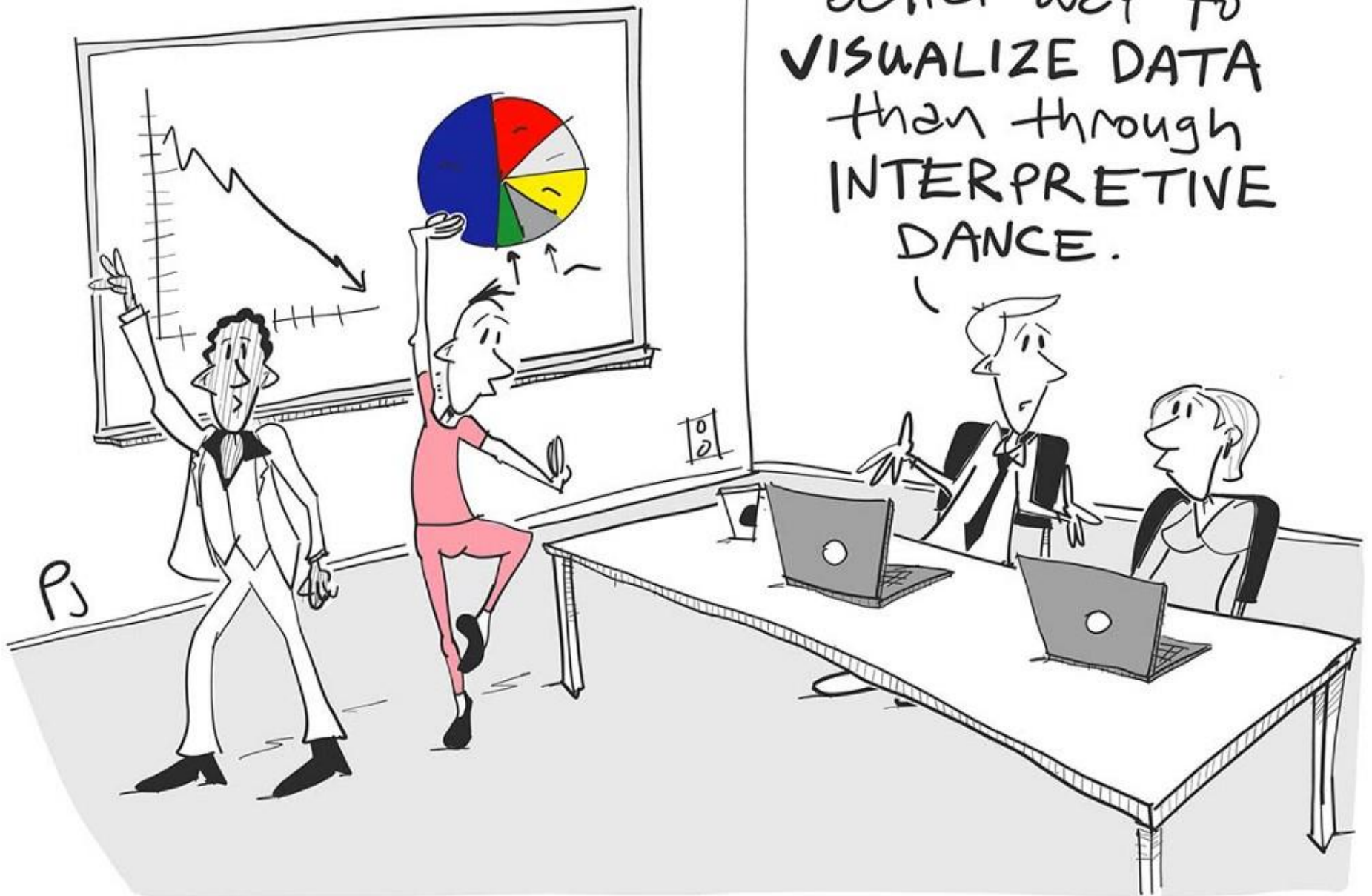




Chronic Disease Data at the Tennessee Department of Health

Thursday, June 3, 2021

Shalini Parekh, MPH, Assistant Commissioner





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Hospital Discharge Data System

Hospital Discharge Data System (HDDS)

- Collects and summarizes patient diagnosis and procedure data from every hospital in TN enabling research on a broad range of public health and health policy issues
- Population
 - Inpatient and outpatient patients from 168 TN hospitals plus 6 mental health hospitals



HDDS – (*Some*) Data Variables

- **Patient name, address, sex, birth date, SSN**
- **Admission date**
- Revenue codes (for payment)
- Payer ID/Health Plan ID
- Employer name (of patient)
- **Principle Diagnosis code, Other Diagnosis codes (ICD-9/10)**
- **Procedure code(s)**
- Patient's reason for visit
- Provider name

HDDS - Uses

- Compare rates of hospitalizations in different geographic areas to determine disease clusters
- Examine data to gauge the delivery of health care services to patients
 - Cost and type of inpatient hospitalizations
 - Number and severity of motorcycle accidents
- Produce disease-specific reports



Ambulatory Surgical Treatment Center and Outpatient Diagnostic Center Data

Ambulatory Surgical Treatment Center and Outpatient Diagnostic Center Data System (ASTC-ODC)

- Collects and summarizes patient claims data from TN ambulatory surgical treatment centers (ASTC) and outpatient diagnostic centers (ODC)
- Definitions
 - *ASTC*: facilities that perform surgeries and treatments that don't necessarily require hospital admission. ASTCs are thought to provide cost-effective services and a convenient environment that is less stressful and expensive than what many hospitals can offer.
 - *ODC*: facilities that provide diagnostic tests, including, X-rays, mammography MRI's, CT scans, and lab services



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Behavioral Risk Factor Surveillance System (BRFSS)

Behavioral Risk Factor Surveillance System (BRFSS)

- Telephone survey (cell and landline) that collects individual data from TN residents ages 18+ on health-related risk behaviors, chronic health conditions and the use of preventive services
- Importance:
 - Only source of state-based health risk behavior data related to chronic disease prevalence
 - Collects data from all 50 states, DC, and three U.S. territories



Behavioral Risk Factor Surveillance System (BRFSS)

Core Sections.....

Section 1: Health Status.....

Section 2: Healthy Days.....

Section 3: Health Care Access.....

Section 4: Physical Inactivity.....

Section 5: Chronic Health Conditions.....

Section 6: Tobacco Use.....

Section 7: Alcohol Consumption.....

Section 8: Immunization.....

Section 9: HIV/AIDS.....

Section 10: Arthritis Management.....

Section 11: Cholesterol Awareness.....

Section 12: Demographics.....

Section 13: Fruits and Vegetables.....

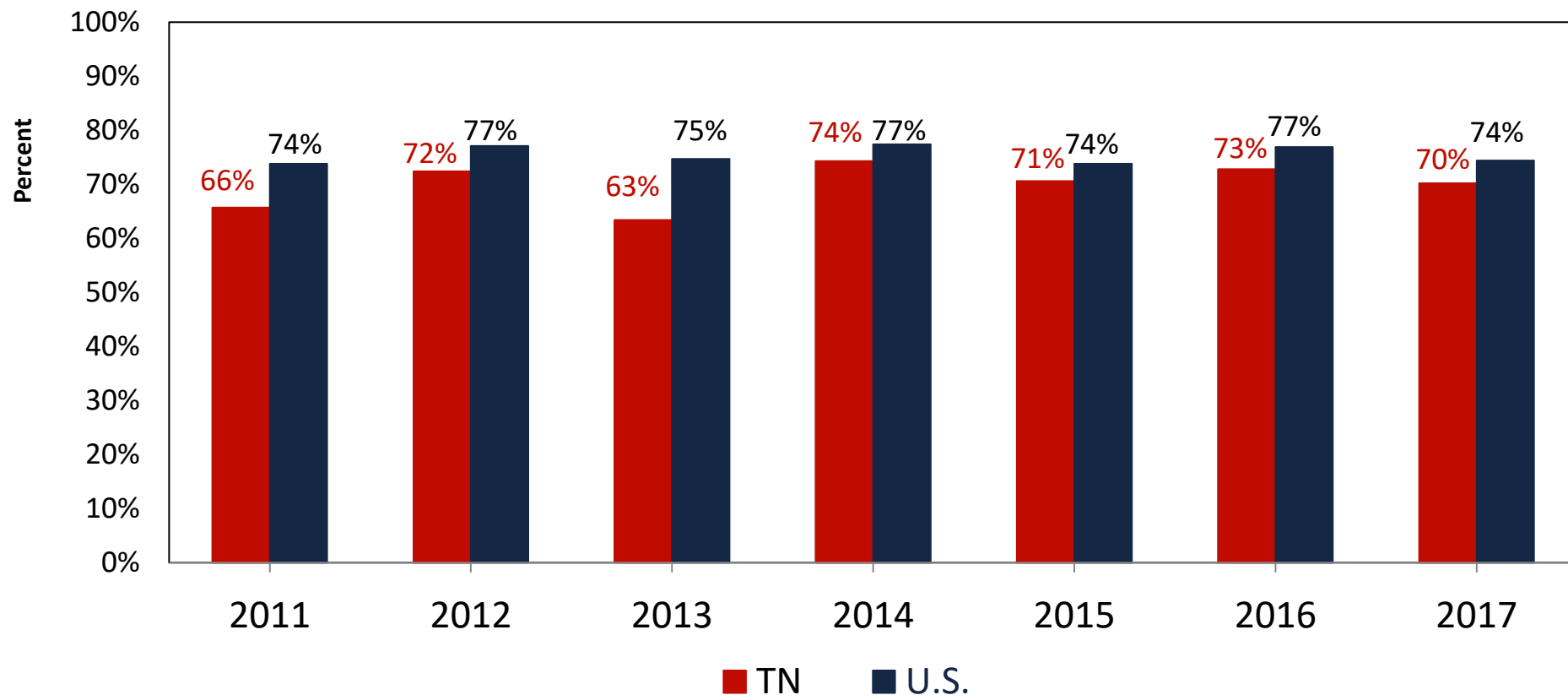
Section 14: Hypertension Awareness.....

Section 15: Closing Statement.....



Behavioral Risk Factor Surveillance System

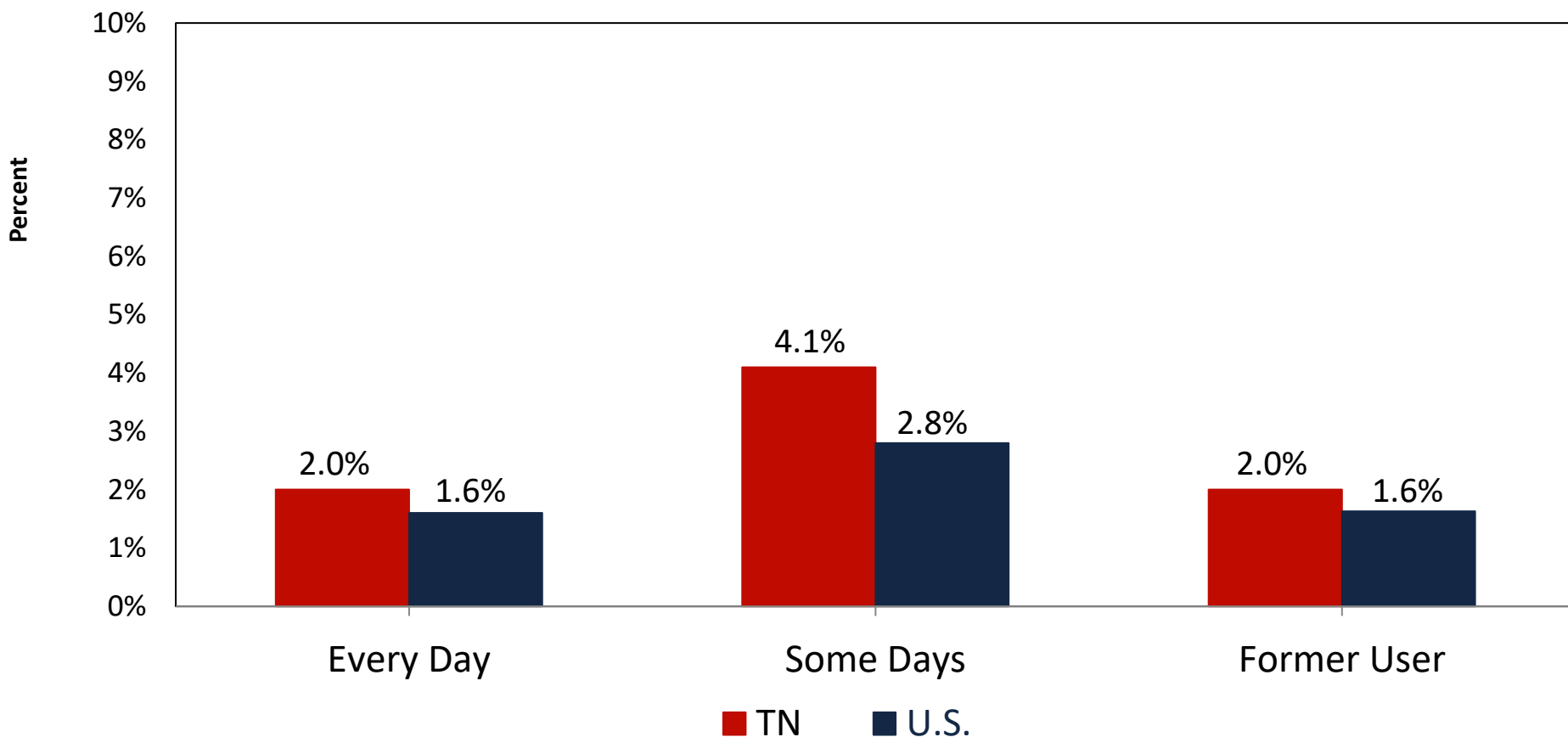
During the past month, other than your regular job, did you participate in any physical activity or exercises? TN and US, 2011 - 2017



Source: Tennessee and US Behavioral Risk Factor Surveillance System (BRFSS)

Behavioral Risk Factor Surveillance System

E-cigarette use, TN and US, 2017



Source: Tennessee and US Behavioral Risk Factor Surveillance System (BRFSS)



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Injury Surveillance Program

Injury Surveillance Program (ISP)

- Collects data on injuries occurring in Tennessee to inform prevention efforts.
- Current Focus
 - Motor vehicle crash injuries/fatalities in the state of TN
 - Merging hospital, death and motor vehicle data
 - Mapping this analysis with traffic accidents
 - Firearm injuries and fatalities





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Occupational Health and Safety Surveillance Program

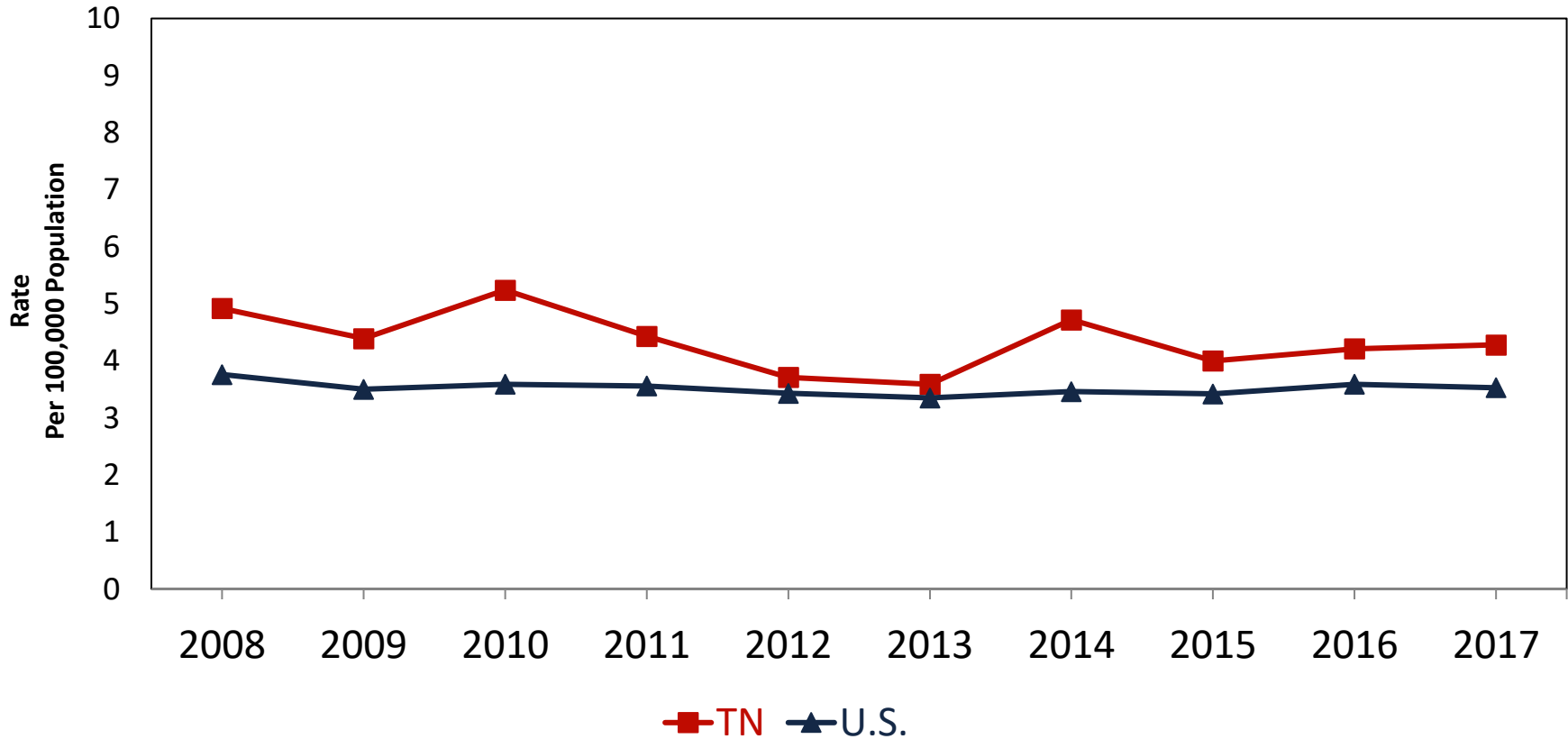
Occupational Health & Safety Surveillance Program (OHSSP)

Compiles, analyzes and assesses health data to monitor trends and progress in occupational health and safety to reduce the incidence of occupation-related injuries in Tennessee.



Occupational Health & Safety Surveillance Program

Rate of fatal work-related injuries, TN and US, 2013 - 2017



Source: Bureau of Labor Statistics (BLS), Census of Fatal Occupational Injuries 2008 - 2017



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Pregnancy Risk Assessment Monitoring Survey (PRAMS)

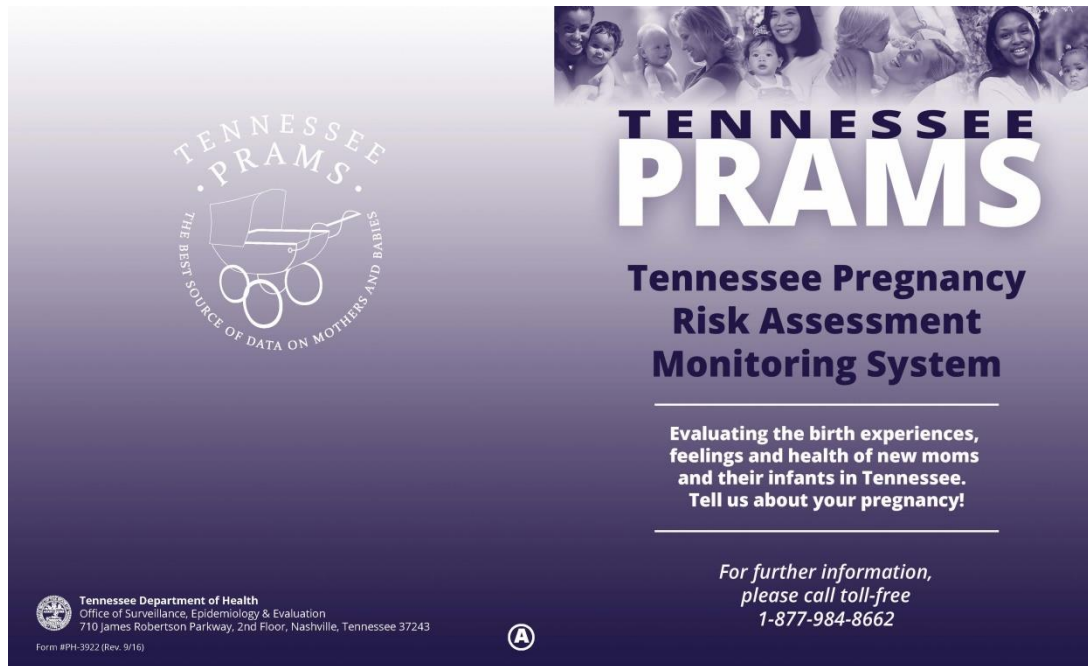
Pregnancy Risk Assessment Monitoring Survey (PRAMS)

- Collects state data on maternal attitudes and experiences before, during and shortly after pregnancy to improve the health of mothers and infants
- Importance:
 - Only source of maternal data of this magnitude
 - Collects data from 48 states and DC and permits comparison across states if response rate is met (55%)
 - PRAMS surveillance currently covers about 83% of all U.S. births



PRAMS Methodology (Survey administration)

- Methodology to obtain responses:
 - **Three survey mail outs** (not including reminder cards)



The image shows a survey mailout card for Tennessee PRAMS. The card features a purple gradient background. At the top, there is a collage of diverse families. On the left, there is a circular logo with a stroller icon and the text "TENNESSEE PRAMS" and "THE BEST SOURCE OF DATA ON MOTHERS AND BABIES". The main title "TENNESSEE PRAMS" is prominently displayed in large white letters. Below the title, the text reads "Tennessee Pregnancy Risk Assessment Monitoring System". A short paragraph describes the survey's purpose: "Evaluating the birth experiences, feelings and health of new moms and their infants in Tennessee. Tell us about your pregnancy!". At the bottom, contact information is provided: "For further information, please call toll-free 1-877-984-8662". The Tennessee Department of Health logo and address are at the bottom left, and a small 'A' icon is at the bottom center.

Tennessee Department of Health
Office of Surveillance, Epidemiology & Evaluation
710 James Robertson Parkway, 2nd Floor, Nashville, Tennessee 37243
Form #PH-3922 (Rev. 9/16)

Tennessee
PRAMS

**Tennessee Pregnancy
Risk Assessment
Monitoring System**

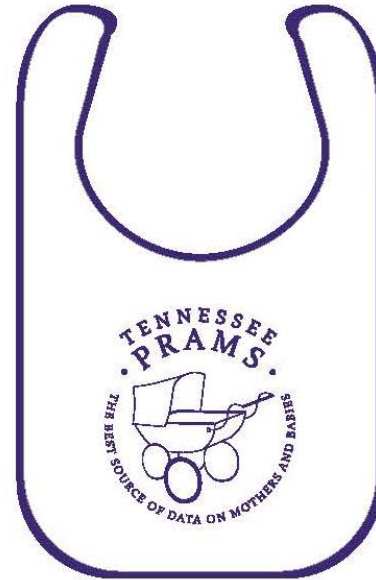
Evaluating the birth experiences,
feelings and health of new moms
and their infants in Tennessee.
Tell us about your pregnancy!

For further information,
please call toll-free
1-877-984-8662



PRAMS Methodology (Survey administration)

- Methodology to obtain responses:
 - Three survey mail-outs
 - **Two gift incentives**



PRAMS Methodology (Survey administration)

- Methodology to obtain responses:
 - Three survey mail-outs
 - Two gift incentives
 - 15 phone attempts
 - **Walmart gift card**



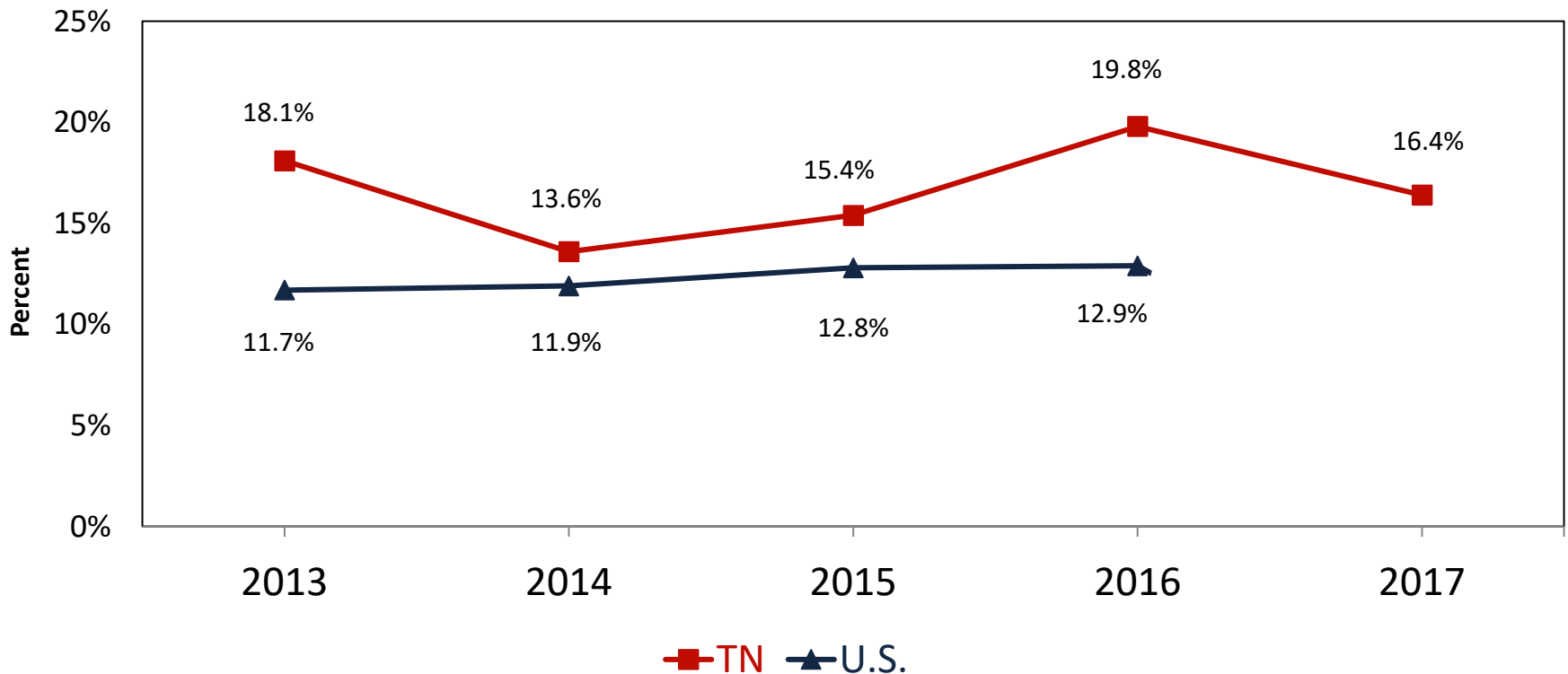
PRAMS Questions

- Demographics
- Insurance status
- Healthcare visits
- Family Planning
- Flu shot
- Smoking/Alcohol Use
- Intimate Partner Violence
- Breastfeeding
- Mother's mental health
- Opioids
- Covid-19



Pregnancy Risk Assessment Monitoring Survey (PRAMS)

Postpartum Depressive Symptoms Among Mothers, TN and US, 2013 - 2017



2017 PRAMS data for U.S. not available as of 4/16/2019.

Source: Tennessee Pregnancy Risk Assessment Monitoring System (PRAMS), 2013 - 2017

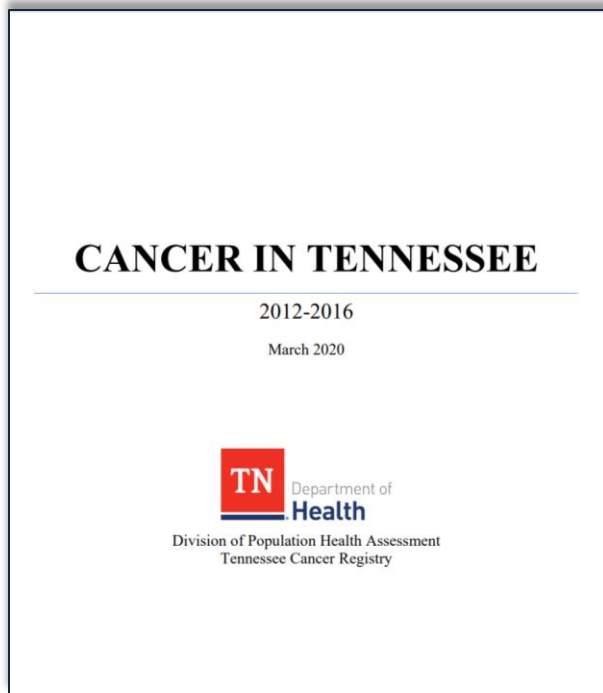


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Tennessee Cancer Registry

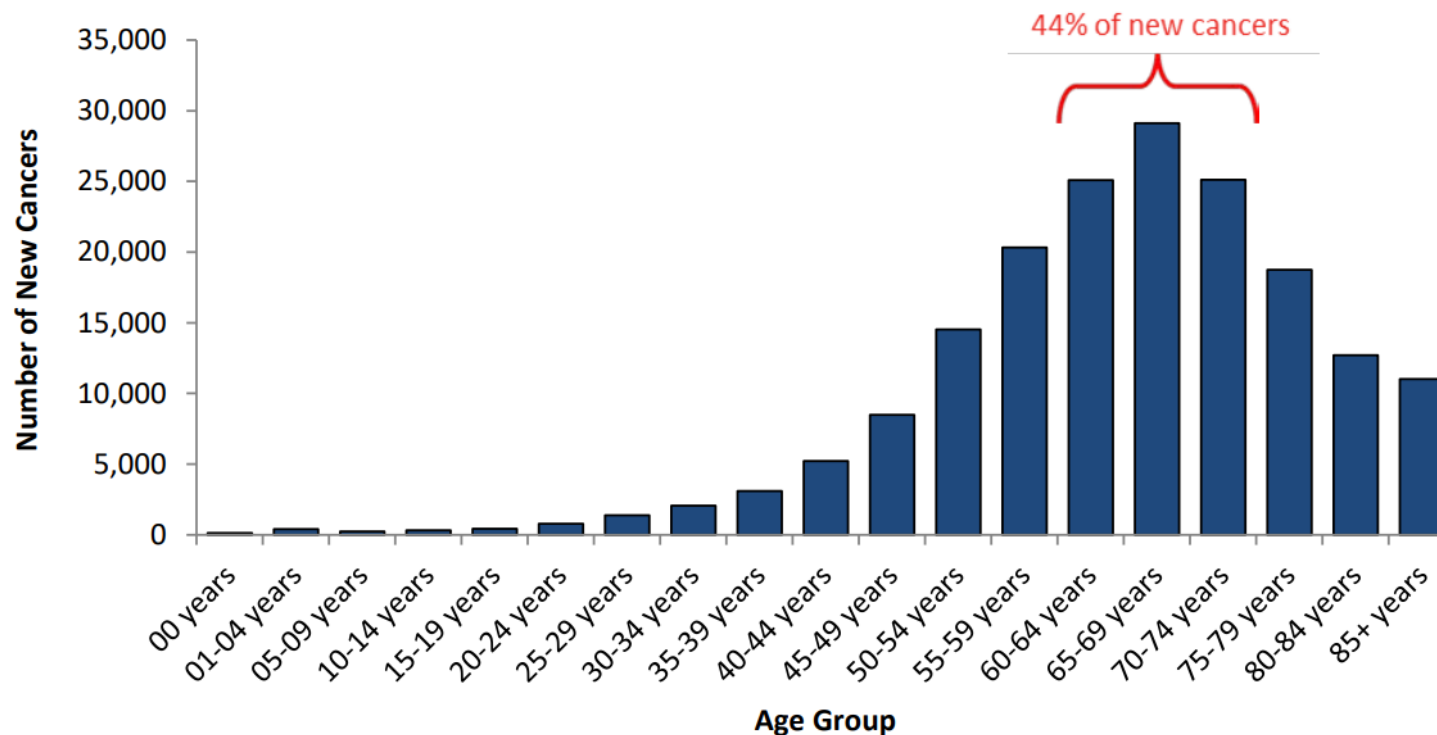
Tennessee Cancer Registry (TCR)

- Collects and reports on cancer incidence in Tennessee residents diagnosed with a new case of cancer or benign CNS tumor



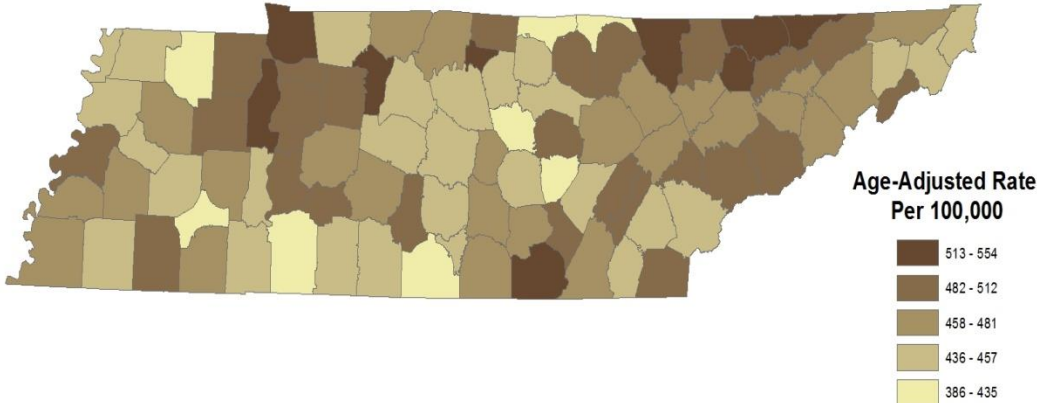
TCR Data

Figure 1. Cancer Incidence, By Age at Diagnosis, Tennessee, 2012-2016

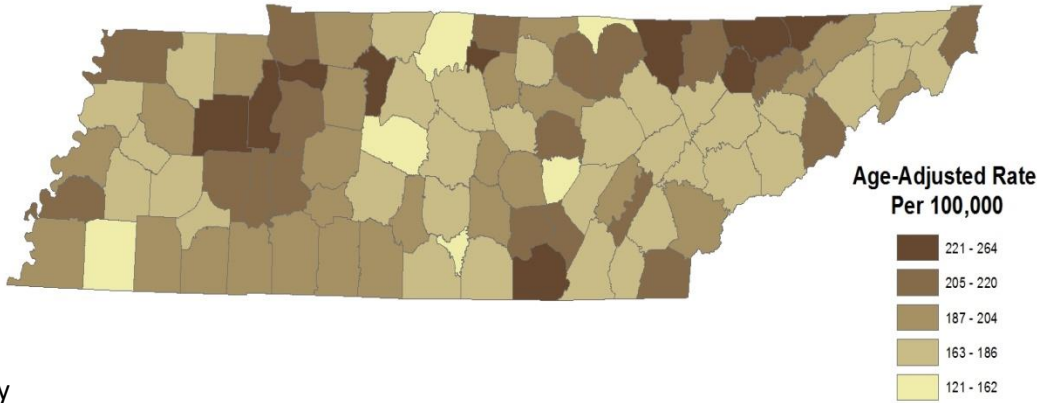


TCR Data

Incidence



Mortality



Source: Tennessee Cancer Registry



Joint Annual Reports (JARs)

Joint Annual Reports (JARs)

- Function
 - Collects data from a variety of licensed health facilities through annual reports known as Joint Annual Reports (JARs)
- Data Collected
 - Facility locations, services provided, patient origin by county, and financial indicators.



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Vital Statistics

Vital Statistics

- Function
 - Collects data on deaths, births, marriages and divorces
- Data Collected
 - **Death:** Overall TN resident mortality for all causes of death, leading causes of death, and demographic details for selected causes of death
 - **Birth:** Special published reports on the Vital Records website includes statistics on general and age-specific fertility rates, infant health conditions (e.g. preterm birth and low birthweight), and breastfeeding initiation.
 - **Marriage and Divorces**



Traumatic Brain Injury

Traumatic Brain Injury

- Information on traumatic brain injuries, including information by select demographic categories



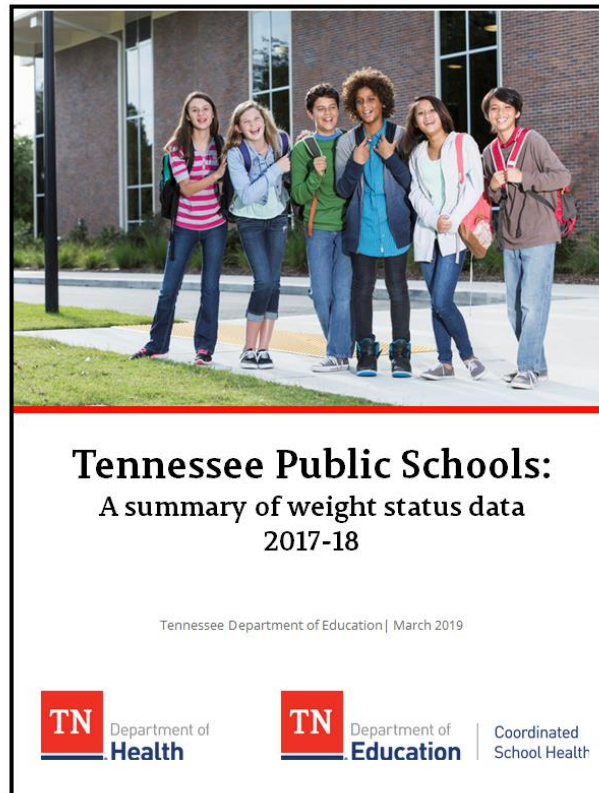
Maternal Mortality Annual Report

Maternal Mortality Annual Report

- Annual report on maternal causes of deaths.

Special Projects

- Provides analytical and GIS support across the Department of Health
- BMI Report



TN Department of
Health

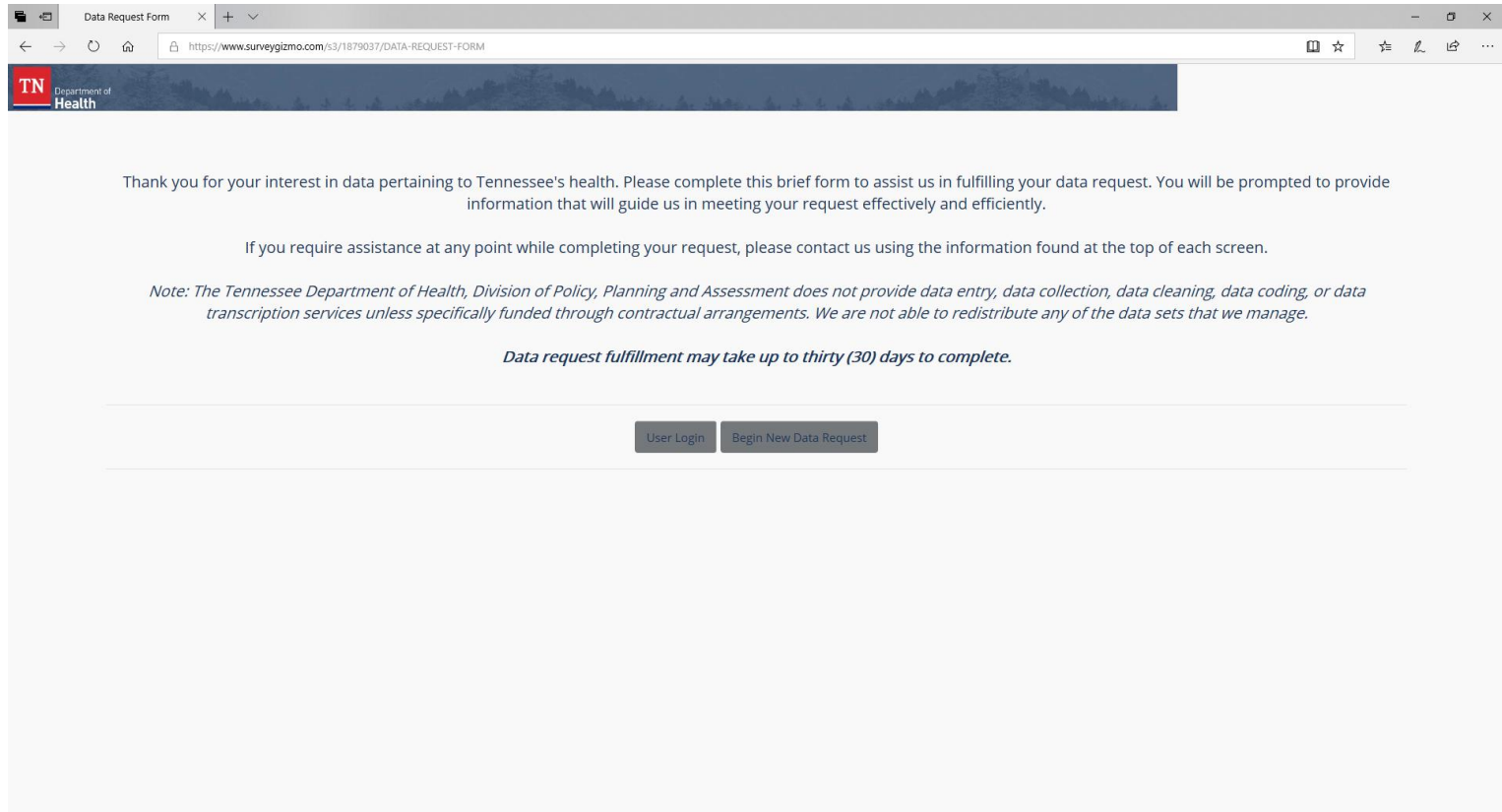


Childhood Asthma in Tennessee 2007 - 2016

Tennessee Department of Health | May 2019



TDH Data Request Procedure



The screenshot shows a web browser window with the title "Data Request Form" and the URL "https://www.surveygizmo.com/s3/1879037/DATA-REQUEST-FORM". The page features the Tennessee Department of Health logo in the top left corner. The main content area contains the following text:

Thank you for your interest in data pertaining to Tennessee's health. Please complete this brief form to assist us in fulfilling your data request. You will be prompted to provide information that will guide us in meeting your request effectively and efficiently.

If you require assistance at any point while completing your request, please contact us using the information found at the top of each screen.

Note: The Tennessee Department of Health, Division of Policy, Planning and Assessment does not provide data entry, data collection, data cleaning, data coding, or data transcription services unless specifically funded through contractual arrangements. We are not able to redistribute any of the data sets that we manage.

Data request fulfillment may take up to thirty (30) days to complete.

At the bottom of the page, there are two buttons: "User Login" and "Begin New Data Request".

<https://www.surveygizmo.com/s3/1879037/DATA-REQUEST-FORM>

Our Data Request Procedure

- For assistance with data request procedure or to answer questions please contact:

Dr. Nash Aragam

Office of Informatics and Analytics

Phone: (615) 741-1954

data.health@tn.gov

Data Sharing Restrictions

- HIPAA Privacy Rule: a set of national standards for the protection of certain health information.
 - A major goal is to assure that individuals' health information is properly protected while allowing for the flow of health information needed to provide and promote high quality health care and protect the public's health and well being.
- If patient-level, identifiable data is requested, data request must go through approval process with the TN Institutional Review Board (IRB).
- Interagency data sharing agreements



Questions?

Thank you

Shalini Parekh, MPH, Assistant Commissioner

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(615) 253-6814

