

The Cabinet for Health and Family Services and the
Personnel Cabinet present:

A report to the Legislative Research Commission
in fulfillment of Kentucky Revised Statute 211.752

2021

DIABETES REPORT

Executive Summary



2021 Kentucky Diabetes Report

LEGISLATION

KRS 211.752 requires that in odd numbered years, the Department for Public Health (DPH), the Department for Medicaid Services (DMS), the Office of Health Data and Analytics (OHDA), and the Personnel Cabinet—Department of Employee Insurance, Kentucky Employees' Health Plan (KEHP), collaborate in developing a report addressing the impact of diabetes on the Commonwealth and plans to address the epidemic.

A COLLABORATION BETWEEN

DEPARTMENT FOR MEDICAID SERVICES
DEPARTMENT FOR PUBLIC HEALTH
OFFICE OF HEALTH DATA AND ANALYTICS
DEPARTMENT OF EMPLOYEE INSURANCE

ON BEHALF OF

CABINET FOR HEALTH AND FAMILY SERVICES
PERSONNEL CABINET

FOR MORE INFORMATION

This executive summary is the abbreviated version of the full report. To access or download copies of the full report, visit <https://chfs.ky.gov/agencies/dph/dpqj/cdpb/Pages/diabetes.aspx>.

To request print copies of this report, please call the Kentucky Diabetes Prevention and Control Program at (502) 564-7996.

For more information about the legislation requiring the Diabetes Report, visit <https://legislature.ky.gov>.

SUGGESTED CITATION

Kentucky Cabinet for Health and Family Services and Kentucky Personnel Cabinet. Kentucky Diabetes Report. Frankfort, KY: KY Cabinet for Health and Family Services, Department for Medicaid Services, Department for Public Health, Office of Health Data and Analytics, and KY Personnel Cabinet, Department of Employee Insurance, 2021.

The following individuals participated in the preparation of the 2021 Diabetes Report.

CABINET FOR HEALTH AND FAMILY SERVICES

Department of Public Health

Steven Stack, MD, Commissioner
Connie Gayle White, MD, MS, FACOG, Deputy Commissioner for Clinical Affairs
Sue Thomas-Cox, RN, Manager, Chronic Disease Prevention Branch
Theresa A. Renn, BSN, RN, CDCES, MLDE, Manager, Kentucky Diabetes Prevention and Control Program
Teresa A. Wood, PhD, Epidemiologist, Chronic Disease Prevention Branch
Sarojini Kanotra, PhD, MPH, Epidemiologist, Kentucky Behavioral Risk Factor Surveillance
Vivian Lasley-Bibbs, MPH, Epidemiologist, Office of Health Equity

Office of Health Data and Analytics

Robert E. Putt, Executive Director
Maik Schutze, Chief Analytics Officer
Allison Lile, Health Care Data Administrator
Lynn Ng, Data Analyst
Jana Lazur, Project Manager
Jamine Hamner, Project Manager
Angela Taylor, Data Architect

Department for Medicaid Services

Lisa Lee, Commissioner
Veronica Judy-Cecil, Senior Deputy Commissioner
Judy Ann Theriot, MD, CPE, Medical Director
Angela W. Parker, RHIT, CHCQM, Director, Division of Program Quality and Outcomes
Troy Sutherland, MPA, Quality Manager, Division of Program Quality and Outcomes
Carolyn Kerr, RN, Nurse/Consultant Inspector

PERSONNEL CABINET

Department of Employee Insurance, Kentucky Employees' Health Plan

Reina Diaz-Dempsey, Commissioner
Jennifer Thompson, RDN, LD, Staff Assistant, Office of the Commissioner
Bruce Cottew, Healthcare Data Administrator, Office of the Commissioner

KENTUCKIANA HEALTH COLLABORATIVE

Stephanie Clouser, Data Scientist

A Message from the Health and Family Services Cabinet and the Personnel Cabinet

The 2011 Kentucky General Assembly codified KRS 211.752 to require the Cabinet for Health and Family Services (Department for Medicaid Services, Department for Public Health, Office of Health Data and Analytics—formerly the Office of Health Policy) and the Personnel Cabinet (Kentucky Employees’ Health Plan) to compile an account of the status of diabetes in Kentucky; what is being done to address it; and, goals/plans for moving this work forward. In this 2021 Kentucky Diabetes Report, we streamlined the format and included links to more detailed information, and an infographic. This updated format makes the report more readable and user-friendly but still provides robust data and information about diabetes in Kentucky.

Diabetes is a complex, chronic disease that affects the body in numerous ways. It can cause heart disease, stroke, blindness, kidney damage, lower extremity amputations, gum disease/tooth loss, as well as pregnancy-related effects on the mother and baby. It can also exacerbate the effects of COVID-19 resulting in increased death rates from this virus. We continue to analyze data related to the impact of COVID-19 on those with diabetes in Kentucky. Addressing diabetes requires the collaboration of many public and private partners, and Kentucky has a long history of such efforts in the area of diabetes prevention and control. Despite these efforts, and some successes, there is much more work to be done.

KENTUCKY PARTNERS ... MUST CONTINUE TO WORK TOGETHER TO DEVELOP INNOVATIVE APPROACHES AND STRENGTHEN EVIDENCE-BASED STRATEGIES TO OFFER KENTUCKIANS A LIFE FREE OF DIABETES OR THE OPPORTUNITY TO LIVE A HEALTHY AND FULL LIFE WITH DIABETES

Preventing new cases, screening to find cases early, offering evidence-based services to those with diabetes, assuring a workforce to handle this load, and improving data to track outcomes are goals recommended by this report. Kentucky partners – healthcare providers, hospital systems, public and private health plans, persons with diabetes, public health agencies, technology resources, communities and more - must continue to work together to develop innovative approaches and strengthen evidence-based strategies to offer Kentuckians a life free of diabetes or the opportunity to live a healthy and full life with diabetes.

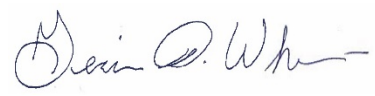
Let this fifth statewide collaborative report foster new energy among collaborators/champions and engage more stakeholders in efforts to improve the health of the Commonwealth.

Sincerely,



Eric Friedlander, Secretary
Cabinet for Health and Family Services

Sincerely,



Gerina D. Whethers, Secretary
Personnel Cabinet

Executive Summary

BACKGROUND

The 2021 Diabetes Report is a requirement of KRS 211.752 (see Attachment 1). It requires that in odd numbered years, the Department for Public Health (DPH), the Department for Medicaid Services (DMS), the Office of Health Data and Analytics (OHDA), and the Personnel Cabinet – Department of Employee Insurance, Kentucky Employees’ Health Plan (KEHP), collaborate in developing a report addressing the impact on the Commonwealth and plans to address the epidemic. Although not specifically named in the legislation, the committee chose to include the Office of Health Equity (OHE), housed in DPH, in this process to ensure attention to the social determinants of health that impact hard to reach and vulnerable populations.

This fifth report was developed by a committee with representatives from each of the entities named above. A list of these committee members is included on Page 2. Changes and additions to this edition of the report include a greater emphasis on presentation of the data and information in a more useful form.

While the information in this report discusses activities and plans specific to state government agencies, it is anticipated that policy makers, communities, professional organizations, and anyone interested in the health of Kentuckians will use this information to improve diabetes outcomes in the Commonwealth. Included in appendices is more information on data summarized in the report, the initial impact of COVID-19 to date, and strategies for diabetes self-management education and support.

GOALS AND ACTIONS FOR ADDRESSING DIABETES

The committee has identified specific goals with related actions to strengthen diabetes prevention, minimize diabetes complications, and improve our ability to have reliable data to track and understand the scope of this epidemic. Goals and actions are consistent with current standards of care and scientific evidence, national and state guidelines and initiatives, chronic disease state planning efforts, and federal grant guidance from the Centers for Disease Control and Prevention (CDC). Goals include:

1. **Prevent new cases** of type 2 diabetes by promoting access to and participation in the National Diabetes

Prevention Program (DPP).

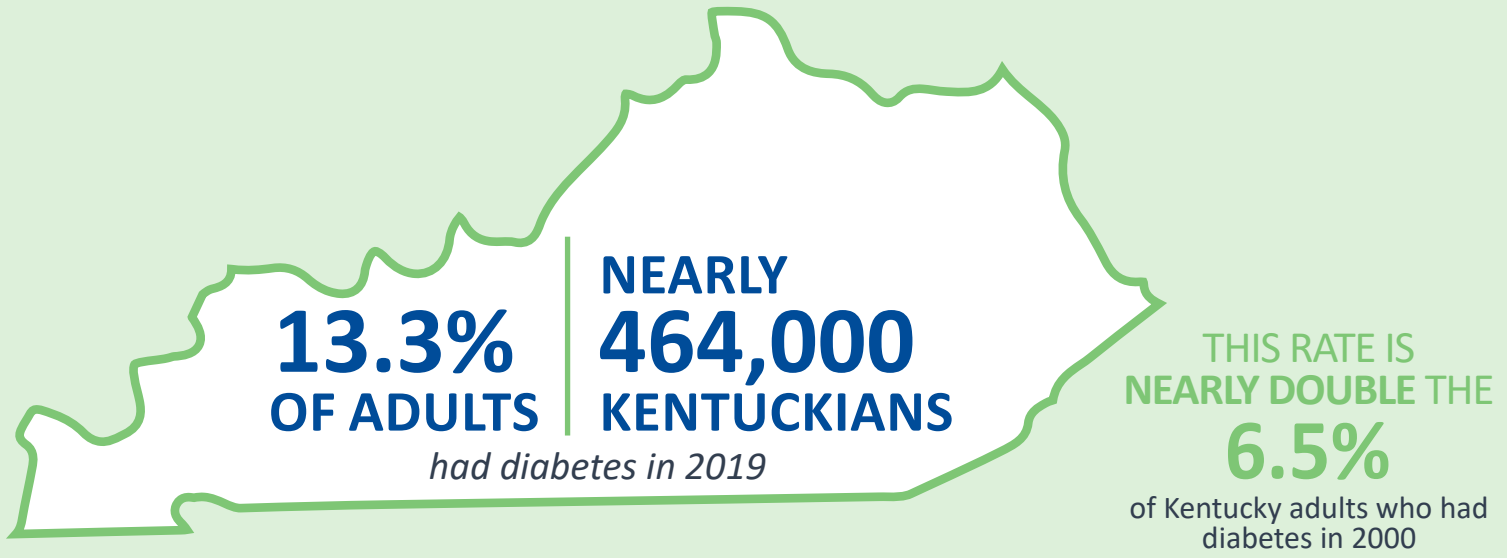
2. **Increase appropriate screening** for prediabetes, diabetes, and gestational diabetes by promoting evidence-based screening guidelines.
3. **Ensure that people** with diabetes have access to evidence-based services, including Diabetes Self-Management Education and Support (DSMES), and case and disease management, which improve knowledge, skills, and behaviors necessary to manage their disease and improve outcomes.
4. **Fund a sustainable** diabetes prevention and control public health infrastructure and workforce at the state and local level.
5. **Improve capacity for**, and use of, diabetes and chronic disease surveillance systems and Health Information Technology (HIT) systems needed to determine the extent and impact of diabetes on the Commonwealth.

THE COMMITTEE HAS IDENTIFIED SPECIFIC GOALS WITH RELATED ACTION TO STRENGTHEN DIABETES PREVENTION, MINIMIZE DIABETES COMPLICATIONS, AND IMPROVE OUR ABILITY TO HAVE RELIABLE DATA TO TRACK AND UNDERSTAND THE SCOPE OF THIS EPIDEMIC.

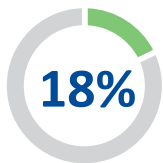
In addition, the Commonwealth must also take actions to impact certain social determinants of health and equity. Social determinants of health are factors that not only negatively affect the ability of certain population groups to access healthcare, but also seriously limit their ability to live a healthy lifestyle and make lifestyle changes. These include education level, income, and the ability to earn a living wage, lack of social support, chronic stress, racial discrimination, transportation access, adequate housing, access to affordable and nutritious food, and access to safe spaces for physical activity. Affecting these social determinants of health will require efforts by a wide variety of community, business, and political leaders across the Commonwealth.

Scope of Diabetes in Kentucky

DIABETES IS COMMON IN KENTUCKY.

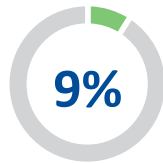


ANOTHER **11%** HAVE PREDIABETES AND ARE AT RISK FOR DEVELOPING DIABETES.



MEDICAID

adult* members had a diagnosis of diabetes in 2019



KEHP

adult* members had a diagnosis of diabetes in 2019

This difference in prevalence suggests a health disparity due to income.



2,864 children under the age of 19 covered by Medicaid

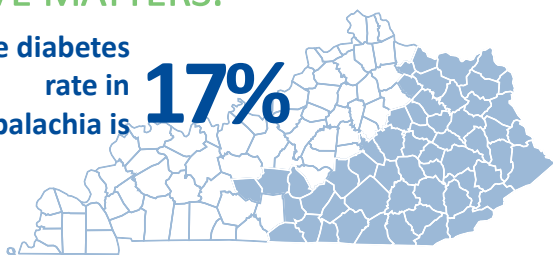
282 children 17 years and younger covered by Kentucky Employees' Health Plan

HAVE A DIABETES DIAGNOSIS

** Adults are defined as individuals over the age of 19 for Medicaid and individuals 18 years and older for Kentucky Employees' Health Plan (KEHP)*

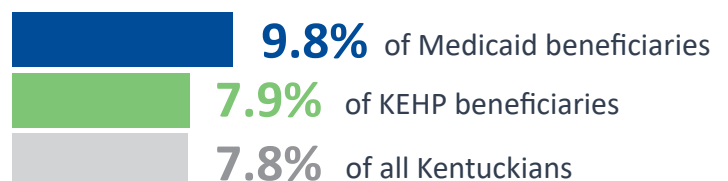
WHERE YOU LIVE MATTERS.

The diabetes rate in Appalachia is **17%**



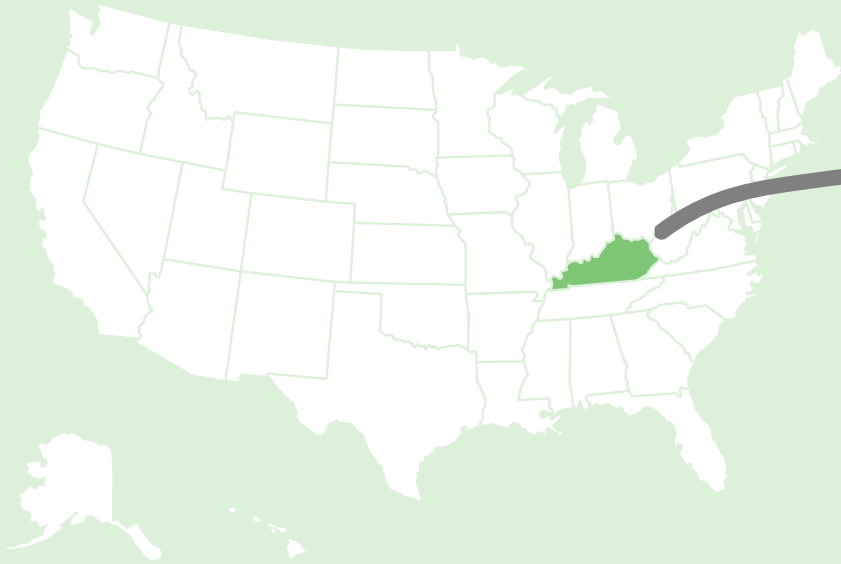
compared to 12% in non-Appalachia Kentucky.

DIABETES IS COMMON DURING PREGNANCY.



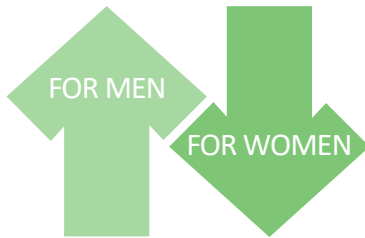
who gave birth in 2019.

DIABETES IS SERIOUS.



KENTUCKY HAS THE
4TH HIGHEST
MORTALITY RATE
FROM DIABETES IN
THE U.S.

SINCE 2001,
DIABETES
MORTALITY
RATES HAVE



Death Rates are substantially
HIGHER FOR African
Americans
than for white Kentuckians.

DEATH RATES IN APPALACHIA
ARE HIGHER THAN NON-APPALACHIA.

10,462 Kentuckians

visited the emergency department a total of **16,497 times** for diabetes in 2019.

8,270 KENTUCKIANS HAD AT LEAST ONE HOSPITAL STAY FOR DIABETES IN 2019.



Diabetes was the
primary diagnosis for

11,545
HOSPITALIZATIONS

in 2019.

AVERAGE LENGTH OF STAY

5 DAYS



DIABETES IS COSTLY.

Second most costly common chronic disease

KENTUCKY MEDICAID

\$129 MILLION

for all diabetes non-prescription claims in 2019



One of the top costly chronic conditions for active and early retirees

KEHP

\$216 MILLION

for combined medical and prescription drug costs in 2019

Emergency department visits resulted in billed charges of approximately

\$92 MILLION

EACH INPATIENT STAY HAD AN

AVERAGE CHARGE

OF

\$39,262

resulting in



TOTAL CHARGES

OF MORE THAN

\$453 MILLION

(\$453,274,627 to be exact.)

DIABETES IS MANAGEABLE AND CAN BE PREVENTABLE (TYPE 2).

- Structured lifestyle change programs such as the National Diabetes Prevention Program have been proven to prevent or delay type 2 diabetes in adults with prediabetes through good nutrition, physical activity, and a 5% to 10% weight loss.
- Quality care from healthcare teams is critical to reduce risks for diabetes-related complications. This can include:
 - Aggressive treatment to manage blood sugar, blood pressure, and cholesterol
 - Smoking cessation promotion
- Diabetes self-management education and support, appropriate self-care and other risk reduction, and behavior change strategies are also critical to manage diabetes and avoid complications.

Addressing Diabetes in Kentucky

APPLYING THE EVIDENCE BASE TO IMPROVE DIABETES OUTCOMES

One key to prevention of type 2 diabetes and diabetes complications is for individuals and healthcare practitioners to follow evidence-based guidelines. Guidelines include screening and diagnosing diabetes as early as possible, providing good medical care, and supporting lifestyle change.

Actions designed to support the availability and sustainability of CDC-recognized DPP and accredited or recognized DSMES programs, healthcare provider referral of patients to these programs, and program enrollment are primary recommendations of this report.

CURRENT DIABETES PREVENTION AND CONTROL EFFORTS

DPH, DMS, KEHP, and external partners support a wide range of activities designed to improve diabetes prevention and control in their respective populations – as well as the state as a whole.

Examples include:

- Providing access to care for prevention, early detection, and treatment of diabetes.
- Providing health risk assessments to health plan members to identify those at risk for diabetes.
- Offering wellness programs to health plan members to increase physical activity levels and improve dietary choices.
- Providing Disease Management (DM) and Case Management (CM) programs for health plan members with complications of diabetes and/or multiple chronic conditions.
- Providing education about diabetes prevention and control to the public and to health plan members.
- Offering training to healthcare providers to provide DSMES education programs.
- Educating healthcare providers about opportunities to refer patients with diabetes to DSMES programs.
- Providing statewide leadership in the development of a network of sites providing DPP.
- Facilitating diabetes professional education and quality improvement activities for healthcare providers.

- Supporting development of referral mechanisms to connect people with or at risk for diabetes to appropriate care.
- Convening state partners to coordinate diabetes prevention and control activities and carry out evidence-based activities.
- Collecting, analyzing, and disseminating of data to track diabetes prevalence, mortality, and outcomes.

Successes related to these efforts include growth in access and utilization of DPP and growth in access to accredited or recognized DSMES programs. In addition, KEHP initiated a “Value-Based Benefit,” which provides medication and supplies for people with diabetes at reduced cost, with no deductible, which has increased medication adherence, decreased hospitalizations and emergency department visits, and kept overall costs stable.

Measuring Progress

The partners involved in this report have agreed to establish comparable benchmarks to measure progress in diabetes management in the state. Collectively, these data provide a picture of clinical care and management, and access to self-management education and support, and lifestyle change programs across the Commonwealth.

- Medicaid requires the Medicaid managed care organizations (MCO) to report Healthcare Effectiveness Data and Information Set (HEDIS) diabetes measures.
- KEHP reports HEDIS measures on diabetes.
- DPH reports measures on self-reported diabetes clinical benchmarks from the Kentucky Behavioral Risk Factor Survey (KyBRFS).
- OHDA reports diabetes specific Prevention Quality Indicators (PQI) as defined and instituted by the Agency for Healthcare Research and Quality (AHRQ).
- DPH and CDC reports data on access to, and use of, DPP and DSMES programs.

As the burden of diabetes in Kentucky continues to grow, we must increase our efforts to make changes in our communities, healthcare systems, and personal behaviors in order to influence the growing epidemic. Now is the time for the Commonwealth to act on the information in this report and move forward with making changes to improve diabetes prevention and control for Kentuckians. Ultimately, this will improve the quality of life and promote better health outcomes for all Kentuckians.