MOPHIMS NEWSLETTER

Newsletter Highlights

MISSOURI DEPARTMENT OF HEALTH & SENIOR SERVICES

Hello, MOPHIMS Users!

We are excited to be bringing the 30th issue of the MOPHIMS Newsletter to your inbox!

This issue includes an article about diabetes, as well as a tutorial on how to access diabetes data using MOPHIMS.

Also included is an exploration of Missouri's food access landscape and a recap of what the Bureau of Health Care Analysis and Data Dissemination (BHCADD) has been up to this year.

Happy Holidays!

-The MOPHIMS Team

Diabetes

Diabetes

More than 30 million people in the United States are living with diabetes, and the disease continues to be one of the top ten leading causes of death both nationally and statewide.[1] According to the 2023 Missouri Diabetes report, more than 537,000 Missouri residents aged 18 and older had doctor-diagnosed diabetes.[2] In addition, from 2017 to 2021, diabetes was the underlying cause of death for more than 8,500 Missourians. Diabetes does not affect everyone the same, with symptoms often manifesting differently from person to person. The two main types of diabetes are type 1 and type 2.

Type 1

According to the CDC, about 5-10% of people who have been diagnosed with diabetes have type 1. Researchers believe type 1 diabetes is caused by an autoimmune reaction, which stops the body from producing insulin. Why is insulin necessary? Insulin helps blood sugar enter the cells in the body to use as energy. Without insulin, sugar builds up in the bloodstream, causing blood sugar levels to soar. People with type 1 diabetes must take insulin every day to survive.[3]

Type 2

The vast majority of people diagnosed with diabetes are diagnosed with type 2. This form of diabetes is caused by the body's cells not responding normally to insulin, otherwise known as insulin resistance.[4] When the cells don't respond appropriately, the pancreas works harder to make more insulin to promote cell response. Over time, the pancreas can no longer keep up with insulin production, causing blood sugars to rise. Making lifestyle changes such as being active, losing weight, and eating a healthy diet are some of the ways to manage type 2 diabetes. Medication or insulin therapy is prescribed if targeted blood sugar levels cannot be maintained.

Treatment Costs and Shortages

Nearly eight million Americans rely on insulin to survive.[5] Insulin prices have been capped for some users. For others, insulin prices have continued to be costly, causing users to ration their supply. "American Diabetes Association surveys found that people with diabetes who depend on insulin cut back or skip doses, putting their lives at risk—1 in 4 insulin users have said the cost has impacted their insulin use."[5]

Not only is the cost of insulin a heavy burden for most, but also there is a shortage of medications used to help treat type 2 diabetes. Semaglutide is a medication that allows the body to produce more insulin to reduce blood sugar levels.[6] Semaglutide also activates parts of the brain that reduce appetite and trigger fullness, which can prompt weight loss. Some injectable semaglutides continue to be in short supply, making it harder for those with diabetes to access.

Diabetes Data on MOPHIMS

[7]

So, how is diabetes affecting your community? Follow this step-by-step tutorial using MOPHIMS to see diabetes's impact across the Show Me State.

First, let's take a look at the Community Data Profiles. The profiles provide ready-made tables and graphics using various indicators for the geography selected. The Diabetes profile is listed under Chronic Disease Profiles. **Figure 1** shows diabetes prevalence among Missouri adults using estimates from the Behavioral Risk Factor Surveillance System (BRFSS). The groups with the highest diabetes prevalence were adults ages 65+, those with an annual household income between $15,000 and $24,999 and individuals with less than a high school education.

Figure 1

	Data Years	Population Estimate	Weighted Percent	Graphics Link	Download Data
Diabetes prevalence among adults					
BRFSS ‡					
All adults >=18 years of age	2019	492,056	10.30		
Age 18-44	2019	54,932	2.60		
Age 45-54	2019	73,109	10.50		
Age 55-64	2019	129,474	15.90		
Age 65+	2019	230,748	21.80		
Annual household income					
Less than $15000	2019	50,143	13.50		
$15000-$24999	2019	91,339	15.80		
$25000-$34999	2019	44,465	11.10		
$35000-$49999	2019	66,609	11.20		
$50000+	2019	149,900	7.80		
Educational attainment					
Less than high school	2019	78,894	15.40		
High school or GED	2019	151,444	10.30		
Some post high school	2019	160,270	10.50		
College or tech school graduate	2019	101,286	8.20		

If a user is interested in looking at other diabetes indicators at a city, county, or regional level, the appropriate geography can be changed as shown in **Figure 2**.

Figure 2

The Death MICA houses Missouri's mortality data dating back to 1999. Users can customize tables, charts, and maps and target specific geographies, ages, sexes, races, ethnicities, and causes of death.

If a user were interested in creating a trend line to compare the diabetes death rate between males and females over a five-year period, the following changes would be made:

Choose Your Data

Year: Single Year
Select 2016-2020

Cause: Deselect 'Select all Major Items
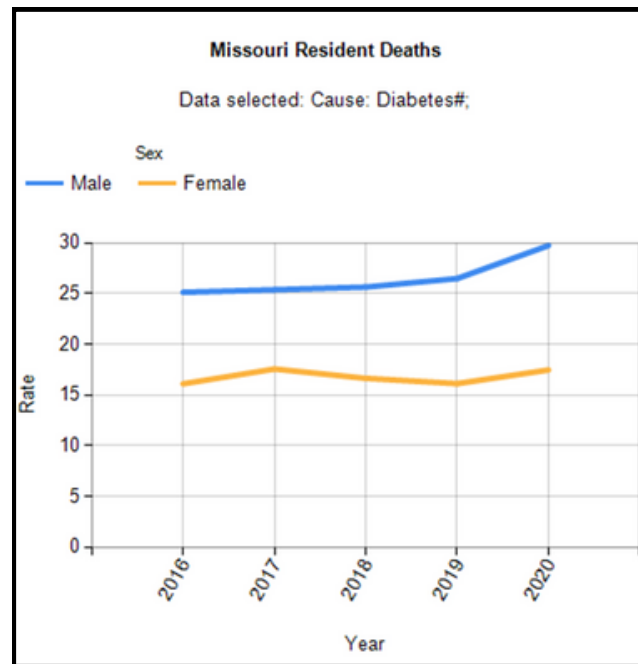Select Diabetes

Build Your Results

Create a Chart

Type of Chart: Trend Line
Variable Axis: Year

Value Axis: Sex

Create Chart

Figure 3

Missouri Resident Deaths

Data selected: Cause: Diabetes#;

Once the selections on the prior page are made, the graph in **Figure 3** is displayed. It shows males have had a consistently higher diabetes death rate compared to their female counterparts, with the highest rate of death nearing 30 deaths per 100,000 in 2020.

A simple change to the **Value Axis** could generate age, race, and ethnicity trend lines.

Suppose a user was interested in seeing diabetes deaths in a specific area. This modification can be made by scrolling back to the Choose Your Data portion and selecting the desired geography shown in **Figure 4**.

Figure 4

As always, if you need MOPHIMS support, please reach out.
We will be happy to assist you!

Missouri's Harvest is in Reach

An exploration of Missouri's Food Access Landscape

Throughout the year, farmers across Missouri showcase their harvests. Access to this healthy produce is key to promoting a balanced diet. Getting healthy food onto the plates of Missourians is not so simple. The ease of filling your grocery cart depends on your income and where you live. In this mapping project, we will explore the geographic distribution of food access in Missouri and highlight food resources and programs. Finally, we'll look at what crops are growing across the state and ways you can join in on the fun.

Follow along on the exploration of this mapping project

The Social Vulnerability and Food Access section highlights locations where individuals may have trouble obtaining food. External environmental forces and socioeconomic factors also affect food security.

The orange and red areas are census tracts in Missouri that score "Moderate to High" or "High" in the Overall Social Vulnerability Index Ranking set by the Centers for Disease Control and Prevention.

The diamond-hatched layer, which represents food-insecure areas, can be overlaid with the social vulnerability layer. A location is considered a food insecure area if the closest food source is greater than one (1) mile in an urban area or ten (10) miles in a rural area. Food insecure area data is from the USDA Food Atlas.

Users can also zoom in to the map to view individual census tracts.
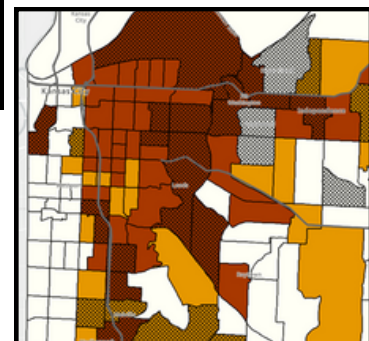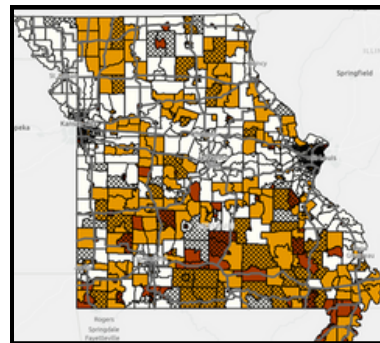
In the next interactive map section, Expanding Access in Food Insecure Areas, users can underlay census tracts where grocery store numbers (2011-2016) or SNAP participation (2012-2017) is on the rise. Both data sets are from the USDA Food Environment Atlas. This section has the diamond-hatched food-insecure area layer from the previous section. Although food insecurity may be more likely in these areas, users can visualize through the additional layers where expansion of food access is occurring.
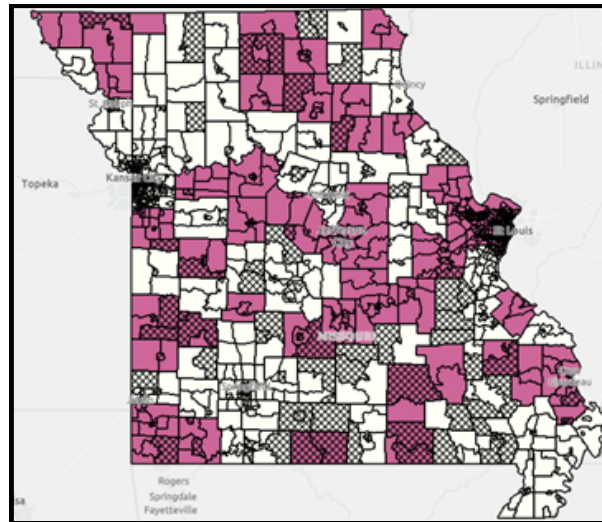
Next, we explore the Farmers Market section. The map shows which counties have at least one farmers market in green, and the diamond hatching shows which counties participate in the WIC (Women, Infant, and Children) and Seniors Farmers Market Nutrition Program. Families participating in WIC or older adults over 60 who are low-income can redeem vouchers at select market vendors in their residing county. Additional links with further information on voucher-accepting vendors for both programs can also be found here.
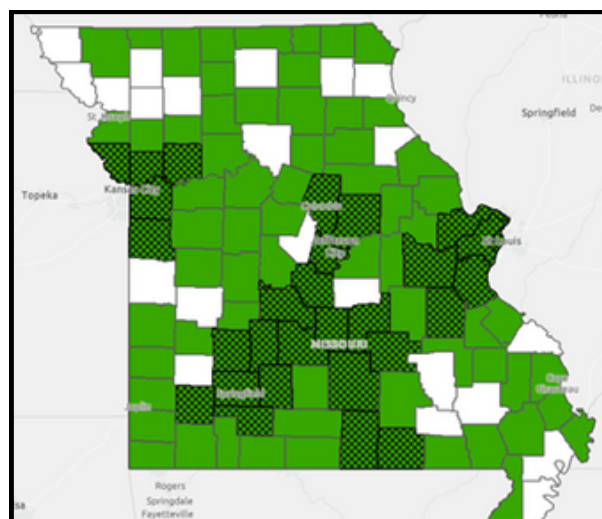
The final map, What's for Dinner Tonight?, showcases the variety of food grown in Missouri and encourages users to try something new at the market with a link to the Have a Plant program. Users can toggle on and off layers showing numbers of fruit producers, vegetable farms, and orchards in each county. Producer numbers are from the USDA/NASS Census of Agriculture, 2017.
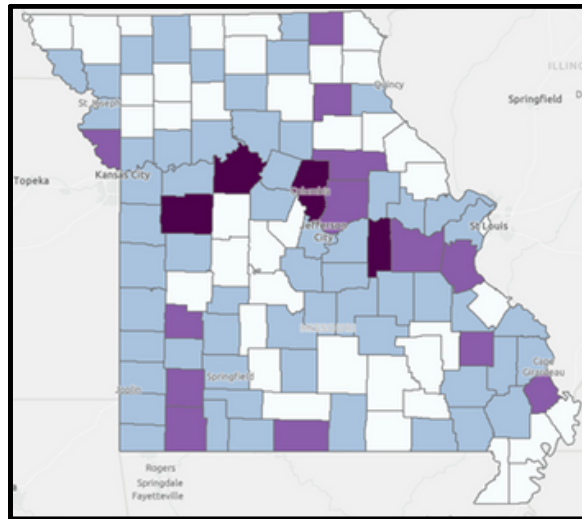
The rest of the StoryMap sections are dedicated to links where users can connect to the University of Missouri Extension events, markets in their area, and the data sources used in the maps. For more information on mapping projects provided by the Missouri Environmental Public Health Tracking Program, e-mail us at **EPHTN@health.mo.gov**.

Environmental Public Health Tracking Program
Last Updated 10/4/2023

BHCADD's 2023 Recap

The Bureau of Health Care Analysis and Data Dissemination once again had a busy year attending conferences, giving presentations, and completing projects and reports.

Here's a look into the bureau's 2023 accomplishments:

February	**Missouri Oral Health Conference**
March	**NAPHSIS Vital Stats 101 Training in New Mexico**
April	**Rx and Illicit Drug Conference in Atlanta, Georgia**
	NAPHSIS Security Conference in Washington DC
June	**OD2A Conference in Atlanta, Georgia: BHCADD staff gave two presentations at this national conference**
	CSTE in Salt Lake City, Utah: BHCADD staff gave four presentations at this national conference
July	**Launched the EMS Dashboard on the Drug Overdose Dashboard (https://health.mo.gov/data/opioids/ems-dashboard.php)**
September	**Missouri Public Health Association Conference: BHCADD staff gave one presentation at this state conference**
	Missouri added to the CDC SUDORS Dashboard
November	**Missouri Rural Health Association Conference: BHCADD staff gave one presentation at this state conference**
	Published the Health in Rural Missouri Biennial Report, 2022-2023 in partnership with ORHPC

Available MOPHIMS Data

Maternal, Infant and Child Health MICAs
- Birth 2020
- Fertility and Pregnancy Rate 2020
- Pregnancy 2020
- WIC Child 2020
- WIC Infant 2020
- WIC Prenatal 2020
- WIC Postpartum 2020
- WIC Linked Prenatal-Postpartum 2020

Injury MICA
- Injury 2015

Hospital and Emergency Room Visit MICAs
- Emergency Room 2015
- Inpatient Hospitalizations 2015
- Preventable Hospitalizations 2015
- Procedures 2015

Chronic Disease MICAs
- Cancer Incidence 2019
- Chronic Disease Death 2019
- Chronic Disease Emergency Room 2015
- Chronic Disease Inpatient Hospitalization 2015

Death MICA
- Death 2020

Population MICA
- Population 2020

Data

The graphic to the left shows the years of data available for each MICA.

If you need more current data than what is available on MOPHIMS, please reach out and we will do our best to complete your request.

Hospital-based datasets are not being updated online yet, but we do have data through 2021 available upon request. The same is true of 2021 BRFSS survey data.

Training

We will begin offering trainings once MOPHIMS is updated with more current data.

In the meantime, if you would like an overview of the MOPHIMS system, Profiles, MICAs, and information on how to become a registered user, you can watch the MOPHIMS Demo Webinar on the department website under 'Community Health Assessment Intervention Planning' located here: https://health.mo.gov/data/

Additional MOPHIMS Newsletter Group Information

About the Newsletter

The MOPHIMS User Group Newsletter was created in response to user requests for communication on updates to the MOPHIMS system, descriptions of new features, additional practice exercises, announcements of training opportunities and any new information about data that might help users perform their jobs more efficiently.

Newsletters will be published on a semi-annual basis. If you have ideas for content, please send them to Andrew.Hunter@health.mo.gov or Chelsea.Fife@health.mo.gov.

We would like to feature stories describing your success at completing projects or obtaining grants using the MICA or EPHT tools as well as interviews with public health professionals about your duties and how you use MICA or EPHT to accomplish them.

Past issues are available at http://health.mo.gov/data/mica/MICA/newsletters.html.

Contributors: Chelsea Fife, Kadarenna Matthews and Nicole Neihues

How to Sign Up or Opt Out

If you have enjoyed this newsletter, please feel free to share it with your colleagues and community partners.

We encourage everyone to sign up for the User Group by sending an email to MOPHIMSUserGroup@health.mo.gov with the subject line **MOPHIMS User Group**. Include your name, position title, organization and email address. By signing up, users will be sent newsletters directly.

Occasionally we may distribute time-sensitive information on training opportunities or other topics if the newsletter is not scheduled for publication prior to a registration deadline. The MOPHIMS User Group list also helps us track the types of organizations using the tools, which is one of our performance measures.

If you would like to unsubscribe from the MOPHIMS User Group, send an e-mail with **Unsubscribe** in the subject line to MOPHIMSUserGroup@health.mo.gov.

PLEASE NOTE: Depending on your position title, you may still receive other types of e-mails from us. For example, we are requested to send training information to all LPHA Administrators, even if they have unsubscribed from the MOPHIMS User Group.

Sources

1 Diabetes - Healthy People 2030.

2 2023 Missouri Diabetes Report. Missouri Department of Health and Senior Services.

3 Type 1 Diabetes. National Institute of Diabetes and Digestive and Kidney Diseases.

4 Diabetes Basics. Centers for Disease Control and Prevention.

5 Insulin and Drug Affordability. American Diabetes Association.

6 Medications Containing Semaglutide Marketed for Type 2 Diabetes or Weight Loss. U.S. Food and DrugB Administration.

7 What is Type 1 Diabetes? Centers for Disease Control and Prevention.

8 FDA Drug Shortages. U.S. Food and Drug Administration.

9 National Diabetes Statistics Report 2020. Estimates of Diabetes and Its Burden in the United States.B Centers for Disease Control and Prevention.