



Downtown Spruce Pine, NC, September 28, 2024



Pensacola Community, Burnsville, NC, October 4, 2024

Community Assessment for Public Health Emergency Response Conducted in June & August of 2025 Following Hurricane Helene in Mitchell & Yancey Counties, NC

Sustaining Essential And
Rural Community Healthcare

SEARCH

A Note to the Reader

Hurricane Helene shattered many lives in Mitchell and Yancey counties. Over the last year, community members, local organizations and outside agencies have rallied to address the impact of the storm. Tremendous progress has been made, but recovery work continues and much remains to be done. This CASPER survey documents the lasting damage approximately one year after Helene. It demonstrates that work needs to be continued. Findings from this Casper survey can serve as a checklist for individuals and organizations to identify progress achieved and ongoing needs. The results of this survey can also be used to document the continuing hardship when seeking outside funding or additional project assistance needed for Mitchell and Yancey counties to thrive.

Executive Summary

Rural communities face unique challenges after a disaster. They are especially vulnerable because of limited housing, poor transportation infrastructure, employment or income loss, and the shortage of emergency response and recovery resources. Hurricane Helene made landfall in Florida as a Category 4 hurricane, later impacting many locations in Western North Carolina with severe flooding, landslides, and hurricane-force winds. Communications, transportation, and other infrastructures were interrupted for months, leading to disinformation and recovery disruptions in a large number of locations. More than 100 deaths in Western North Carolina were attributed to Hurricane Helene and more than 38,000 homes, both owned and rented, suffered damage as a result of Hurricane Helene, as reported by the North Carolina Division of Community Revitalization. The almost complete collapse of all communication systems impeded evacuation processes and persisted months after the storm, significantly affecting recovery efforts as well.

Key Findings About Needs

Housing and Transportation

The North Carolina Division of Community Revitalization has reported that out of the 38,000 homes damaged as a result of Hurricane Helene, 2,319 of those homes were located in Yancey County and 1,476 were located in Mitchell County. In Mitchell County, entire portions of downtown Spruce Pine were underwater (see cover photos).

Our survey found that 14% of households in Mitchell and Yancey counties reported at least one person staying in the surveyed home at the time of survey was displaced due to the hurricane. More than 35% of households evacuated because of Hurricane Helene. Nearly 18% of all households evacuated after, and 8.33% evacuated during the hurricane. Barriers to evacuation included but were not limited to concerns about leaving pets and livestock, not being able to buy gas or find safe routes or transport, and prohibitive costs.

Environmental Impacts

Nearly a quarter of households reported seeing or smelling mold or a musty odor in their home since the hurricane. Roughly 63% of those households reported the continued presence of mold or odors, with barriers to removal or remediation including but not limited to money or cost, not knowing how, not having access to cleaning supplies or personal protective equipment, being physically unable, or extenuating structural needs. Further, nearly 30% and 16% of households reported environmental hazards such as damaged trees and household debris, respectively, on their property at the time of survey. Nearly 68% of households reported still having at least some debris and waste on their property. Despite all housing and property concerns, nearly 90% of respondents indicated they feel safe living in their home.

Mental Health Needs

Following Hurricane Helene, many households reported one or more members having new or worsening mental health symptoms. Over 40% reported anxiety, while roughly 30% reported trouble sleeping and depression. Nearly 60% of households reported being stressed about another disaster affecting their home. Preferred sources of mental health support were faith-based support, primary care providers, and individualized counseling. Roughly 15% of households reported receiving help from a counselor, pastor/clergy member, therapist, case worker, or social worker to address mental health concerns. Transportation, insurance challenges, and difficulty connecting with providers were cited as barriers for accessing care for those who needed but could not obtain care.

Employment and Economic Impacts

Thirty percent of households reported at least one member having negative changes in their employment (i.e., job loss and found work), job loss and still unemployed, or reduction in work hours following the hurricane. More than half reported no change in their employment status.

Emergency Response and Recovery Resources

More than 40% of all households received some form of assistance from FEMA. Roughly 30% received assistance from non-profit organizations or church groups. The almost complete and total collapse of all communications systems for periods of weeks and months following the storm significantly impeded the evacuation and recovery process.

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Background

Hurricane Helene made landfall in Florida on September 26, 2024, and moved inland to severely impact Western North Carolina with catastrophic flooding, landslides, hurricane force winds and severe damage to housing, businesses and transportation and communications infrastructure. While a major disaster was declared in 39 of North Carolina's 100 counties and for the Eastern Band of Cherokee Indians, several rural counties were particularly hard hit. According to the North Carolina Department of Health and Human Services (DHHS), 108 deaths were attributed to the direct impacts of the storm including 11 in Yancey County and 3 in Mitchell County, 13% of the total. On a per capita basis, that represents the highest death rate in Western North Carolina from Hurricane Helene. According to the National Oceanic and Atmospheric Administration, these two rural counties also experienced two of the top three rainfall amounts measured in North Carolina, 30.78 inches in Yancey County and 23.31 inches in Mitchell County, while the highest wind gusts (92 miles per hour) were recorded in Yancey County.

In November 2024, a local community based organization Sustaining Essential and Rural Community Healthcare (SEARCH) partnered with the Department of Epidemiology at the University of Delaware and Spatial Data Consulting to conduct a modified Community Assessment for Public Health Emergency Response (CASPER) in Mitchell and Yancey Counties, two rural counties severely impacted by Hurricane Helene.

The specific objectives of this CASPER were to:

1. To understand the community needs approximately 1-year after Hurricane Helene.
2. To provide information about ongoing recovery needs and inform long-term recovery and resilience planning.

Methods

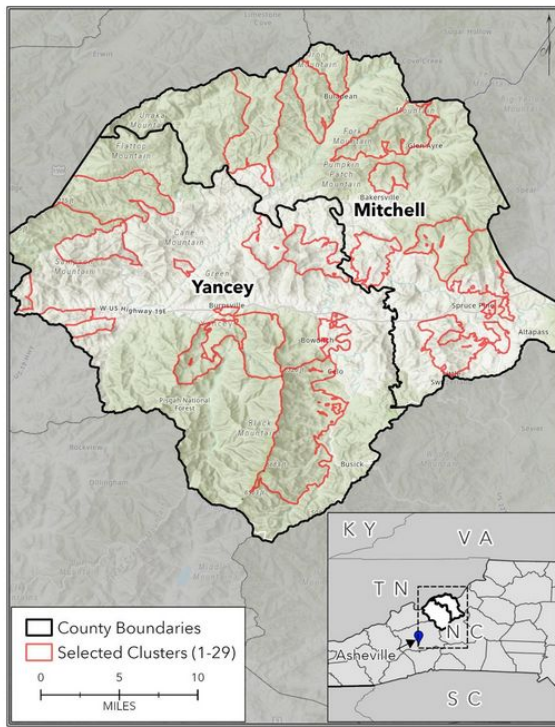
SEARCH, Spatial Data Consulting, and the University of Delaware conducted a modified CASPER using a 29 question survey adapted from a CASPER that was conducted by the Buncombe County Public Health Department in June 2025 with assistance from the N.C. Department of Health and Human Services and local fire departments. The survey included information about the household's members (e.g., age, ownership status, job status, and health insurance coverage), evacuation before, during or after Hurricane Helene, household repair and recovery status (e.g., debris removal, safety, and housing assistance), presence of mold or physical health systems associated with indoor air quality, access to health care, environmental impacts (e.g., safety of drinking water source, wells, and septic systems), and mental health status (e.g., new or worsening symptoms, availability and use of mental health supports, and stressors) (Appendix A). The survey and all related materials were submitted to the University of Delaware's Institutional Review Board, which determined them to be exempt (2291737-1).

The modified CASPER used a two-stage cluster sampling technique developed by the World Health Organization and later modified by the Centers for Disease Control and Prevention for use in disaster settings. The sampling frame for this study included Yancey and Mitchell Counties in Western North Carolina, two rural counties directly impacted by Hurricane Helene. Due to the rural nature of these counties and the large number of U.S. Census blocks with less than 10 households, 20 U.S. Census blocks in each county were selected with probability proportional to population size with replacement in the first stage of sampling. To reduce the number of very small U.S. Census blocks included, the smallest 5 U.S. Census blocks were removed. The final sampling frame included 29 selected U.S. Census blocks (14 in Mitchell County (1 block selected twice) and 15 in Yancey County) (Figure 1). In each selected cluster, 7 random addresses were selected and interview teams of at least two local residents were assigned to each cluster. Paper and electronic maps for each selected block were available to interviewers, who completed a virtual training with Spatial Data Consulting prior to conducting the face-to-face interviews.

Prior to the survey, SEARCH conducted 16 key informant interviews across the two counties with City and County managers, local health department staff, healthcare facility staff, law enforcement personnel, nonprofit organization leaders, and elected officials, and others active in the disaster recovery efforts in Mitchell and Yancey Counties.



Figure 1. Selected U.S. Census blocks for Community Assessment for Public Health Emergency Response, Hurricane Helene, Mitchell and Yancey Counties, North Carolina



Results

Interviewers recorded data about the type of structure and the presence of debris on the property prior to beginning the interview. Most households who participated in the CASPER were living in single family homes (79%). Twenty-nine percent of households had environmental debris on their property at the time of the survey while 16% of households had household debris on their property at the time of the survey.

Household Information

Most of the households that participated in the CASPER included 2 people (43%). Nearly all households had 4 or fewer people (88%) (Table 1). Only 26% of households included any person less than 2 years of age while 67% and 62% had people aged 18-64 and 65 or older, respectively. Most households owned their home (82%) while a minority (15%) were renters.

Table 1. Size of household:

	Frequency	Estimate	% of Households (95% CI)
Less than or equal to 4	159	12,745	88 (83, 93)
Greater than or equal to 5	22	1,715	12 (7, 17)
Total	181	14,460	100

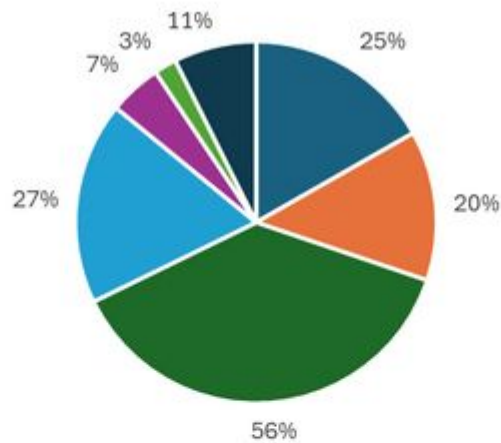
Approximately 14% of households had someone who had been displaced by Hurricane Helene who was still living in their home. About 7% of households reported that a member of their household had lost a job because of Hurricane Helene and had still not found work while 11% lost a job but found another job later. Most people did not gain or lose a job due to the storm (53%), in part because many respondents were likely retired.

Health Insurance

More than half of all households (56%) had someone in the household covered by Medicare while 27% had at least one member covered by Medicaid (Figure 1). Most others were either covered by employer or union provided health insurance (25%) or by insurance purchased directly through an insurance company (20%).

Figure 1. Types of insurance coverage:

(Note: Total greater than 100% due to one response option being "check all that apply".)

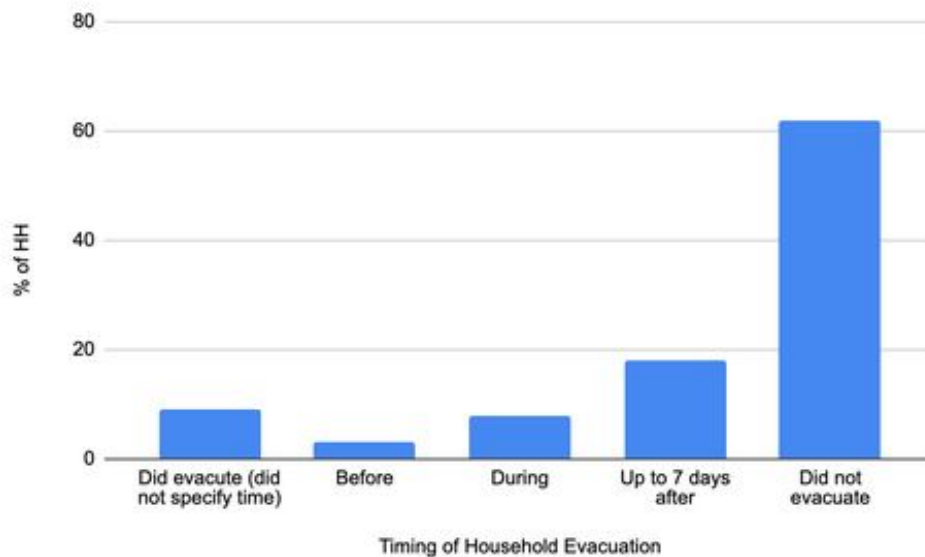


- Insurance through a current or former employer or union
- Insurance purchased directly from an insurance company
- Medicare, for people 65+ or people with certain disabilities
- Medicaid, medical assistance, or any kind of government assistance plan for those with low incomes or a disability
- VA, TRICARE, or Military Healthcare
- Any other type of insurance or health coverage plan
- At least one member without insurance

Evacuation

All or some members of about one-third of households (36%) evacuated at some point during Hurricane Helene. Eighteen percent evacuated up to seven days after the impacts from Hurricane Helene.

Figure 2. Household evacuation timing:



The primary reasons given for not evacuating included feeling that they did not need to evacuate (40%). Many did not evacuate because of damaged and impassable roads (23%). Fewer reported they did not evacuate because they were concerned about leaving their property (5%), did not receive an evacuation alert or warning (4%), because they had nowhere to go (3%), or due to health problems that prevented evacuation (3%).

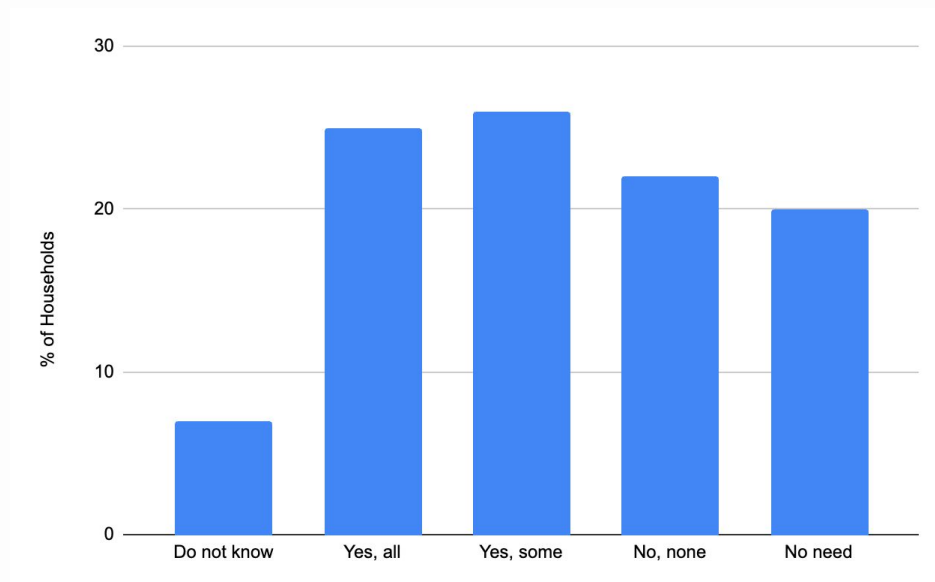
Repair and Recovery Status

The majority of households reported minimal damage to their homes due to Hurricane Helene (38%). There were fewer households reporting moderate damage (15%) and some reported severe damage to their home (14%).

Not including the landscape, slightly less than a quarter of households surveyed (23%) are still not repaired to their original state prior to the hurricane. Nearly one-fifth of households were somewhat repaired (19%) and another 20% of households were fully repaired to their condition prior to the hurricane. The remaining thirty-five percent of households were not damaged, so repairs were not necessary.

About one-quarter of households (27%) had no need for removal of debris and waste from their properties. About 26% of households have had some debris and waste removed from their properties. 25% of households had all debris and waste removed, while slightly less (22%) have not had any debris removed from the property.

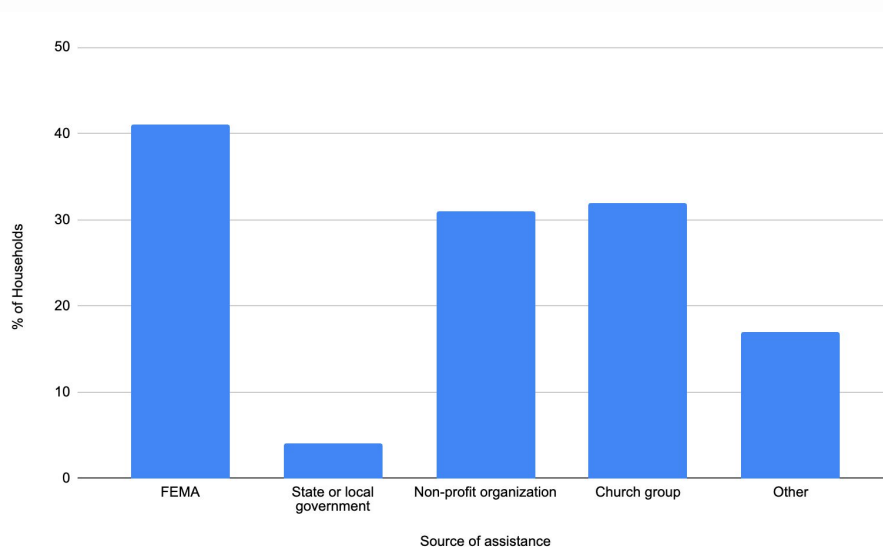
Figure 3. Removal of debris and waste from property:



The majority of households (90%) feel that their home is currently safe to live in, while only 14 (8%) of households feel their home is not currently safe.

Less than half of households (41%) received assistance from FEMA. The second most popular source of assistance among households was church groups, with 32% of households receiving assistance. Slightly fewer households (31%) received assistance from a nonprofit organization. State and local government assistance was least common and only received by 8 households (4%). About one-fifth (17%) of households received assistance from various other sources.

Figure 4. Households receiving hurricane related assistance:

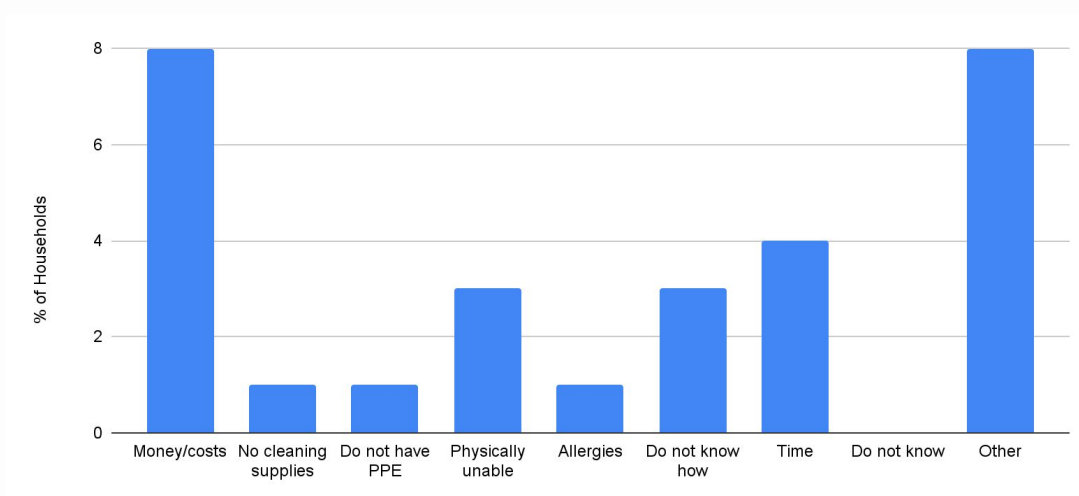


Mold and Musty Odors

Since Hurricane Helene, slightly less than one-quarter of households (22%) have seen mold or smelled a musty odor at some point within their home, while 14% of households reported that their household still currently had the mold or musty odor at the time of the survey. A little more than one-fourth (26%) of households reported they no longer have the smell.

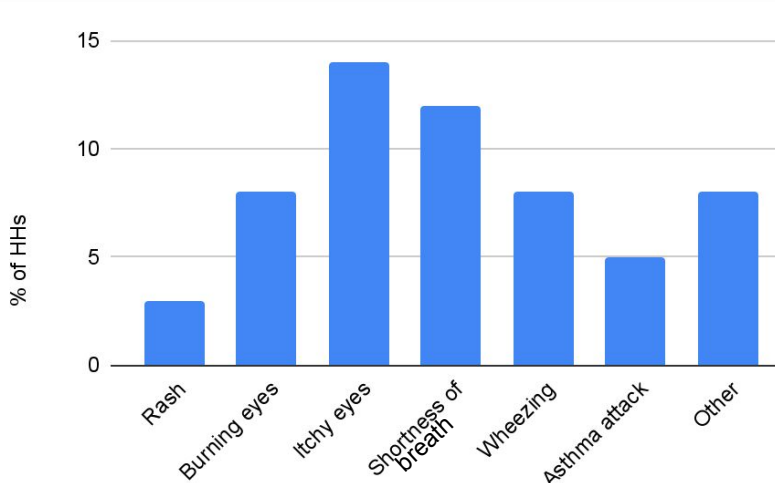
For households experiencing the mold or musty odor, the majority (8%) reported that money and costs were a barrier to taking action to remove the mold or musty smell. The second most common barrier for households (4%) was time. Equal amounts of households (3%) reported lack of knowledge and lack of physical capabilities as the barrier. Eight percent of households faced other barriers to removing the mold or smell.

Figure 5. Barriers faced by households that prevented removal of mold or musty odor:



The most common symptoms experienced by households potentially associated with mold or indoor air quality were itchy eyes (14%) and shortness of breath (12%). Burning eyes and wheezing were both experienced by 8% households. Only 3% of households experienced a rash since the hurricane. A few more households (5%) experienced asthma attacks. Other respiratory issues were experienced by just under 10% of households (8%).

Figure 6. Symptoms that may be associated with mold or indoor air quality experienced by households:



Since the hurricane, a few households have individuals told by a healthcare professional that they have new or worsening food allergies (2%), asthma (4%), and emphysema (4%). New or worsening COPD (4%), heart disease (3%) and hypertension (4%) were also reported. Of the given conditions, new or worsening environmental allergies were seen in the most households (9%).

Access to Healthcare

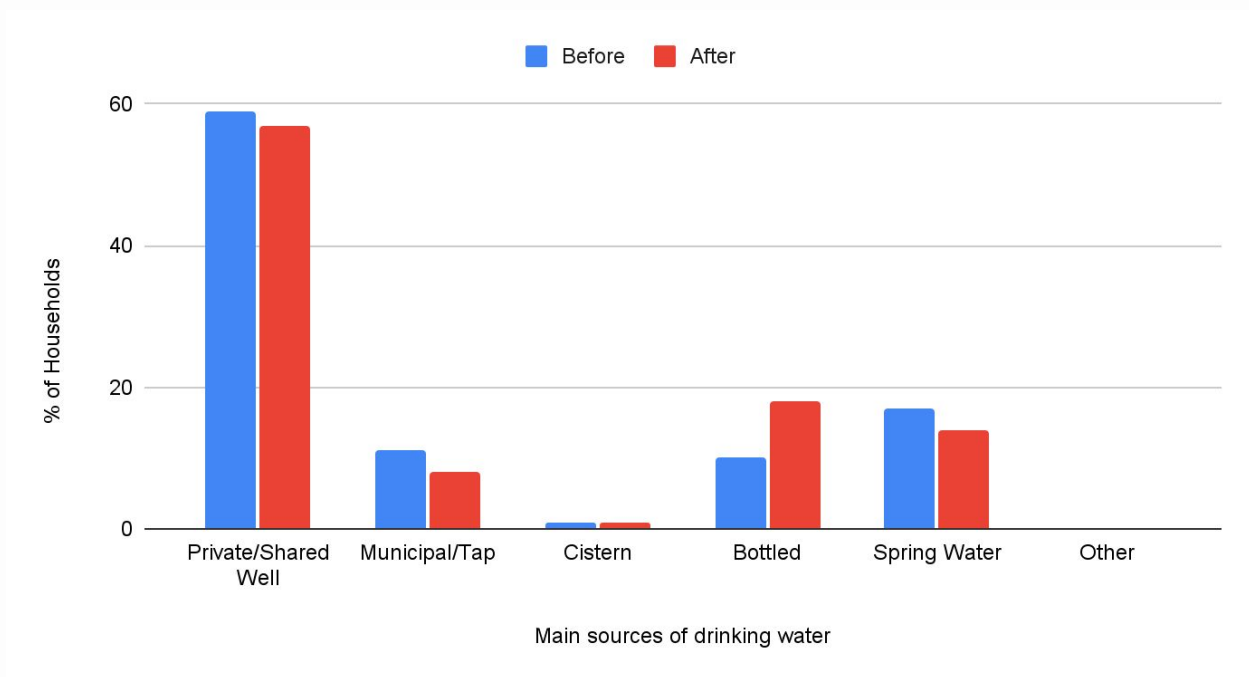
More than half of households (56%) had no difficulties in receiving the medical care they needed, because they were able to receive care from their usual source. Eight percent of households did need to seek medical care but did not have difficulties as they were able to receive care from a source other than their usual source, such as pop-up mobile clinics established by local first responders, volunteer fire departments, and volunteer organizations like the American Red Cross. However, 15% of households had difficulties in getting necessary medical care. Slightly less than a quarter of households (21%) did not need help and therefore did not attempt to seek medical care.

Difficulties in receiving medical care due to a lack of transportation were reported by 5% of households. A few households (3%) reported money and costs caused difficulty in receiving care. Similarly, 3% of households had difficulties in receiving needed medical care because the usual clinic was closed or their usual healthcare provider was unavailable. Only 2% of households reported difficulties caused by issues with insurance, and another 2% of households had difficulties due to disruption of home health services. Lack of cell phones and internet access created difficulties in receiving medical care within only 1% of households. Of the households that experienced difficulty in receiving medical care, the majority experienced problems other than the previous ones identified (7%).

Observed Environmental Impacts

More than one-third of households (34%) are aware of the presence of environmental hazards near their residence since Hurricane Helene. These environmental hazards include contaminated air, water, and soil. Before the hurricane, more than half of households (59%) utilized a private or shared well as their main source of drinking water. This decreased slightly after the hurricane (57%). Municipal (City) water was the main source of drinking water for 11% of households, and after the hurricane fewer households reported municipal water as their primary source (8%). Both before and after Hurricane Helene, only 1% of households reported using a cistern as a source of drinking water. Prior to Hurricane Helene, fewer than one-fifth of households (17%) used spring water and after the hurricane slightly fewer households used spring water as their primary source (14%). Bottled water was the only source seen to increase in use after the hurricane, increasing from 10% to being the primary source of water for 14% of households.

Figure 7. Main source of drinking water among households before and after Hurricane Helene:



The majority of households (61%) feel that their source of tap water is safe, while 16% do not feel their source of tap water is safe. Fewer households (11%) were unsure. Of households using well water, 9% experienced well flooding during or immediately after Hurricane Helene. Slightly more than half of households (52%) did not have their well flood.

Septic Systems

The majority of households have a septic system (78%) while only 20% of households do not. The majority of septic systems did not flood (72%) but some households did report septic system flooding during and after Hurricane Helene (7%). About one-fifth (21%) of households were unsure or preferred not to answer if their septic system had flooded.

Some households (6%) experienced a soggy area in the yard where the septic system is located (even without rainwater). Sewage backing up into sinks, toilets, or tubs was mentioned by 5% of households. Five percent of households also experienced sewage overflowing from the septic and pump tanks, or unusual odors around the septic tank, drain field, or even within their home. After the pump was turned on, one household reported experiencing a soggy area on the ground surface. One percent of households experienced fixtures draining slowly, while the majority of households (66%) did not experience any of the above issues.

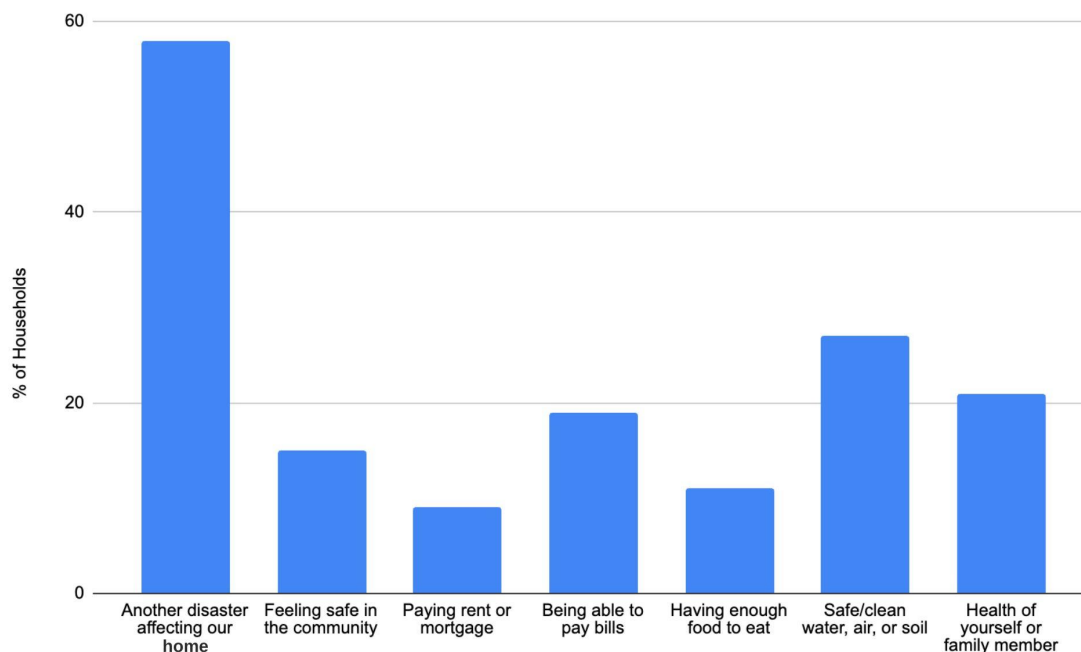
Household Mental Health Status

Since Hurricane Helene, 17% of households have members that needed help, but did not receive help from a counselor, pastor or clergy member, therapist, case worker, or social worker for behavioral health concerns. Fewer households (15%) report receiving help from these sources for behavioral health concerns, while the majority of households (64%) report not needing assistance for behavioral health concerns.

Difficulties in seeking services for behavioral health due to barriers such as insurance limitations, transportation issues and mental health were seen in 6% of households. Around one-third of households (34%) had no difficulties seeking services. More than half of households (55%) did not have a need to seek services for behavioral health concerns since the hurricane.

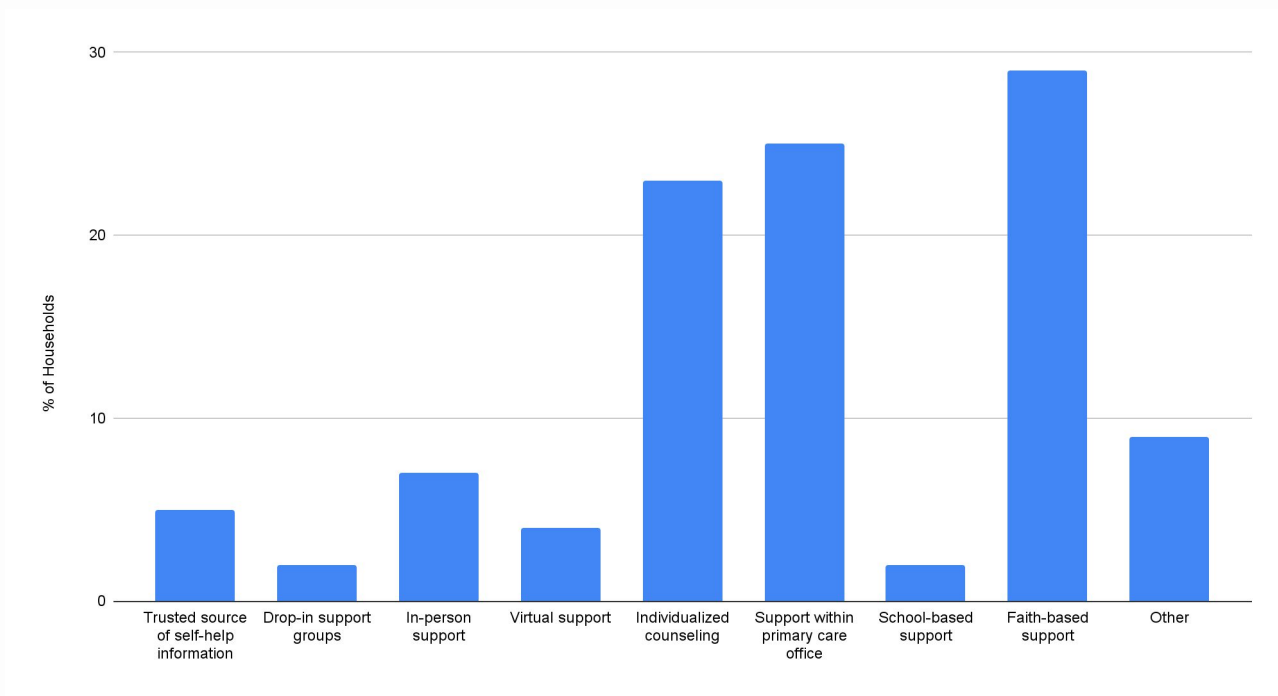
Since Hurricane Helene, the majority of households (58%) worry or stress about another disaster affecting their home. More than one-fourth of households (27%) are worried about safe and clean water, air, and soil. Twenty-one percent of households have individuals who are worried about the health of themselves or another family member. Stress about the ability to pay bills was reported in about one-fifth of households (19%), and slightly fewer households (15%) have worry or stress about feeling safe in their community. Worrying about paying rent or the mortgage was reported by the fewest households (9%). Eleven percent of households reported worry or stress about having enough food to eat.

Figure 8. Areas of concern amongst households after Hurricane Helene:



One-fourth of households (25%) prefer to get mental health support through their primary care office. Slightly fewer households (23%) prefer to utilize individualized counseling. A larger number of households (29%) prefer faith-based support for mental health. Drop-in support groups (2%) and school-based support (2%) were preferred by only a few households. Slightly more households (4%) prefer virtual support or a trusted source of self-help information (5%). In-person support for mental health was preferred by 7% of households. Other sources of support such as family, neighbors and friends, medication, and fitness centers and communities are the preferred source for 9% of households.

Figure 9. Preferred source of mental health support:



Discussion

One year after Hurricane Helene many households in Mitchell and Yancey Counties are still continuing to recover. Prior research demonstrates the critical importance of housing recovery to the overall recovery process (Khajehei & Hamideh, 2024), yet slightly more than 14% of households in Mitchell and Yancey Counties still report that they have someone living within their home who was displaced by the storm. This is not surprising as results from this CASPER estimated approximately 29% of homes in these two rural counties were either moderately or severely damaged by the storm. It is important to note that residents whose housing was destroyed or rendered uninhabitable because of Hurricane Helene were absent from their homes and could not be interviewed. As a result, the findings of damage from this survey may not accurately reflect the total degree of devastation that has occurred within the community.

After the scope and scale of the total impacts of Hurricane Helene in Mitchell and Yancey Counties became apparent, SEARCH WNC (Sustaining Essential and Rural Community Healthcare) began a collaboration with the Department of Epidemiology at the University of Delaware and Spatial Data Consulting to attempt to (1) identify community needs approximately 9 to 12 months following the storm, (2) supply valuable data to healthcare providers, governmental agencies and local area nonprofits to assist in ongoing recovery needs and (3) help prepare our region for long-term recovery and the next disaster. It was determined that a modified CASPER survey for Mitchell and Yancey Counties was the best way to meet these objectives as it includes a statistically valid method of obtaining data directly from the residents who experienced the storm and also included direct, in-person interviews with key personnel who were involved since beginning efforts of responding to the storm. These key personnel included City and County managers, local health department staff, healthcare providers, law enforcement personnel, nonprofit organization leaders and elected officials.

The 16 key informant interviews were completed between March and June of 2025. The CASPER survey began on the weekend of June 27 with a group of both local volunteers and volunteers from the surrounding region. SEARCH and some local volunteers continued the survey process over the next several weeks and completed the process over the weekend of August 17, 2025. There were 183 surveys completed (out of a total sampling size of 210 surveys), resulting in an 87.1% completion rate. The Contact Rate (total surveys completed divided by the number of households approached) was 55.1% and the Cooperation Rate (total completed surveys divided by the number of houses where contact was made) was 85.1%. The vast majority of residents contacted were eager and thankful to have the opportunity to tell the stories of their experiences.

Household Information

The NC Division of Community Revitalization has reported that in Yancey County, approximately 11.4% of households had a job loss following the storm, which was the second highest in Western North Carolina. More than half of surveyed households had some household member insured through Medicare and a little more than a quarter of households had a member insured through Medicaid. Almost half of households had someone insured through an employer or the market. Those numbers are significant when viewed in the context of current Federal and State tax and budget policies.

After the storm, more than 13,000 reports of damage to private roads and bridges were submitted to the State's Private Roads and Bridges Program (N.C. Department of Public Safety, n.d.) and 1,400 state roads and 818 state-maintained bridges were reportedly damaged and closed (Colburn, 2025). Although many roads and bridges have been repaired since Hurricane Helene, the damage to the transportation infrastructure in the Western North Carolina region remains a major challenge to recovery.

The key informant interviews showed that the near total loss of communications in the immediate aftermath of the storm was a significant impediment to rescue efforts and evacuation decisions. Proper planning and preparedness can help improve recovery efforts in future disasters.

As of the date the survey was conducted, a large number of residents that reported damage to their houses had yet to have that damage repaired. In fact, when the survey was conducted, only about 20% of households have had their homes returned to their original condition. Many households still have wood debris and household debris on site. Cost, lack of insurance proceeds and a lack of reliable contractors were reported as the biggest reasons for lack of repair.

While approximately 40% of households reported receiving FEMA aid, it is important to note that many of the households reporting FEMA assistance indicated that they only received the minimum \$750 payment and did not receive assistance from FEMA to compensate for losses and household damage. It was clear that many residents were unsure how or where to seek help. The volunteers conducting the survey distributed information leaflets describing the existence of the Mitchell and Yancey County Long Term Recovery Groups (LTRGs) and how to seek assistance from them. Future preparedness planning should include a clear plan to deliver recovery efforts as well as how to communicate where that help can be received.

Health Information

About 15% of residents did have difficulties obtaining needed medical care due several issues. These included lack of transportation, cost issues, their usual provider was unavailable, insurance issues and disruption of home health services. Based upon key informant interviews and some comments from residents, it was learned that some specialty care services (for example, services from specialists who come to the region once a week) were completely interrupted because the providers decided to stop coming to the region. Improvements to being able to access healthcare after a major storm should be made in storm preparedness plans.

The survey found that environmental health issues (i.e., contaminated air, water and soil) remained an issue at the time of survey. Some of this contamination is associated with wood and household debris remaining on residents' properties and some is associated with lingering mold issues that have not yet been remediated. While most households that use tap water felt that their water was safe, approximately 25% of residents either did not feel their tap water was safe or did not know. That is a large portion of the population that doesn't have confidence and trust in their tap water supply.

The vast majority of residents have septic systems and most of those were not damaged in the storm. However, a number of residents did experience damage to their water source and/or septic systems. Residents of Spruce Pine were advised not to use their septic systems for months following the storm because the sewer treatment plant for the City of Spruce Pine was

completely destroyed in the storm. However, rivers running through many other locations were contaminated with sewer discharges for a significant period of time after Hurricane Helene. Based upon work with on-going long-term recovery groups, it is known that water issues for both drinking water and sewer/septic water account for a significant part of many home repairs that have not yet been completed.

Similar to results from other post-disaster CASPERs, new or worsening mental health symptoms were reported by many households. While reports of new or exacerbated mental health conditions like anxiety, depression, or post-traumatic stress disorder are common following disasters, identification and referral of individuals to appropriate care remains difficult in a post-disaster setting (North & Pfefferbaum, 2013). Other factors identified as prevalent in this study, like displacement, have been shown to increase the risk for, and symptoms of, preexisting mental health issues (Schwartz et al., 2017). Based on conversations with key personnel and survey participants, it is known that stress and anxiety about economic issues (uninsured losses, loss of job, etc) has contributed to the need for counseling. Almost one-third of residents responded that they needed help from a counselor, pastor, therapist, etc., and of those, about half actually got the help that they needed. Barriers to not getting needed help included insurance issues and lack of transportation. It was clear during the survey that a large number of people remain concerned about another storm (58% of households) and/or how they are going to get back on their feet. Providing improvements to access to counseling services is an important issue that needs to be addressed.

This study has several important limitations. As survey data was collected up to 11 months after Hurricane Helene initially impacted Western North Carolina, there is potential for recall bias. However, Hurricane Helene was a major disaster event in an area not often impacted by hurricanes, making it likely that respondents would accurately remember their experiences. In addition, CASPER surveys are cross-sectional, so the temporal relationship between exposure to Hurricane Helene and outcomes reported by respondents cannot be confirmed. Response bias is also possible if respondents felt that some responses were more socially desirable than others, for example reporting evacuation. To reduce response bias, surveyors were local residents who had also experienced the impacts of Hurricane Helene and were involved as volunteers with a well-known community based organization. A lot of significant damage occurred along rivers and streams as distinguished from higher elevations therefore the frequency of severe damage may be understated. The Contact Rate for this survey was approximately 54% meaning that the survey teams had to approach about twice as many homes as was needed for the survey due to people not being home, people deciding that they did not want to take the survey, or people that did not have enough time to take the survey. Households that chose to complete the interview may be different from households that did not or could not.

Conclusions and Recommendations

- (1) Communications/Emergency Preparedness: The total failure of all forms of customary communications during and in the immediate aftermath of the storm materially hampered emergency response. This communication blackout inhibited the ability of residents who were in the region during the storm to evacuate, delayed and frustrated residents' ability to find food, water, and healthcare, facilitated the spread of false information, and created an erosion of trust and confidence in the rescue and relief effort. We recommend that collaborative relationships be formed between County emergency response personnel, long-term resilience groups and local nonprofits in each County to (a) develop written disaster response plans that include a system for communicating emergency evacuation warnings and a clear delegation of responsibilities for disaster response. These plans should include communication to the public of evacuation routes, where and how to locate food, water, shelter and healthcare assistance, evacuation of livestock, management and distribution of incoming in-kind donations, and direction on how to locate essential transportation, (b) locate funding to acquire communication equipment to be used by first responders, law enforcement and other disaster response personnel that are reliable for use in circumstances where Wi-Fi, cell phones, television, radio and other forms of customary communication have been compromised, and (c) develop a means of educating the public about the agreed emergency warning systems and disaster response plans. We acknowledge that due to the expertise and professionalism of our emergency preparedness personnel, County officials and health departments, progress is already underway for many of these recommendations.
- (2) Housing: Hurricane Helene had a devastating impact on housing in Mitchell and Yancey Counties and many in the area are still living in damaged or temporary housing. A number of the damaged residences, especially along the rivers, can never be replaced. Each County has already formed a long-term resilience group to address housing repairs and unmet needs. We recommend continuing the collaborative partnerships created through these LTRGs and to strengthen the LTRGs' efforts by (a) recruiting new and additional volunteers to continue the housing repair process that is anticipated to last well into 2027, (b) locating grants and other funding for continued LTRG efforts,(c) educating the public about the existence of the LTRGs and how they can help residents that need assistance with cleaning, replacing and/or repairing their residence including water and septic system repairs, the elimination of mold, repair of access ways and culverts, and the winterization of campers and housing, and (d) conduct listening sessions with the public in the two County area to more specifically and completely understand the extent of need to return residents to pre-Helene status in respect of their housing.

- (3) Access to Healthcare: Access to Healthcare issues were already problematic in Mitchell and Yancey Counties before Hurricane Helene hit and the storm has exacerbated all of those access to healthcare issues including housing, lack of public transportation, lack of availability of some healthcare services within a reasonable distance and a lack of professional healthcare providers (including in behavioral health). Given current spending and budget policies at the Federal and State level, the cost of health insurance is likely to increase for many, food security is likely to diminish and some will lose healthcare insurance completely. While many of the access to healthcare issues here were not caused by Helene, we know that Helene has made them worse, including the need for effective behavioral health services. We recommend that collaborative relationships be formed with local healthcare providers, health departments and nonprofits to (a) create and expand the use of effective telehealth and mobile health services, (b) recruit professionals in specialty healthcare services to open offices and/or spend some professional time in this region, including in behavioral health and maternity care specialties, (c) identify methods and financing sources to address the healthcare needs of the increasing number of uninsured or underinsured residents of this region and (d) create an educational platform to inform residents of general wellness trends, the health ramifications of mold, unclean water and contaminated soil, and available local healthcare services and where to find them.

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