



Utah health status update

Key findings

- Male children are significantly more likely to have developmental concerns reported on the ASQ-3 and behavioral concerns reported on the ASQ:SE-2.
- Rates of reported developmental screening concerns on the ASQ-3 are higher for children who are American Indian/Alaska Native (AI/AN) and Asian compared to White children.
- Populations where screening is done more regularly reported a lower average rate of concerns.

Developmental screening results for Utah children younger than age 6

The Ages and Stages Questionnaires (ASQ) are a group of developmental screening tools to be used by parents or caregivers so they can monitor their child's development and identify those who could benefit from intervention and resources. The ASQ-3 and ASQ:SE-2 are scored, and a child may score as "typical/no concern," "monitor," or "concern."

The Utah Department of Health and Human Services ASQ online account has stored data collected by various state and other early childhood service providers since 2010. This screening also collects information (as reported by parents/guardians) such as the ZIP code where the child lives, county, gender, and race and ethnicity. In 2023, the data from this account was used to evaluate 25,943 children who were screened between 2018 and 2022. This data was analyzed to answer the following questions:

- 1) Are parents of children of different races, ethnicities, and gender reporting developmental concerns at the same rate?
- 2) Are parents reporting developmental concerns at the same rate in different poverty groups?
- 3) Are parents of children of different races and ethnicities reporting developmental concerns at the same rate among different poverty groups?

Methodology and results

Results from the first time a child was screened using the ASQ-3 and the ASQ:SE-2 were sorted by race, ethnicity, and gender. These groups were then sorted into 4 different poverty groups based on the ZIP code poverty level. The percentage of children with a result of concern in each of these groups was compared to the total percentage of children with a result of concern on both screenings.



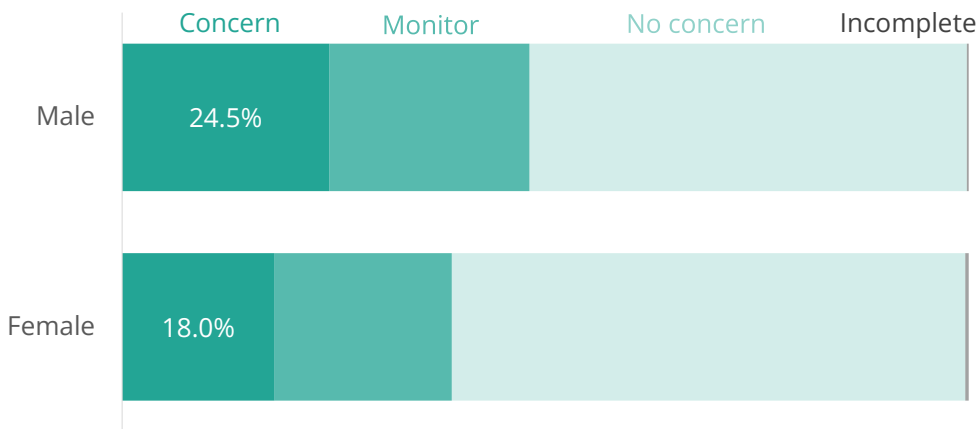


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For the ASQ-3, the average percentage of children with reported concerns is 21.4%. In contrast, 32.2% of American Indian/Alaskan Native (AI/AN) children and 26.1% children listed as other race had results of concern. Children in the highest poverty group were more likely to have results of concern (28.5%) than children in other poverty groups. When viewed by gender, only 18.0% of females have reported concerns, compared to 24.5% of males (Figure 1). The largest difference in the highest poverty group (32.3% for males and 24.1% for females). By ethnicity, non-Hispanic children (21.8%) were more likely to have results of concern compared to Hispanic children (17.4%).

Figure 1. Percentage distribution of ASQ-3 results by gender

Males were more likely to have reported concerns (24.5%) than females (18.0%).

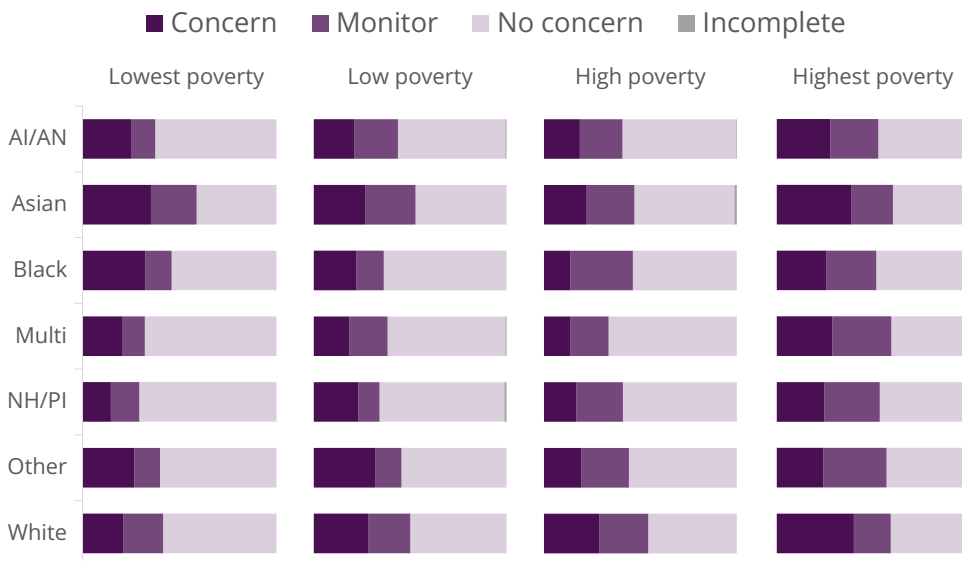


Source: ASQ data extract

On average, 21.4% of parents reported developmental concerns about their children on the ASQ-3. However, there are significant differences by race, ethnicity, and gender in the poverty groups. Children listed as Asian, AI/AN and other race had higher rates of concern in various poverty groups than average (Figure 2).

Figure 2. Percentage distribution of ASQ-3 results by race and poverty group

Differences in scores can be seen for both race and poverty groups.



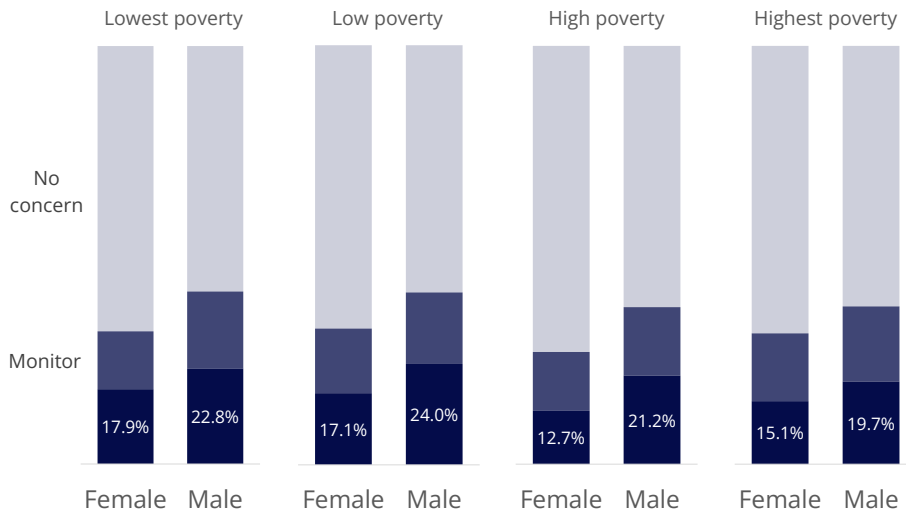
Source: ASQ data extract

The average percentage of children with reported concerns on the ASQ:SE-2 is 18.8%. No significant difference was found between the percentage of children with reported behavioral concerns of different races or ethnicities for the ASQ:SE-2. However, male children were much more likely to have reported behavioral concerns with 21.9% in contrast with 15.2% of females. Like the ASQ-3 results, this difference in reporting of concerns for male children was maintained across poverty groups with the largest difference in the high poverty group (21.2% of males and 12.7% of females had scores of concern). Also, more parents

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Figure 3. Percentage distribution of ASQ:SE-2 results by gender and poverty group

Males were more likely to have reported behavioral concerns in all poverty groups, but the largest difference is in the high poverty group.



Source: ASQ data extract

in the higher 2 poverty groups reported behavioral concerns than parents in the wealthier groups (Figure 3).

Conclusions

Differences in the percentage of children with reported concerns on the ASQ-3 by race is consistent across poverty groups. Variations in the percentage of concerns on the ASQ-3 by race, particularly AI/AN, Asian, and other race may suggest that children in these populations only receive developmental screenings after a concern has been mentioned about developmental delay. A more

universally conducted screening is expected to result in more equal concerns across races in the same poverty group, since socio-economic status is a known driver of developmental delay.¹

The Utah-specific data for the ASQ:SE-2 confirms nationwide data related to developmental delays in boys being more common,² but also relates to the perspective of caregivers which may put more focus on male behavior. Boys may be more likely to be screened for behavioral issues, since boys are more likely to be diagnosed with a mental, behavioral, or developmental disorder than are girls.³ It is also possible that parents in the higher poverty groups are more likely to screen for behavioral concerns.

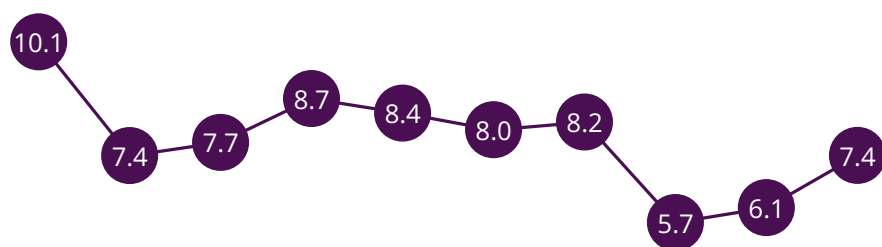
It is important to remember that the reported concerns do not necessarily mean that developmental or behavioral concerns occur at higher rates in specific populations. Instead, it reflects the access to and education about the importance of developmental screenings in different populations. These results suggest that while this screening is available to all Utah children, in many populations, only parents who are concerned about their child’s development access the screening. We must work toward universal developmental screening to appropriately address the needs of all children and families in Utah.

1. Ahmadi Doulabi M, Sajedi F, Vameghi R, Mazaheri MA, Akbarzadeh Baghban A. Socioeconomic Status Index to Interpret Inequalities in Child Development. *Iran J Child Neurol.* 2017 Spring;11(2):13-25. PMID: 28698723; PMCID: PMC5493825.
 2. Zablotsky B, Ng AE, Black LI, Blumberg SJ. Diagnosed developmental disabilities in children aged 3–17 years: United States, 2019–2021. *NCHS Data Brief, no 473.* Hyattsville, MD: National Center for Health Statistics. 2023. DOI: <https://dx.doi.org/10.15620/cdc:129520>.
 3. Data and Statistics on Children's Mental Health. Centers for Disease Control and Prevention, National Center for Injury Prevention and Control, <https://www.cdc.gov/childrensmentalhealth/data.html>, [cited 2024 Sept].

Student injuries in Utah

The Student Injury Reporting System (SIRS) tracks injuries that happen while students travel to and from school, and during school time or school-related activities. SIRS helps identify where, when, how, and why students get hurt at school. This gives education officials a way to pinpoint risk factors, and develop safety guidelines and prevention programs to reduce student injuries. Schools are not required to report. However, all 42 Utah school districts and more than 800 public schools have participated.

Figure 1. Student injuries in Utah per 1,000 K-12 students by school year



During the 10 years from 2012 to 2022, the fewest number of student injuries was reported in the 2019–2020 school year (5.7 per 1,000 students), and then the rate increased year over year into 2021–2022.^{1,2} The sharp decrease from the 2018–2019 school year to the 2019–2020 school year was most likely due to the COVID-19 pandemic and quarantine measures, so kids spent less time at school or traveling to and from school (Figure 1).

2012-2013

2021-2022

Source: Student Injury Reporting System, Violence and Injury Prevention Program, Utah Department of Health and Human Services

Figure 2. Student injuries in Utah per 1,000 K-12 students by grade, 2019-2020 to 2021-2022 school years

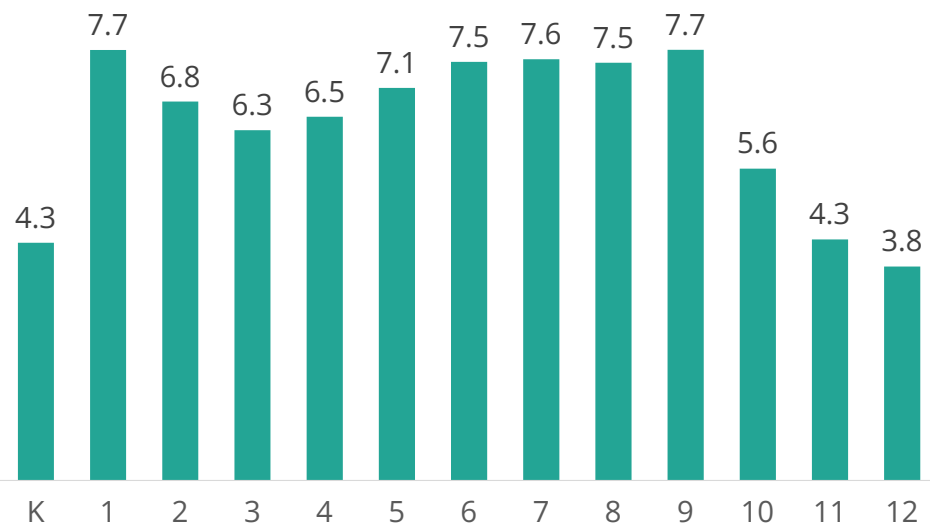


Figure 2 shows that the highest rate of student injuries was among 1st and 9th graders (7.7 per 1,000 students). The lowest rate of student injuries was among 12th graders (3.8 per 1,000 students).^{1,2} The injury rates among 1st and 9th graders suggest a need for age-specific safety interventions. It might be helpful to use play-based learning along with safety education for 1st graders given their developmental stage. It is also important to note the rate increase from 5th to 6th graders. As those in middle school/junior high were most likely to be injured during PE class, targeted injury prevention programs in PE classes would be helpful for that population. For 9th graders who are moving into high school and may be doing more intense physical activities, targeted injury prevention programs in PE classes and sports could be helpful.

Source: Student Injury Reporting System, Violence and Injury Prevention Program, Utah Department of Health and Human Services



Broken bones were the most common injury type among all school age groups: elementary schools (44.3%), middle schools/junior high schools (26.3%), and high schools (19.0%). Elementary school students were most likely to be injured during recess/lunch recess (70.2%), and middle school/junior high (40.1%) and high school students (27.9%) during physical education class. Elementary school students were most likely to be injured on the playground/playfield (72.4%), and middle school/junior high (34.7%) and high school students (31.8%) in the school gym.¹

These findings suggest a need for more supervision during recess for younger students and organized activities during PE for older students to prevent injuries. More aides or more training to help current staff to recognize and address unsafe behaviors during these times could help. Because broken bones are so common, it could be helpful to put in safer playground surfaces to reduce such injuries. It's also important to keep sports and PE equipment updated and to conduct regular safety audits.

Prevention tips

1. Watch children carefully when they play on age-appropriate playgrounds.
2. Teach playground etiquette to children—not to push, shove, or crowd other children on the playground.
3. Dress in the right clothes for play time—no loose clothing, shoes, or accessories.
4. Check equipment and surroundings—make sure there are no hazards and the ground is made of soft, absorbing, and well-maintained materials.
5. Wear the right protective gear for the sport/activity and make sure it fits and is worn correctly.
6. Children who are injured should not return to play if there has been a possible concussion or traumatic brain injury. See a doctor first.

1. Student Injury Reporting System Data, Violence and Injury Prevention Program, Utah Department of Health and Human Services, 2012–2021 data queried via Utah's Indicator Based Information System for Public Health (IBIS-PH) [cited 2024 January].

2. Fall Enrollment by Grade Level and Demographics, Utah State Office of Education

Long COVID epidemiology in Utah and available supports

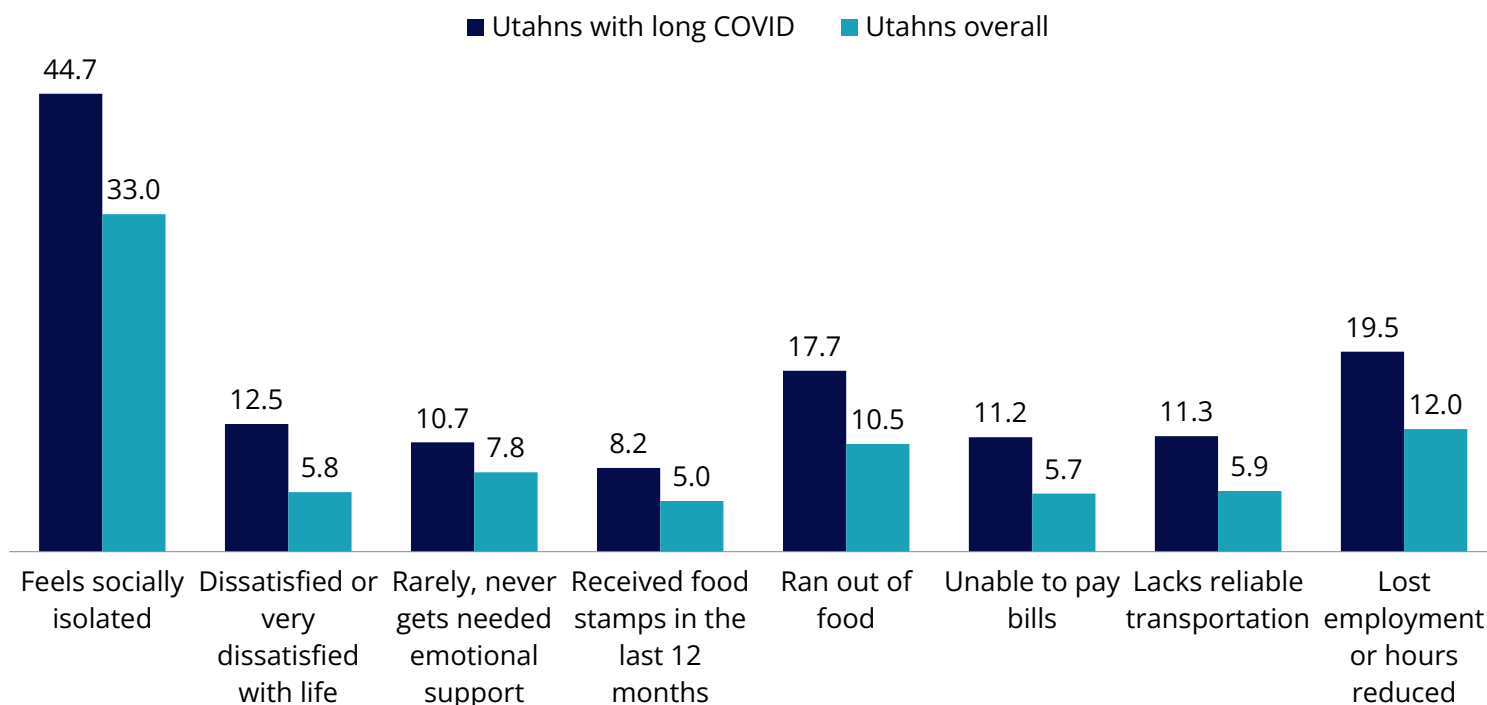
Long COVID is a condition where people experience a range of health issues after a COVID-19 infection. Symptoms can affect different body parts and may last months or years after the infection. Symptoms include physical and mental health challenges like fatigue, shortness of breath, loss of smell, muscle aches, difficulty concentrating, and chest pain. In 2022, the Utah Behavioral Risk Factor Surveillance System (BRFSS) survey asked Utah residents about their health and Long COVID experiences.

Long COVID is more common in Utah than in the U.S. overall. In Utah, 9.6% of all adults had experienced Long COVID compared to 6.9% nationally.¹ Among Utahns who had a COVID-19 infection, 1 in 4 reported Long COVID symptoms compared to 1 in 5 in the general U.S. population.² Long COVID was more common among women and adults younger than 65 years old.

Poorer general health, physical health, and mental health were reported by people with Long COVID. People with Long COVID reported disability, chronic diseases, depression, problems concentrating, and chronic pain more often than Utahns overall.

Long COVID can have significant and lasting impacts on a person's quality of life. Utahns with Long COVID were more socially isolated and had greater financial challenges than Utahns overall (Figure).

Percentage of respondents reporting each factor, Utahns with Long COVID vs. Utahns overall, 2022



Source: Utah Behavioral Risk Factor Surveillance System

This survey does not allow us to learn if these challenges were a result of Long COVID or if they were part of the reason the people developed Long COVID. More study is needed to better understand the factors that may cause or result from Long COVID.

The best way to lower your risk of Long COVID is to stay up-to-date on COVID-19 vaccinations.³ For more information on Long COVID in Utah, including resources for medical providers and patients, see <https://dhhs.utah.gov/wp-content/uploads/Long-COVID-in-Utah-v2.5.pdf>.

1. Adjaye-Gbewonyo D, Vahratian A, Perrine CG, Bertolli J. Long COVID in Adults: United States, 2022. NCHS Data Brief, no 480. Hyattsville, MD: National Center for Health Statistics. 2023. DOI: <https://dx.doi.org/10.15620/cdc:132417>

2. Nguyen KH, Bao Y, Mortazavi J, Allen JD, Chocano-Bedoya PO, Corlin L. Prevalence and Factors Associated with Long COVID Symptoms among U.S. Adults, 2022. *Vaccines*. 2024;12(1):99. DOI: <https://doi.org/10.3390/vaccines12010099>

3. Centers for Disease Control and Prevention. Long COVID Basics. 11 July 2024. <https://www.cdc.gov/covid/long-term-effects/index.html>

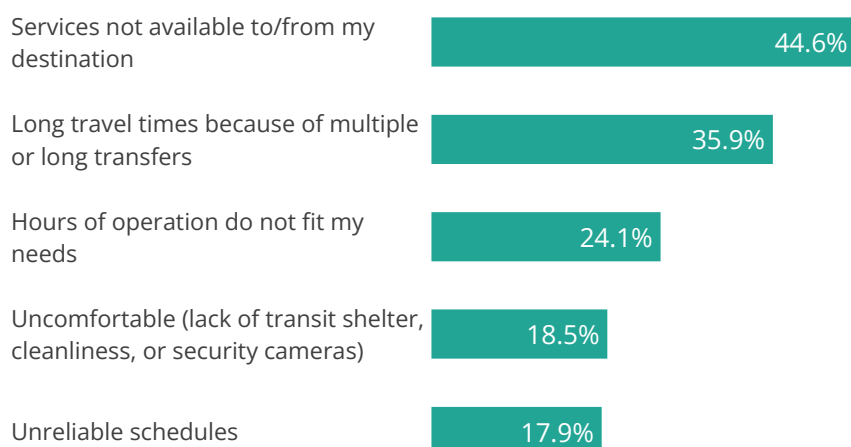
How transportation impacts access to healthcare services

Transportation is an important part of access to healthcare services. People who don't have reliable transportation face barriers in reaching medical appointments, treatments, pharmacies, hospitals, and clinics. For a lot of people, particularly those who don't have reliable transportation, accessing healthcare can become a big challenge that impacts their overall health and well-being.

For people who don't have access to a personal vehicle, it can be even harder to access healthcare. This is particularly true for low-income households, people who have disabilities, and those who don't have a driver's license. It can be very difficult to get to appointments for anyone who doesn't have a car. They either have to depend on others to take them or learn how to use the public transit system.

Many people depend on public transportation instead of a personal vehicle, but it doesn't always meet the needs of Utahns (see figure). Public transit routes aren't always located near a person's home or work and the healthcare facility they need to visit. A lot of routes also don't run very often and that means passengers need to leave for appointments really early or get back from appointments very late, which doesn't always work when you think about work, family, and caregiving responsibilities. Even when public transportation options are available, they often do not work for the specific needs of people who have disabilities.

Top public transportation issues reported, Utah, 2023



Source: Transportation Equity Report

People who have chronic health conditions or disabilities that require a lot of medical attention are the most impacted by transportation unfairness. Regular and reliable access to healthcare is an important part of managing these conditions, and transportation barriers can make people miss appointments, which makes their health worse, and increases reliance on costly emergency services. It can be even harder in rural areas since the nearest necessary services may be very far away.

Public transportation also has an impact on access to opportunities and essential community resources. In a recent survey, the Utah Developmental Disabilities Council asked people to identify places they struggled to get to or couldn't access because of transportation barriers. Besides health and treatment facilities, participants also identified gyms and fitness centers, grocery stores, schools, workplaces, religious services, social activities, community events, parks and recreation centers, and family and friends' homes.¹ Limited access to such resources can have significant impacts on overall well-being, including physical and mental health.

Transportation issues can also threaten employment stability. In the U.S., where health insurance is often tied to employment, losing a job because of transportation issues can lead to the loss of health coverage, which adds a financial strain and limits access to necessary care even more. While some people could move to areas with better public transit options and better access to employment, healthcare, and social services, a lot of time this means

moving to urban areas where the cost of living is much higher. This option can also mean that people would be moving away from their existing communities, including their family and friends.

It is important to address access to transportation if we hope to improve healthcare access. Critical steps include expanding and improving public transit options, making sure accessible and affordable, and addressing physical limitations. Get Healthy Utah, a nonprofit organization, has resources for transportation authorities, healthcare and local governments to help them take steps toward improving transportation access. Find out more about their work at <https://gethealthyutah.org/resources/communities>. If we can tackle these issues, we can work toward a more equitable healthcare system where transportation is not a barrier to receiving the care needed to maintain health and well-being.

1. Transportation Equity Report, Spring 2024. Utah Developmental Disabilities Council (UDDC). <https://uddc.utah.gov/wp-content/uploads/Transportation-Equity-Report-2024-1-1-1-1.pdf>