



# Community Assessment for Public Health Emergency Response (CASPER) to Assess the Level of Preparedness in Carson City, Nevada September 2018

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## **Executive Summary**

Carson City, officially the Consolidated Municipality of Carson City, is an independent city that serves as the Nevada State Capital. In recent years, flooding throughout Nevada has highlighted the importance of emergency planning and public health response to disasters. In January and February 2017, atmospheric river storms caused both water run-off and river flooding on the Carson River which impacted Carson City. Throughout the spring of 2017, flood warnings were regularly in effect due to the spring thaw of a high amount of snow in the Sierra Mountains. In April 2018, flooding led to road closures and unsafe conditions in the community. Responses to these events included issuing warnings and taking public health measures to reduce the effects of flooding on the health of the community.

As part of the ongoing effort to increase the level of emergency preparedness in the community, Quad-County Public Health Preparedness Program (QCPHP), housed at Carson City Health and Human Services (CCHHS), collaborated with Carson City Emergency Management, Carson City Emergency Medical Services, and Carson City Sheriff's Office to complete a Community Assessment for Public Health Emergency Response (CASPER). This assessment is a survey tool designed by the Centers for Disease Control and Prevention ([CDC](#)) to collect household-based information about the community in a quick and low-cost manner. The Carson City CASPER was conducted September 17- September 21, 2018. The goal was to assess resident preparedness for an emergency or disaster. The survey focused on general emergency preparedness, such as having emergency supply items and plans, the preferred source of information during an emergency, evacuation intentions, as well as additional household needs such as durable medical equipment. The data gathered will be used to strengthen local level preparedness and response capabilities. The Carson City CASPER was the first CASPER to be conducted in the state of Nevada.

Thirty census blocks within Carson City were selected first. Then, seven households were randomly selected from each of these census blocks giving a total of 210 households. These households were selected based upon their probability of being selected from the total number of households in Carson City. Because the selection of clusters and households was done randomly by their probability of being selected, the results are generalizable to the entire community. From the 210 selected households, a total of 188 households completed an interview. The data collected were adjusted, or weighted, to reflect what was known about the total number of households in Carson City. Data analyses were conducted to report the projected percent of households based on weighted data. The major findings of the survey fall under the following categories:

### ***Emergency Preparedness***

Approximately 58% of Carson City residents feel they are prepared for an emergency or disaster. In general, most households have basic emergency supplies. A large number of households have a working smoke detector (87.8%) while about half of the households have a working carbon monoxide detector (50.9%). Approximately 3 out of 5 households also have a working fire extinguisher. Over half of all households reported having adequate emergency supplies. The most commonly reported emergency supply was a 3-day supply of food that will not go bad (84.6%) and the least common emergency supply was a 3-day supply of drinking water (60%).

In terms of components of household emergency plans, having multiple routes out of their neighborhood was the most common component (84.7%). Having a designated meeting place in their neighborhood (22.1%) and outside of their neighborhood (19.1%) were the least frequent components. More than half of the households have a written list of phone numbers for people who can help in an emergency (62.8%) and copies of important documents (79.2%).

### ***Communications***

During an emergency, more than 4 out of 5 households would communicate with their friends and family via cellular phone calls. The second communication method with the highest frequency was a phone call on a landline (9.1%). The most preferred source of information during an emergency is television (39%) followed by text message (13.2%) and radio (13.2%). Only one-third of households have heard of CodeRED, the reverse 9-1-1 emergency alert system for Carson City. Of those who have heard of this system, about 1 in 5 are registered.

### ***Household Demographics***

Based upon data collected during the CASPER, over half of the population lives in single family homes (58.3%) and over a quarter live in apartments or condominiums (28.3%). The most common household size in Carson City is two people (41.4%) with one person being the next commonly reported (20.7%). A large number of households reported having someone between the ages of 18 and 65 (81.5%) and 28.3% reported having someone over the age of 65 in the household. A majority of the population prefers to speak English in their household (86.0%) and 7.8% preferred to speak Spanish.

### ***Health Conditions and Functional Needs***

The most common reported medical conditions were high blood pressure (32.8%); Asthma, COPD, and Emphysema (18.6%), and physical disability (16.9%). The majority of households have at least one member taking daily medications besides vitamins or birth control (57.5%),

and several households reported at least one member needing a wheelchair, cane, or walker (11.9%).

## **Recommendations**

Based on these findings, QCPHP will guide ongoing work around the following recommendations:

- Community outreach and educational campaigns should continue to teach the public about emergency preparedness while highlighting the importance of having designated meeting spots inside and outside of their neighborhood in case members of the household are separated due to an emergency. Based on responses, the community would like these community outreach campaigns to be made available online and via television.
- There is a large number of multi-unit properties throughout Carson City. Property owners should be educated on emergency preparedness and emergency plans for multi-unit properties.
- Officials should plan to utilize television channels to disseminate emergency alerts and information. Having a relationship with local news and television channels would be useful.
- Information regarding CodeRED should be distributed widely throughout the community to raise awareness of the system. CodeRED sign up events should occur throughout the community.
- Evacuation plans and procedures should account for heavy traffic exiting the community due to the large number of respondents who reported they would go to a friend or family member's home out of the area.
- CASPER results revealed that a portion of the community did not have smoke detectors. Even less respondents had a carbon monoxide detector or a working fire extinguisher. QCPHP will share these results with the Carson City Fire Department Fire Prevention Division to provide them with baseline information that they can use to develop community education campaigns. QCPHP is willing to collaborate with the Carson City Fire Department Fire Prevention Division to encourage the community to have these essential fire prevention items.

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