



# Utah health status update

## Key findings

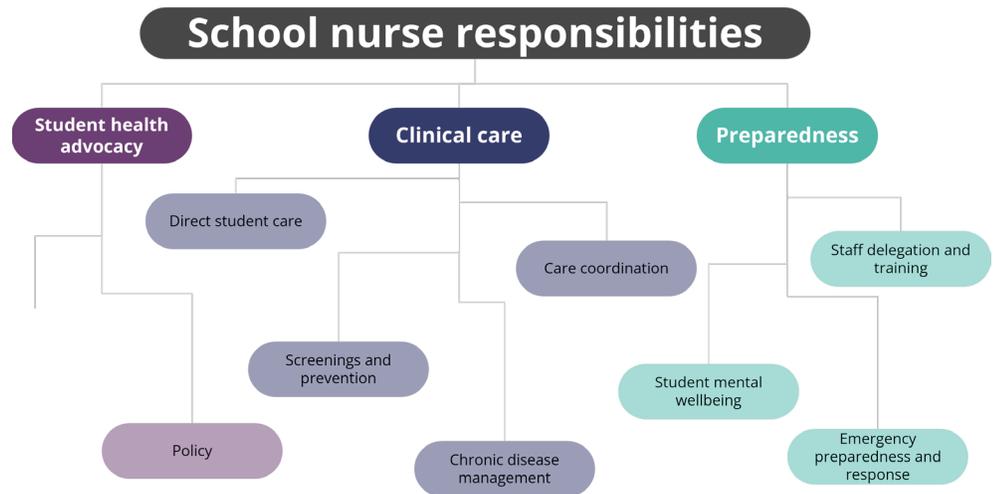
- School nurses are defined as a registered nurse whose primary role is to provide a wide range of medical care to students enrolled in the public school system.
- Utah legislation recommends the staffing of 1 full time school nurse per 2,000 students.
- More than 523,000 public school students do not have the recommended school nurse coverage at their school.

## School nurse capacity and medical support in Utah

School nurses do important and wide ranging work in the school setting. As shown in Figure 1, some of their work includes first aid and emergency help, staff training, and acting on health plans. School nurses also provide hearing and vision tests to connect students with care. Nurses give medicine, routine tests, and answer health-related questions for students.

**Figure 1. School nurse responsibilities**

School nurses provide a wide range of important care to students, staff, and visitors.



Students can have a wide range of health needs in school. This is broken down into 5 categories, as shown in Table 1.

According to the Utah 2024–2025 School Health Workload Report, 87,977 students needed levels 2–5 care. Of these students, 2,385 needed levels 4 and 5 care, which is steady medical support during school hours in order to live. Students reported they had been told by a doctor they have the following conditions: 10,765 reported severe allergies, 18,050 reported asthma, 2,516 reported type 1 diabetes, and 74 reported type 2 diabetes. The medicines used to treat these serious diseases are usually available for schools to use in emergencies. School





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**Table 1. Utah care levels of students definitions**

Students can have a wide range of health needs in school.

Level	Description	Examples of conditions
1	No/minimal occasional healthcare concerns	Sees school nurse once a year for screening, occasional visits as needed
2	Health concerns (uncomplicated & predictable)	ADHD, mild asthma/allergies, medication needs
3	Medically complex (unstable condition requiring daily treatment)	Anaphylaxis, diabetes without complications, moderate-severe asthma, seizure disorder, spina bifida (self-catheterizing)
4	Medically fragile (daily risk of life-threatening emergencies)	Unstable diabetes, frequent severe seizures, spina bifida (assistance required), tube feeding
5	Nursing dependent (24/7 skilled nursing care)	Students requiring tracheostomy suctioning, ventilator support

nurses train staff on the proper use of these medicines, make sure they are available, track their use, and work with students and families to prevent their need.

With the many important tasks school nurses do in schools, organizations and state governments create guidance on staffing to best support student health, safety, and learning. Many things affect the guidance for staffing. These include the number of students, community health, the special care needs of students, and resources in the community. The National Association of School Nurses created a recommendation for the number of students at a school per 1 full time equivalent (FTE) school nurse who is present in school all day, every day.

National Association of School Nurses (NASN) recommendations:<sup>1</sup>

- 1:750 for general student populations
- 1:225 for students requiring daily nursing services
- 1:125 for students with complex medical needs

During the 2022 Utah General Legislative Session, House Bill 114 was passed to promote 1 school nurse for every 2,000 students in Utah schools. Previous state legislation recommended 1 school nurse for every 5,000 students.<sup>2</sup> The Utah Department of Health and Human Services provides additional guidance:<sup>3</sup>

- One full-time registered school nurse per school; or
- Several full-time registered school nurses per school (for schools with higher health needs); or
- One full-time registered school nurse to no more than 3 schools (for schools with lower health needs).

**Figure 2. Utah schools by nurse to student ratio recommendation (at least 1 nurse per 2,000 students), 2024–2025**

There were 772 schools affecting more than 523,900 students that did not meet the state’s nurse-to-student ratio recommendation.



Source: Utah 2024–2025 School Health Workload Report, Utah Department of Health and Human Services in collaboration with the Utah State Board of Education



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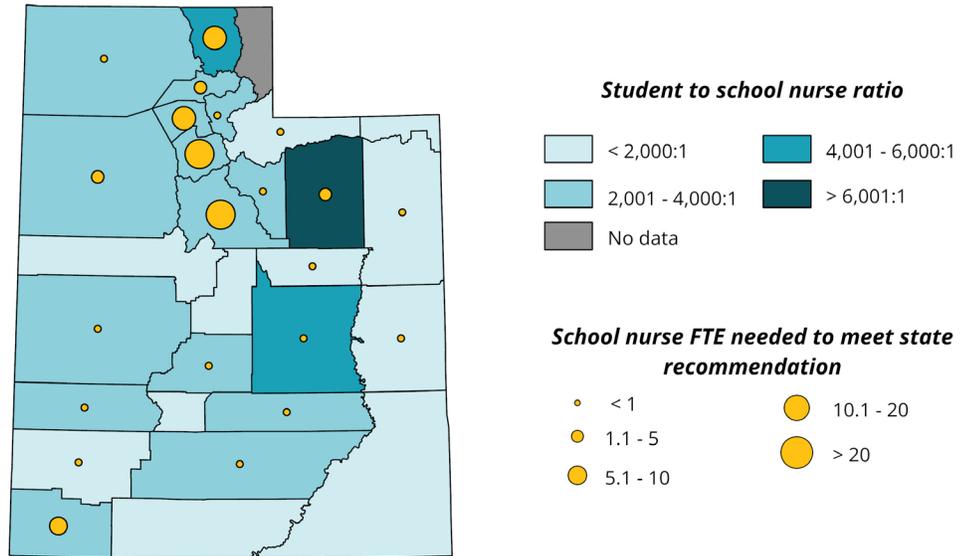
- Local education agencies with fewer than 2,000 students should try to meet the above recommendations. There are guidelines to help if this is not possible.

In the 2024–2025 school year, fewer than 3 out of 10 schools met the state’s nurse to student ratio (Figure 2). This includes:

- 772 schools affecting more than 523,900 students with a ratio higher than the 1:2,000 recommendation.
- 90 charter schools and 46,712 students with no school nurse-based health care coverage.

### Figure 3. School nurse to student ratio and full-time equivalent hours needed to meet Utah legislative ratio recommendation, 2025

About 82 additional full-time nurse positions are needed for schools to meet the legislative recommendation across the state.



Source: Utah 2024–2025 School Health Workload Report, Utah Department of Health and Human Services in collaboration with the Utah State Board of Education

The lack of school nurse care can lead to lower student attendance, poorer grades, and increased time spent by principals, teachers, and office staff helping with student health needs.<sup>4</sup> The overall Utah nurse to student ratio for the school year was 1 nurse per 2,318 students (1:2,318). However, this is a significant improvement from the 2019–2020 school year at 1:3,134.<sup>5</sup>

About 82 additional full-time nurse positions are needed for schools to meet the legislative recommendation across the state (Figure 3), with about 24 FTE positions needed for schools with no nurse. Utah and Salt Lake counties have the highest FTE need, at 28 and 21 respectively. Garfield, Wayne, and Grand counties have the lowest FTE need, at less than .05. There are 11 counties that meet the school nurse to student ratio guidance, but 5 of those counties have charter schools with no nurse. Duchesne County has the highest student to school nurse ratio. The county's .75 FTE nurse serves 5,133 students, which equates to a workload of 6,844 students.

While hiring school nurses may rely on funding and access to qualified applicants, their knowledge and skills are a required part of how a school functions. Help from the community is also invaluable to the health and well-being of students, especially when a nurse is not available. This can include sharing clinical assistance, relevant health and preparation training for staff, and local advocacy for the student body. Health aides can provide a bridge in skills if hiring a school nurse is not possible. Local education agencies, state agencies, community systems, and the Utah legislature can work together to ensure health is supported in schools.



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## Weight bias in healthcare

People who are obese have a higher chance of getting other health problems. This can include high blood pressure, type 2 diabetes, kidney disease, and some cancers (Figure 1).<sup>1</sup> Rates of obesity have gone up in Utah since 2015 and about 1 in 3 Utah adults had obesity in 2024 (Figure 2). The percentage of adults with obesity varies across the state, with the highest in Weber-Morgan local health district (37.5%) and Tooele County local health district (42.2%).

It is important for everyone to get medical care, but even more so for people who have a higher risk for other health problems. It is known that physical barriers and cost can keep people from getting care. But research shows that being treated unfairly because of weight (also known as weight bias) can also stop people from seeking healthcare.<sup>3,4,5</sup> Studies show that some doctors act and speak differently with patients who are overweight. This can lead to worse care for those patients.<sup>6</sup> The impact this weight stigma has on patients can include:<sup>4</sup>

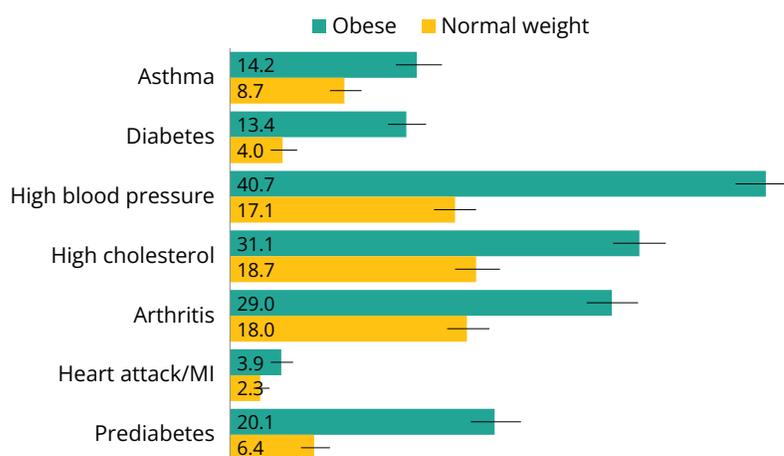
- Following treatment plans less closely
- Trusting doctors and nurses less
- Skipping follow-up appointments
- Putting off important screenings

All patients should feel respected while getting healthcare. This helps them to use prevention services and follow their treatment plans. Health providers should treat weight with care and understanding. Many things can affect a person's weight. There are many resources to learn about obesity and the impact of weight stigma in healthcare.

- The Obesity Action Coalition provides education, advocacy tools, and support resources for people with obesity and others.<sup>7</sup>
- The Obesity Medicine Association offers trainings, resources, and community spaces for health professionals to learn about evidence-based treatment practices for obesity.<sup>8</sup>

**Figure 1. Age-adjusted percentage of adults with certain chronic disease diagnosis by weight status, Utah, 2023**

A larger percentage of adults with obesity reported ever being told they have certain chronic diseases compared to adults with a normal weight.

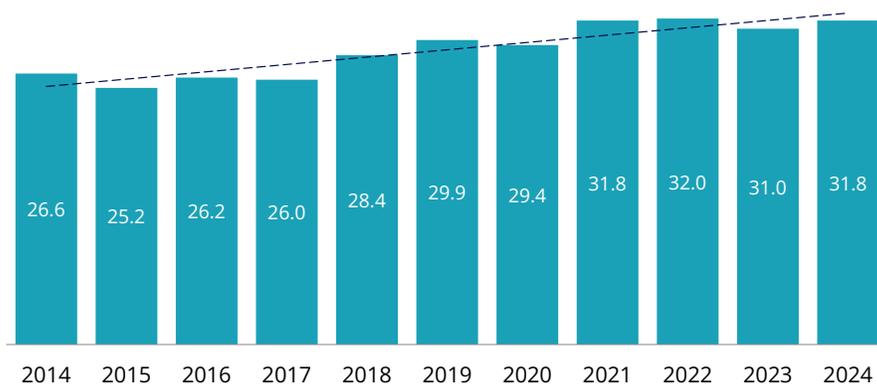


Note: obesity is defined as having a body mass index (BMI) of 30 or more. Normal weight is defined as a BMI of less than 25. BMI is calculated by dividing weight in kilograms by the square of height in meters.<sup>2</sup>

Source: Utah Behavioral Risk Factor Surveillance System, Utah Department of Health and Human Services

**Figure 2. Age-adjusted percentage of adults who have obesity, Utah, 2014–2024**

Adult obesity has been increasing in Utah since 2015.



Note: obesity is defined as having a body mass index (BMI) of 30 or more. Normal weight is defined as a BMI of less than 25. BMI is calculated by dividing weight in kilograms by the square of height in meters.<sup>2</sup>

Source: Utah Behavioral Risk Factor Surveillance System, Utah Department of Health and Human Services



- The American Academy of Family Physicians has resources and trainings for how to create a welcoming environment for patients with obesity, as well as information on evidence-based strategies for treating obesity-related diseases.<sup>9</sup>

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## Food insecurity

In 2023, 1 in 5 women who gave birth in Utah struggled to afford enough nutritious food. This issue, known as food insecurity, isn't just about hunger—it greatly impacts the health of both the mother and the baby. When a person faces food insecurity during pregnancy, they are at a much higher risk for serious health issues, including anemia, high blood pressure, and higher rates of anxiety and depression. Federal assistance programs are available, although they have different income requirements. Many families earn too much money to qualify for the Supplemental Nutrition Assistance Program (SNAP), which has an income limit of 130% of the federal poverty level (FPL), but they still struggle to pay for food. Because the Women, Infants and Children (WIC) program has a higher income limit of 185% of the FPL, it often serves as a safety net for those who don't qualify for other types of aid.

Data from the Pregnancy Risk Assessment Monitoring System (PRAMS) survey was used to identify Utah women who gave birth in 2023 and reported food insecurity. Food insecurity was defined in PRAMS as running out of food (and not being able to buy more) or being worried about food running out during the 12 months before their new baby was born. The survey also identified health issues they experienced.

Mothers who had higher rates of food insecurity were more likely to be younger, not have a high school diploma, have a disability, and not work during their pregnancy. Table 1 includes demographic characteristics of women in Utah who gave birth in 2023 by food insecurity status. Table 2 includes data on nutrition assistance programs by food security status. WIC services were used by 54% of food insecure mothers, and SNAP benefits were used by 28%. It's worth noting that almost one quarter of food insecure mothers were above the 185% FPL for WIC eligibility, and at least 41% were above the 130% FPL for SNAP eligibility.

Mothers who experienced food insecurity had higher rates of high blood pressure and anemia

**Table 1. Food insecurity by maternal demographics, Utah, 2023**

Characteristic	Experienced food insecurity	
	Yes, %	No, %
<b>Age</b>		
Younger than 24	25.5	74.5
25–29	15.8	84.2
30–34	12.4	87.6
Older than 35	14.9	85.1
<b>Highest level of education</b>		
No high school diploma	51.4	48.6
High school diploma	23.7	76.3
Some college	22.0	78.0
4-year college degree or higher	4.1	95.9
<b>Has any disability</b>		
No	14.3	85.7
Yes	36.2	63.8
<b>Worked during pregnancy</b>		
No	24.3	75.7
Yes	12.6	87.4

Source: Utah Pregnancy Risk Assessment Monitoring System

**Table 2. Food assistance and household income by food insecurity, Utah, 2023**

Characteristic	Experienced food insecurity	
	Yes, %	No, %
<b>Received WIC assistance</b>		
Yes	53.6	84.0
No	46.4	16.0
<b>Received SNAP assistance</b>		
Yes	28.3	93.8
No	71.1	6.2
<b>Household income (as a % of federal poverty level)</b>		
≤100% FPL	46.4	9.5
101–138% FPL	12.5	6.8
139–185% FPL	16.7	9.9
≥185%	24.4	73.7

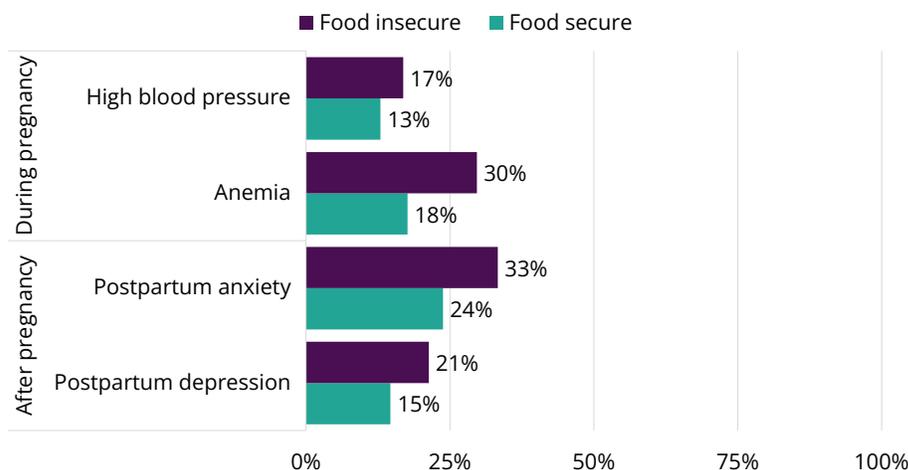
Source: Utah Pregnancy Risk Assessment Monitoring System

during pregnancy. They also were more likely to report postpartum depression and anxiety (Figure 1). Getting help from WIC seemed to affect the number of certain health problems (Figure 2). Twelve percent of women using WIC had high blood pressure during pregnancy compared to 22% of those who did not receive WIC. Twenty-seven percent of WIC recipients had anemia during pregnancy compared to 32% of those who did not receive WIC. Postpartum anxiety was also lower for women who received WIC (25%) compared to those who did not receive WIC (43%).

Nutrition is a key part of healthy pregnancies and families. Our data suggests WIC services may lower rates of certain health issues for those in need of support. While food insecurity can impact anyone, data shows it is more common among certain groups in Utah. Public education campaigns should encourage those eligible to apply for assistance. Information on how to apply for WIC can be found at <https://wic.utah.gov/about/apply/>.

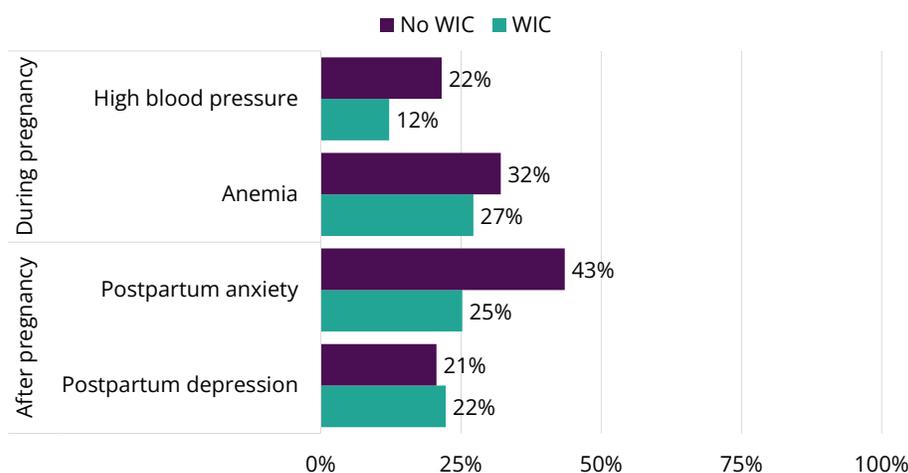
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**Figure 1. Pregnancy and postpartum health outcomes by food security status, Utah, 2023**



Source: Utah Pregnancy Risk Assessment Monitoring System

**Figure 2. Pregnancy and postpartum health outcomes by WIC status among those who experienced food insecurity, Utah, 2023**



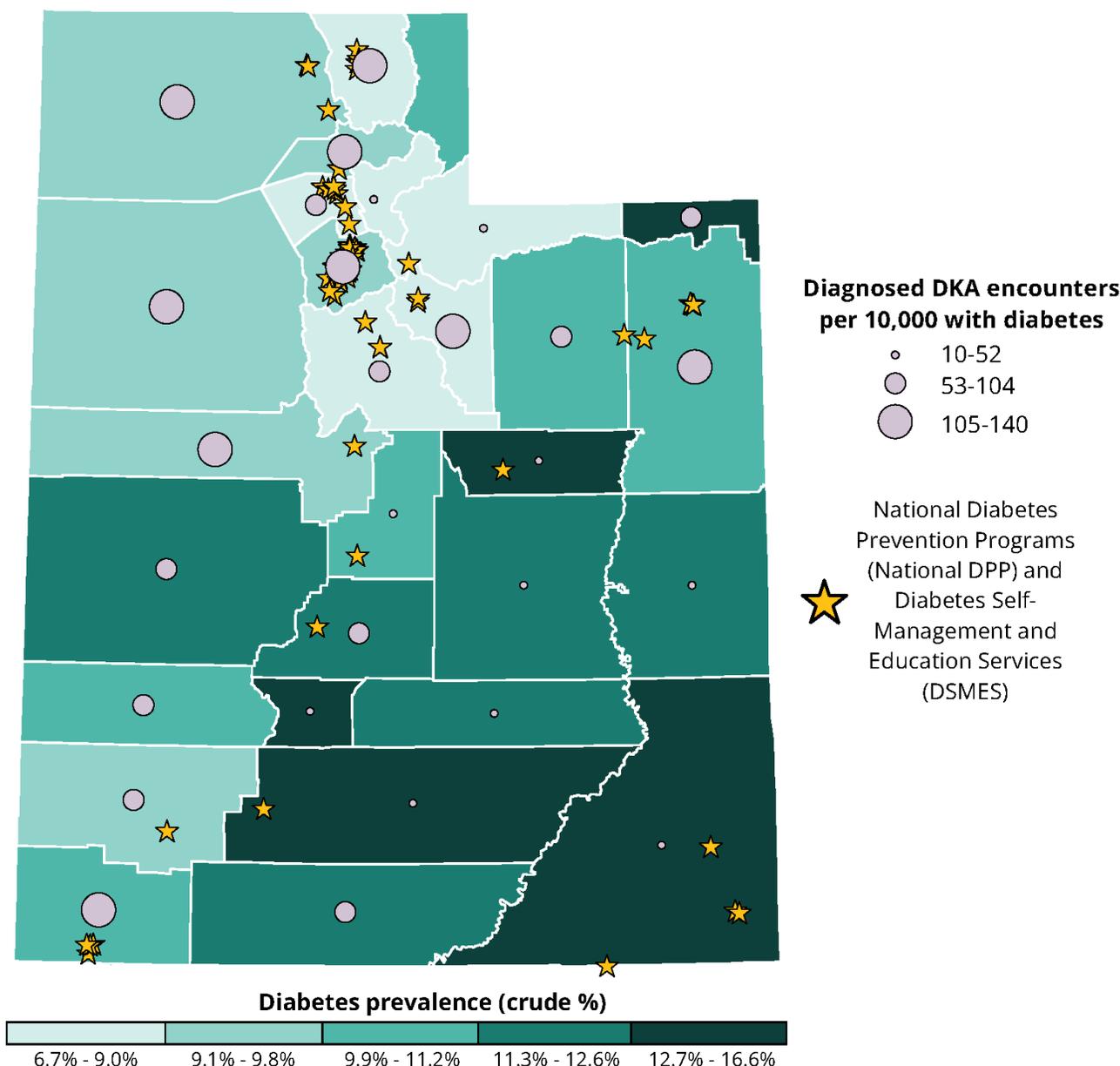
Source: Utah Pregnancy Risk Assessment Monitoring System

## Using syndromic surveillance data to enhance chronic disease surveillance efforts

Diabetic ketoacidosis (DKA) is a serious side effect of diabetes. In DKA, the body does not make enough insulin and makes up for it by burning fat for fuel. If not treated, DKA can lead to death. It is important to identify which counties in Utah where people are more likely to be admitted to the emergency department (ED) due to complications of diabetes like DKA. This may help improve efforts to increase diabetes education, control, and prevention.

We pulled data from the CDC's syndromic surveillance platform to understand where in Utah the most people were being discharged from the ED with DKA. The data included all ED visits for adults 18 and older in Utah with a diagnosis of DKA from January 1, 2024 to December 31, 2024. We found a total of 2,353 visits.

**Figure 1. Diagnosed diabetic ketoacidosis (DKA) emergency department (ED) encounters in Utah counties, January–December 2024**





DKA diagnoses were counted by county of residence and represented 28 out of 29 counties. Rich County had 0 DKA diagnoses in 2024. The population of adults with diabetes in each county was calculated using CDC PLACES data. This was done by multiplying the percentage of diabetes from the total population of those 18 and older.

We created a map of Utah counties to show where diabetes was the highest (Figure 1). National Diabetes Prevention Program (National DPP) providers and Diabetes Self-Management Education and Support (DSMES) sites were represented using yellow stars. These programs help people make lifestyle changes to prevent or manage diabetes. DKA ED diagnoses were added to show how many emergency department visits had a DKA diagnosis per 10,000 adults.

As the map shows, northern and western counties had higher rates of diagnosed DKA per 10,000 adults with diabetes. Counties with the highest diabetes prevalence had a lower DKA rate per 10,000. This may be because those counties have smaller population sizes and more type 2 diabetes, which is less likely to lead to DKA. Tooele County had a high rate of diagnosed DKA per 10,000 with diabetes, but had no diabetes programs. We recommend diabetes programs be started in this area.

Near real-time data through syndromic surveillance helps expand the ability to understand chronic disease burden, severity, and disparities. Further research can be done to explore other ways syndromic surveillance can be used for chronic disease surveillance.