41.13
If YES, what would HH do with pets if asked to evacuate*				
Take them with you	107	14,514	95.0	90.46 – 99.48
Leave them behind with food and water	3	--	--	--
Find a safe place for them to go	1	--	--	--
Would not evacuate	1	--	--	--
Don't Know	1	--	--	--

*n=113 respondents

Hazards

Households determined that the most prevalent hazard to affect their county are earthquakes (60.6%). Other hazards that are deemed a high threat level to this community are power outages at 48.5% and floods or flash floods at 43.6% (Table 19). These high-level threats are most likely the cause of a natural event, and not man-made disasters. If using the data and perceptions of households, man-made threats or hazards are less likely to affect this community. According to the 2017 Nevada State THIRA report[5], the top three hazards most likely to affect the state of Nevada are: earthquakes, floods, and wildfires. Comparing this to the data obtained in this assessment, Mineral County residents accurately described the possible hazards most likely to strike their community.

Table 19. Top 3 hazards most likely to affect HH

Hazards	Frequency (n=170)	Projected HH (n=15,285)	% of HH	95% CI
Earthquakes				
Yes	100	8,654	60.6	49.80 – 71.37
No	70	5,630	39.4	28.64 – 50.20
Power Outage				
Yes	79	6,932	48.5	38.11 – 58.94
No	91	7,353	51.5	41.06 – 61.89
Flood/Flash Flood				
Yes	73	6,230	43.6	34.78 – 52.45
No	97	8,055	56.4	47.56 – 65.22
Wildfires				
Yes	51	4,305	30.1	22.04 – 38.23
No	119	9,979	69.9	61.77 – 77.96
Dust Storm				
Yes	38	3,078	21.5	14.46 – 28.63
No	132	11,206	78.5	71.37 – 85.54
Other*				
Yes	26	2,117	14.8	7.44 – 22.21
No	144	12,167	85.2	77.79 – 92.56
Chemical Release				
Yes	25	2,091	14.6	9.44 – 19.84
No	145	12,193	85.4	80.16 – 90.56
Terrorist Attacks				
Yes	17	1,396	9.8	5.35 – 14.20
No	153	12,888	90.2	85.80 – 94.65
Tornadoes				
Yes	10	850	6.0	2.35 – 9.55
No	160	13,434	94.0	90.45 – 97.65
Extreme Heat				
Yes	9	715	5.0	1.33 – 8.68
No	161	13,569	95.0	91.32 – 98.67
Snowstorm				
Yes	8	624	4.4	1.68 – 7.06
No	162	13,660	95.6	92.94 – 98.32
Pandemic/Epidemic				
Yes	4	--	--	--
No	166	13,946	97.6	94.68 – 100.59
Cyber Attacks				
Yes	3	--	--	--
No	167	14,037	98.3.	96.28 – 100.26
Don't Know				
Yes	3	--	--	--
No	167	14,050	98.4	96.49 – 100.23

*Includes severe wind/wind, volcano, bears, and falling while living alone

Discussion

Process

The overall organization of the CASPER and communications during the event were the strongest

aspects of this assessment. Both volunteer teams and community stakeholders felt the CASPER process

was well designed. Team feedback post-assessment revealed volunteers felt they had enough breaks

and refreshments; however, some volunteers reported feeling fatigued after an entire day spent walking

through the community. In the future, it will be more advantageous to arrange for additional volunteers

and schedule three or four hour rotating shifts so as not to physically and mentally exhaust personnel.

Teams of two volunteers were the most time-efficient arrangement.

While there were benefits to conducting the CASPER on a Friday and Saturday, most rural residents

leave on the weekends and Fridays to travel to other counties in order to grocery shop, attend

medical/healthcare appointments, or to enjoy weekends elsewhere, according to the County's LEPC

members. Community stakeholders suggested the possibility of conducting any future CASPERs over the

course of several weeknights when there is higher certainty of families being home to answer the door.

What initially seemed like a beneficial arrangement turned into the realization that certain dates and

times are not as accessible in rural areas due to different community dynamics. The tribal community of

Schurz had the best response rates and those respondents were the most enthusiastic members of the

community to participate in the assessment.

The traditional CASPER process outlined by the CDC[3] was followed with the exception of households and

replacement households being pre-selected by staff instead of volunteers. While this initially eliminated

confusion among volunteers on where to go, it eventually created a stressful work environment for the

Incident Commander (IC) when finding additional replacement households. The Incident Commander

(IC) relied on Google Maps to choose replacement homes, but a major issue arose in that Google Maps

was not updated to reflect the recent arrangement of neighborhoods. While the maps would show

housing units and legitimate addresses, volunteers would report at the same time from the exact location that structures were either vacant, collapsed, or nonexistent. To prevent this conflict from occurring again, extensive ground truthing efforts should be implemented if pre-selected households are chosen in future non-emergency CASPERs.

Another area for improvement includes the advertisement for community volunteers. Initial advertisement efforts included posting flyers on the Emergency Manager's Facebook page, posting the event on the Community Calendar on the County's website, advertising through the rural clinic community health nurse and Mt. Grant Hospital staff, emailing the high school principal to disperse flyers, multiple newspaper announcements, blast announcements through the army base on pay stubs, and relying on word of mouth through community stakeholders. However, post-assessment "hot wash" discussions with community leaders revealed that the best form of notice would be to visit the local churches and have them advertise the event on the behalf of the CASPER planning team. The local churches are the pillars of Hawthorne's community; utilizing that resource would have most likely yielded a higher number of volunteers.

Materials

Interview teams were initially not equipped with enough paper copies of surveys or handouts. Once this issue was addressed, teams were able to continue surveying households. Teams also found it was better to paraphrase the introductory script. Although the main script was cut short before teams went out into the field, volunteers still reported that residents would quickly lose interest in participating if it was read in its entirety. In the future, more time should be spent on training volunteers how to properly fill out tracking forms as well. Much of the confusion surrounding the field work was tracking form use. Volunteers were unsure how to document multiple replacement households or gave up entirely and

chose to write notes about households on the list of designated homes to survey instead. Hands-on training would provide teams with an opportunity to use tracking forms prior to going out into the field.

Survey

Multiple issues were reported with various survey questions. Volunteer teams encountered many households in which respondents replied to questions with "it depends on the type of disaster" in regard to where a household would evacuate to, if they would evacuate, who they would trust in an emergency, etc. Teams also reported that a majority of respondents they spoke with were highly uncomfortable answering the question asking about monthly rent or mortgage payment. That question was received with the highest number of refusals throughout the whole survey (20.4%) (Table 2). Suggestions were also made on changing the verbiage for certain questions containing "neighborhood" and "community" when those areas of the county are so small to begin with or vary in interpretation. It would also be beneficial to include more "not applicable" responses to questions in which that response applies.

Communications

Utilization of private 800 MHz radios with closed-communication channels was highly beneficial for volunteer teams and Incident Command (IC) staff. Personnel did not have to compete with outside sources listening or communicating via the same channels. Cell phones serving as a backup allowed for redundant communication, but also allowed Incident Command (IC) to respond to multiple teams at one time for various requests during moments of heavy radio traffic.

Data Analysis and Limitations

Data entry and analysis took longer than expected. Tracking forms were filled out incorrectly or did not match the number and order of surveys collected each day of the assessment. Certain survey questions

were left blank and were interpreted as a refusal, or for certain questions as not applicable. These

surveys were still included in the analysis. The interpretation of the blank questions as either a "refusal"

or "not applicable" may bias the data and the true rate of household preparedness within the county.

Respondents also chose multiple answers to questions with a "select only one" limit, making it difficult

to determine which answer would be the true representation of that household. The verbiage of certain

questions, especially those containing the word "community" or "neighborhood" caused confusion on

behalf of residents. As there was no exact definition as to what community or neighborhood meant,

responses were varied due to misinterpretation. These issues may skew data, causing an increase in

refusals or incorrect responses that does not accurately represent the population.

Another issue faced with the data were the age ranges selected for household members. The survey

questions asked how many members within the household were aged between zero and two years old,

while another option offered the age range of two to 17 years old. In future surveys, this should be

changed to reflect the age range of zero to two years old, and age range of three to 17 years old, as it

was difficult to ascertain which end of "two years old" households responded for.

Recommendations

Per the CASPER results and post-assessment discussions with the county's Emergency Manager, the

following considerations are recommended for Mineral County:

1. **Emergency Communications**

   Almost half of all residents rely on television for information during an emergency. Local officials

   should be prepared to utilize television as a main source of dispersing vital information to

   residents, either using a local broadcast station or immediately contacting nearby media

   stations to provide updates. Officials should establish partnerships with media personnel to

   ensure information is disseminated quickly and properly. If a large-scale emergency causes a

power outage, officials should consider using a secondary method of dispersing vital information that does not rely on a power grid. Another possibility is to develop an alert system for text messages and automated phone calls, as a combined 33.8% of residents rely on those methods for receiving information (Table 16).

2. **Emergency Awareness and Preparedness**

County officials should consider creating awareness campaigns for residents focusing on what types of emergencies are relative to the area, the importance of preparing for them, and how to start preparing. Each community within the county has a small population, which means there is a smaller ratio of available and trained responders able to meet the needs of residents during an incident. If residents are educated about preparedness and have personalized plans in place, responders will be able to focus more on mitigation efforts or focus on residents whose needs exceed those that can be mitigated by preparedness efforts prior to an incident. Officials should also campaign for a whole-community approach, encouraging residents to work together to create evacuation plans, train in CPR and first aid, and collect emergency supplies. It is also important for community stakeholders to continuously update emergency preparedness and response plans that reflect the data collected. A high percentage (83.8%) of residents responded that they would evacuate if necessary (Table 9), with 50.9% traveling to an area outside of the county (Table 11). Planners will need to account for how this may affect traffic, response times, accessibility to roads and nearby support structures, etc. Incorporating the collected data into current preparedness and response plans would be highly beneficial for county officials.

3. **Emergency Assistance Programs**

Assistance programs should be developed and implemented during the life-cycle of an emergency to aid elderly populations in evacuation, those receiving immediate medical care, etc. Residents over 65 years of age comprised most of the households who responded at least one member relies on either a wheelchair, cane or walker on a daily basis. This vulnerable population has serious mobility issues that will prevent them from quickly evacuating. Assistance programs that provide transportation to either a shelter, clinic or hospital should be made available to elderly residents in times of crisis. Mineral County Emergency Management should incorporate access and functional needs (AFN) populations within emergency preparedness plans in order to pre-identify resources which may be used for this community during an emergency event, such as special needs shelters. The 2014 Nevada SCEMP report[6] states that *"all local governments… will make every effort to comply with Title II of the Americans with Disabilities Act (ADA) and other applicable laws related to emergency and disaster related programs…."* Stakeholders may refer to the Title II checklist[7] to ensure all aspects of emergency preparedness plans incorporate planning for persons with access and functional needs.

4. **Develop Relationships between Tribal and County Leaders**

Mineral County is diverse in its population as it includes the tribal Walker River Reservation, located within and around the Schurz, Walker Lake, and Walker River areas[8]. Approximately 1,129[9] persons, 25% of the county's total population, are part of the Walker River Reservation. It was a priority to ensure inclusion of tribal members in this assessment, as tribal members have often been excluded in past community assessments. The lack of inclusion has left them without

access to and knowledge of resources, as well as strengthened tribal community plans. It is

imperative that community leaders from both the county government and tribal government

foster a relationship based on emergency preparedness efforts. All areas of the county are

vulnerable to the occurrence of natural and man-made disasters. By working on emergency

preparedness, response, and mitigation plans together, as well as creating mutual aid

agreements, all areas of the county will effectively be able to respond to an incident of large

proportions. Collaboration efforts of this effect are key in creating strong emergency

preparedness plans.

Conclusion

The CASPER was a well-organized effort to promote the importance of planning for emergencies and

disasters at the household level. Through the survey, Mineral County residents were able to reflect on

their households' readiness, and what they could do in the future to improve it. The recommendations

made in this report will allow county stakeholders to better understand the concerns of their

constituents, providing an opportunity to include the information collected into revisions of emergency

preparedness and response plans, and plan for considerations found through this assessment.

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Recommended Citation

Additional Information

Appendix I. Mineral County CASPER Questionnaire

Mineral County CASPER Survey 2018

To be complete by team BEFORE interview	
Q1. Date (mm/dd/yy):	Q2. Cluster number:
Q3. Survey number: 1 2 3 4 5 6 7	Q4. Interviewer initials:

First, we are going to ask about basic household information:	

Q5. Including yourself, how many people live in your home?
_____

Q6. How many people living in your household are (list number):

Less than 2 years old? _____   2-17 years old? _____

18-65 years old? _____   More than 65 years old? _____

☐ Don't Know (DK)   ☐ Refused (R)

Q7. What is your housing situation?

☐ Rental   ☐ Apartment

☐ Homeowner   ☐ Multi-Family

☐ Low Income/HUD   ☐ RV   ☐ Refused

Q8. What is your level of satisfaction regarding your current housing situation?

☐ Extremely Dissatisfied   ☐ Satisfied

☐ Dissatisfied   ☐ Extremely Satisfied

☐ Neutral   ☐ Refused

Q9. What is your approximate monthly rent or mortgage payment?

☐ $0-$500 ☐ $501-$1000 ☐ $1001-$1500 ☐ $1501-$2000

☐ DK   ☐ R

Q10. Do you or anyone in your household need any of the following:

Daily Medication (other than birth control or vitamin)	☐ Yes	☐ No	☐ DK	☐ R
Dialysis	☐ Yes	☐ No	☐ DK	☐ R
Caregiver	☐ Yes	☐ No	☐ DK	☐ R
Oxygen Supply	☐ Yes	☐ No	☐ DK	☐ R
Wheelchair/cane/walker	☐ Yes	☐ No	☐ DK	☐ R
Special formula, bandages, diapers	☐ Yes	☐ No	☐ DK	☐ R
Service animal	☐ Yes	☐ No	☐ DK	☐ R
Other: _____				

Q11. Does anyone in your household have any of the following that could be barriers to effective communication during an emergency? (check all that apply)

Impaired Hearing	☐ Yes	☐ No	☐ DK	☐ R
Impaired Vision	☐ Yes	☐ No	☐ DK	☐ R
Developmental/cognitive disability	☐ Yes	☐ No	☐ DK	☐ R
Difficulty understanding written material	☐ Yes	☐ No	☐ DK	☐ R
Difficulty understanding English	☐ Yes	☐ No	☐ DK	☐ R

Now we would like to ask you questions about emergency preparedness:	

Q12. How prepared do you feel your household is for an emergency?

☐ Well Prepared   ☐ Not at all Prepared

☐ Somewhat Prepared   ☐ DK   ☐ R

Q13. If public authorities announced a voluntary evacuation for your community due to a large-scale disaster/emergency, would your household evacuate?

☐ Yes   ☐ No   ☐ DK   ☐ R

Q14. If your household had to evacuate due to a large-scale disaster/emergency, where would be the first place your household would go?

☐ Family/Friends/2nd home (*outside* your neighborhood)

☐ Hotel/Motel

☐ American Red Cross, Church, or Community Shelter

☐ Other _____

☐ Don't Know

☐ Would not evacuate

Q15. What would be the main reason that might prevent your household from evacuating if asked to do so? (Select One)

☐ Lack of transportation

☐ Concern about leaving property

☐ Concern about personal safety

☐ Concern about traffic jams

☐ Health problems

☐ Lack of trust in public officials

☐ Nowhere to go

☐ Concern about leaving pet (s)

☐ Inconvenient

☐ Expensive

☐ Other _____

☐ N/A—would not evacuate

Q16. In the past 5 years, have you or anybody in your household taken training in (check all that apply):

☐ First Aid   ☐ CERT (Community Emergency Response Team)

☐ CPR   ☐ DK   ☐ R

Appendix I. Mineral County CASPER Questionnaire

Q17. Does your household currently have:

A 3-day supply of food that will not go bad for each member of your household?	☐ Yes ☐ No ☐ DK ☐ R
A 3-day supply of drinking water for each member of your household? (1gallon/person/day)	☐ Yes ☐ No ☐ DK ☐ R
7-day supply of medication for each person who takes prescribed medications?	☐ Yes ☐ No ☐ DK ☐ R ☐ N/A
Meeting places within your neighborhood if separated?	☐ Yes ☐ No ☐ DK ☐ R ☐ N/A
Meeting places outside your neighborhood if separated?	☐ Yes ☐ No ☐ DK ☐ R ☐ N/A
Multiple escape routes out of your neighborhood?	☐ Yes ☐ No ☐ DK ☐ R
Copies of important documents? (i.e. passport, social security card, driver's license)	☐ Yes ☐ No ☐ DK ☐ R
A written list of phone numbers for people to contact in an emergency?	☐ Yes ☐ No ☐ DK ☐ R

Q18. What is your household's main source of receiving information during an emergency? (Select one)

☐ TV
☐ AM/FM Radio
☐ Text Message
☐ Automated Call
☐ Social Media (Preferred Type:_____)
☐ Local Newspaper
☐ Internet
☐ Neighbor/Family/Friend/Word of Mouth
☐ Church or Other Groups
☐ Other _____
☐ Don't Know   ☐ Refused

Q19. Does your household have pets?
☐ Yes ☐ No ☐ R

Q19b. If YES, if your household was asked to evacuate, what would you do with your pets?
☐ Take them with you ☐ Find a safe place for them to go
☐ Leave them behind with food/water
☐ Would not evacuate because of pets
☐ Would not evacuate   ☐ DK   ☐ R

Q20. Has your household prepared an emergency supply kit with supplies such as flashlights, radio, and extra batteries kept in a designated place in your home?

☐ Yes ☐ No ☐ DK ☐ R

Q21. Has your household prepared a first aid kit with medical supplies that is kept in a designated place in your home?

☐ Yes ☐ No ☐ DK ☐ R

Q22. Does your household currently have the following:

A working generator	☐ Yes ☐ No ☐ DK ☐ R
If YES, do you have a 3-day fuel supply	☐ Yes ☐ No ☐ DK ☐ R
A working smoke detector	☐ Yes ☐ No ☐ DK ☐ R
A working carbon monoxide detector	☐ Yes ☐ No ☐ DK ☐ R
A working fire extinguisher	☐ Yes ☐ No ☐ DK ☐ R
A backup heat source (fireplace, etc.)	☐ Yes ☐ No ☐ DK ☐ R

Fuel source: ☐ N/A

Q23. What are the top three emergencies/hazards that are most likely to affect your household? (Check only 3 – show form)

☐ Chemical Release   ☐ Earthquakes   ☐ Tornadoes
☐ Wild Fires   ☐ Extreme Heat   ☐ Flood/Flash flood
☐ Cyber-attacks   ☐ Terrorist Attacks ☐ Dust Storm
☐ Power Outage   ☐ Snow Storm   ☐ DK   ☐ R
☐ Epidemic/Pandemic (flu) ☐ Other (specify)_____

Q24. If an emergency were to occur, who would you and members of your household most likely trust for reliable info? (check only 1)

☐ Governor's Office   ☐ Law Enforcement
☐ Local Public Health Department   ☐ Local News
☐ Physician/Medical Professional   ☐ Other_____
☐ Family member/Neighbor   ☐ DK   ☐ R

Finally, we would like to ask you about access to resources in your community:

Q25. Does your household have access to medical/healthcare within your county?
☐ Yes ☐ No ☐ DK ☐ R

Q25b. If NO, where does your household go to receive medical/healthcare when needed? (check all that apply)
☐ Carson City ☐ Reno ☐ Douglas ☐ Out of State
☐ Other   ☐ Do not access care ☐ DK ☐ R

Q26. What is the main reason preventing members of your household from receiving medical/health care?

☐ Services are too far ☐ Lack of services/providers
☐ No transportation ☐ Expensive
☐ Other_____   ☐ DK   ☐ R

Thank you for your time!

Appendix II. Consent Letter to Respondents

November 2018

Dear Mineral County Resident,

If you are receiving this letter it is because your household has been one of 210 households randomly selected for an interview assessing emergency preparedness within Mineral County communities. Mineral County and the Nevada Division of Public and Behavioral Health are sending volunteers door-to-door to administer surveys among the Mina, Schurz, Walker Lake, and Hawthorne communities.

The purpose of the survey is to determine if households within Mineral County are prepared for emergencies or disasters, and if they have access to resources within their communities. The information collected is not personal or identifiable, and answers will be kept confidential. The survey should take no more than 5-10 minutes to complete. The survey is completely voluntary. You can refuse to take part in the survey, refuse to answer any of the questions, or stop at any time. Nothing will happen to you or your household if you choose not to take part in the survey. Your participation is greatly appreciated. The responses you give allow local stakeholders to determine if emergency plans need to be improved and which areas of the county are need of specific resources related to emergency preparedness.

If you have any questions or concerns about this survey, please contact our CASPER Lead Emily Gould at (775) 684-3216 or by email at egould@health.nv.gov.

Thank you very much for your time and participation.

Sincerely,

Nevada Division of Public and Behavioral Health (DPBH)
Mineral County Local Emergency Planning Committee (LEPC)

Appendix III. Emergency Kit Handout

Are You Prepared for an Emergency?

5 Items To Start Your Emergency Kit:

1. Copies of **important documents** (birth certificate, social security card, etc.) in a water-proof bag
2. **Flashlight** with extra batteries
3. Small **First-Aid Kit**
4. 7-Day supply of **prescription medication** for each family member who takes them
5. 3-Day supply of **food and water** for each person in your household
   - 1 gallon of water per person per day
   - Protein bars, canned foods with manual can opener, etc.

For Pets:
- Identification tag
- Leash
- Food, water, medication
- Phone number for vet & shot records
- Pictures of your pet

For Children:
- Toys and Blankets
- Diapers, bottles, and extra clothes
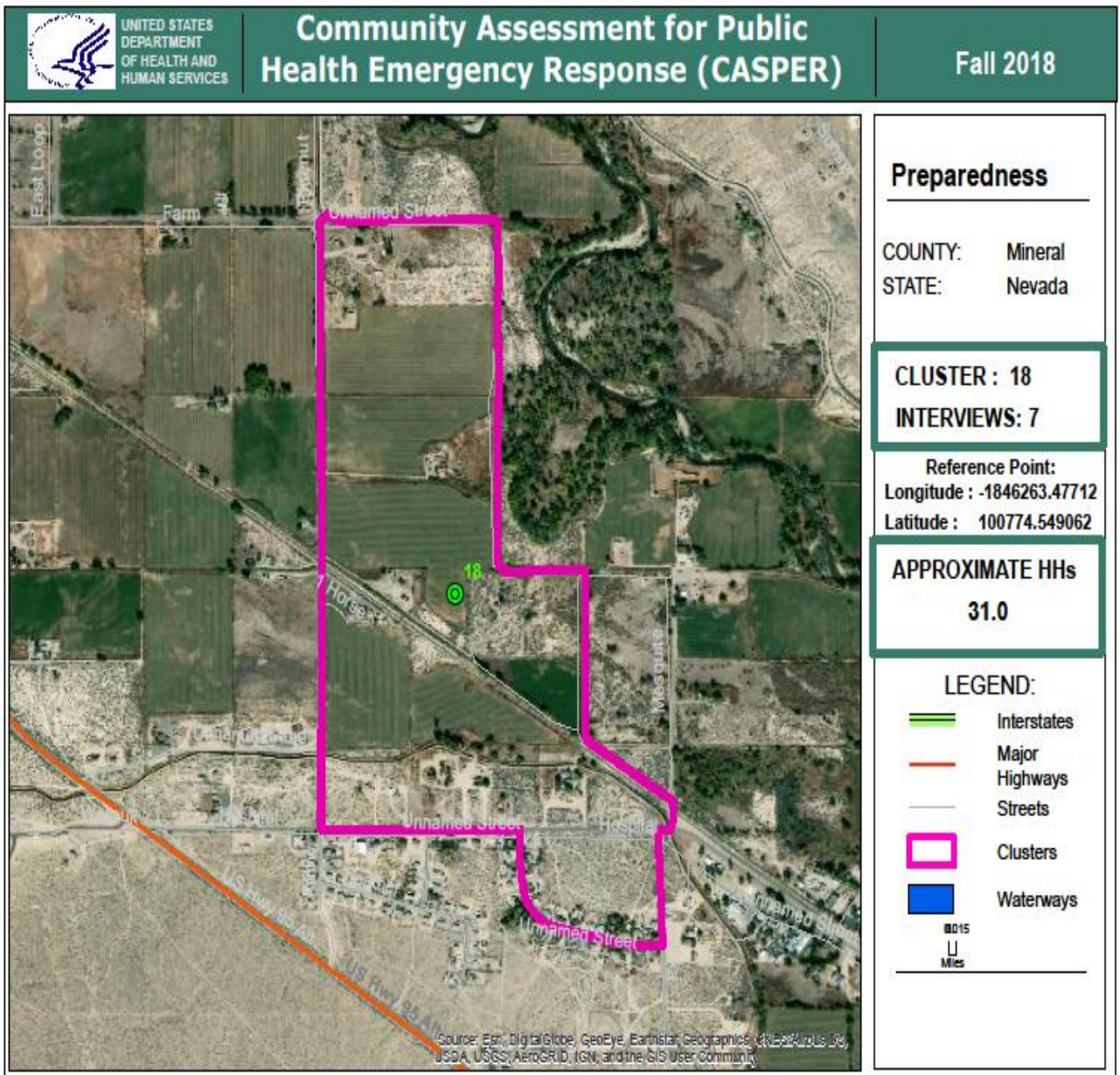- Children's medications
- Shot records
- Pictures of your children

Brought to you by the Nevada Div. of Public and Behavioral Health and the Mineral County LEPC
For more information contact us at: 775-684-3216 or egould@health.nv.gov
Or visit our website at http://dpbh.nv.gov/ or https://www.ready.gov/

Appendix IV. Example Map: Mineral County Cluster 18

Community Assessment for Public Health Emergency Response (CASPER) — Fall 2018

Preparedness

COUNTY: Mineral
STATE: Nevada

CLUSTER: 18
INTERVIEWS: 7

Reference Point:
Longitude: -1846263.47712
Latitude: 100774.549062

APPROXIMATE HHs
31.0

LEGEND:
— Interstates
— Major Highways
— Streets
☐ Clusters
■ Waterways

0 0.15
Miles

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community
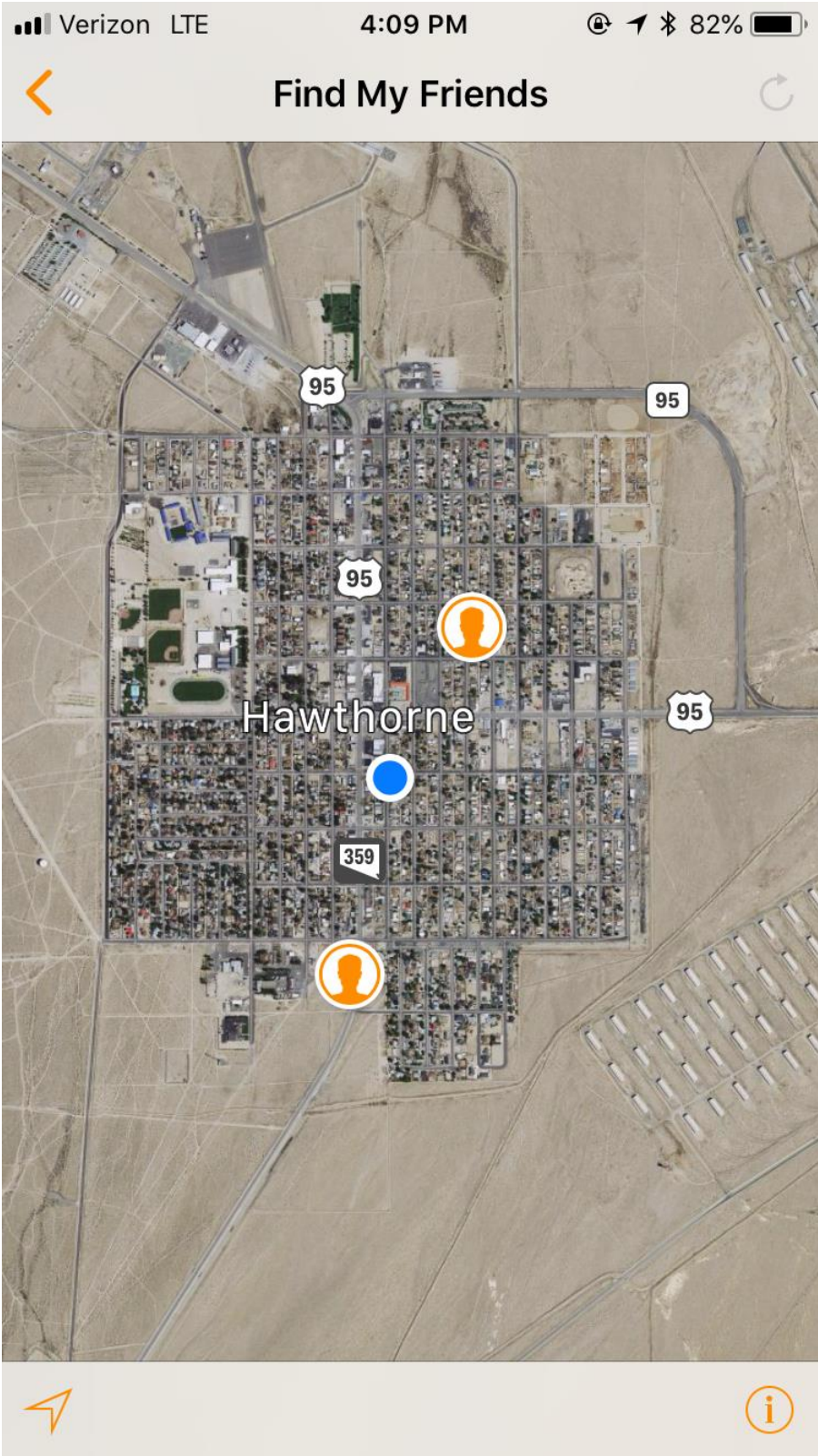
Appendix V. Assessment Photographs

*Photograph credit: Danika Williams | Hawthorne, NV

*Photograph credit: Danika Williams | Designated volunteer identifying vest and badge

*Photo credit: Danika Williams | Find My Friends cell phone application in-use to track volunteers

Acronym List

AFN	Access and Functional Needs
AIC	Assistant Incident Commander
CASPER	Community Assessment for Public Health Emergency Response
CDC	Centers for Disease Control and Prevention
CERT	Community Emergency Response Team
CI	Confidence Interval
DPBH	Division of Public and Behavioral Health
EM	Emergency Manager
HH	Household
IC	Incident Command or Incident Commander
ICP	Incident Command Post
LEPC	Local Emergency Planning Committee
LHA	Local Health Authority
PHP	Public Health Preparedness
SCEMP	State Comprehensive Emergency Management Plan
SME	Subject Matter Expert
THIRA	Threat and Hazard Identification and Risk Assessment