

# 2022-2023 Yellowstone County Community Health Needs Assessment

## Data Packet: Respiratory Disease

Recommended Citation: Professional Research Consultants, Inc.

2023 Community Health Needs Assessment Report: Yellowstone County, Montana

[hbdyc.org/CHNA](https://hbdyc.org/CHNA) – Published January 4, 2023



# How to Use This Data Packet

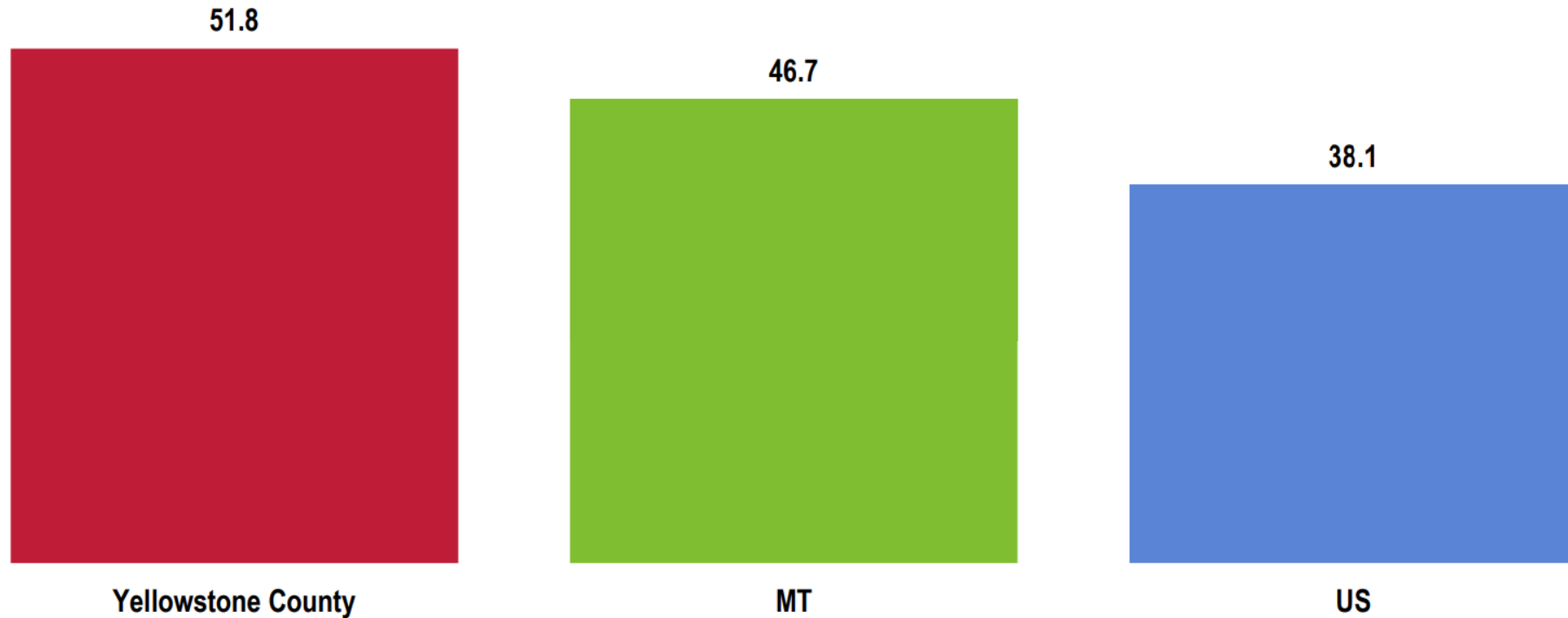
The graphs, data points, trends, and other insights shared in this data packet can be utilized when seeking:

- Verified local data for data acquisition or utilization purposes such as grant applications, local and non-local trend tracking, etc.
- High resolution slides for use in presentations or educational materials.
- Accessible, accurate data to increase understanding of community health topics and health disparities.
- A condensed, topic-specific alternative to reading 200+ pages of data!

# Key Takeaways – Respiratory Disease

- While consistently declining since 2015-17, Yellowstone County (YC) still outpaces state and national rates for **Chronic Lower Respiratory Disease (CLRD) deaths**.
- Concerns remain regarding the individual and community perceptions of **COVID-19** risks, treatment, and impact.
- After a gradual climb since 2005, the prevalence of **Chronic Obstructive Pulmonary Disease (COPD)** has dropped significantly since 2020.
- YC has not seen consistent progress regarding **lower asthma diagnoses** since 2005.

# CLRD: Age-Adjusted Mortality (2018-2020 Annual Average Deaths per 100,000 Population)

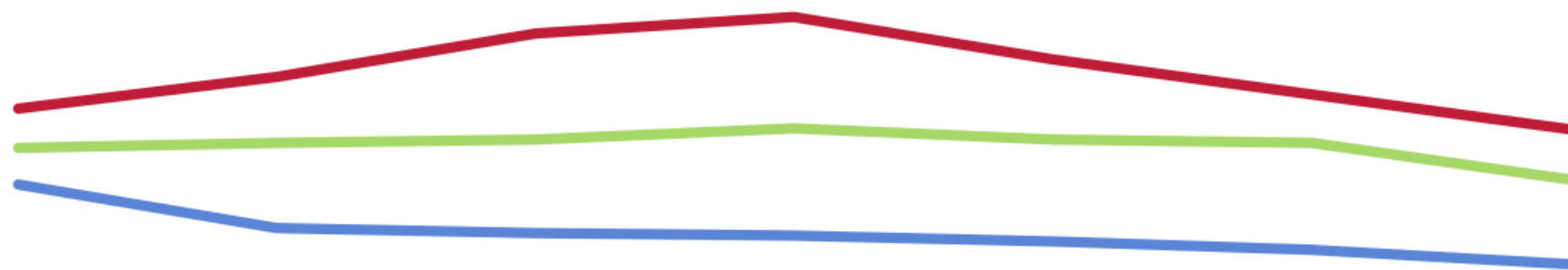


Sources: ● CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted July 2022.

Notes: ● CLRD is chronic lower respiratory disease.

# CLRD: Age-Adjusted Mortality Trends

## (Annual Average Deaths per 100,000 Population)

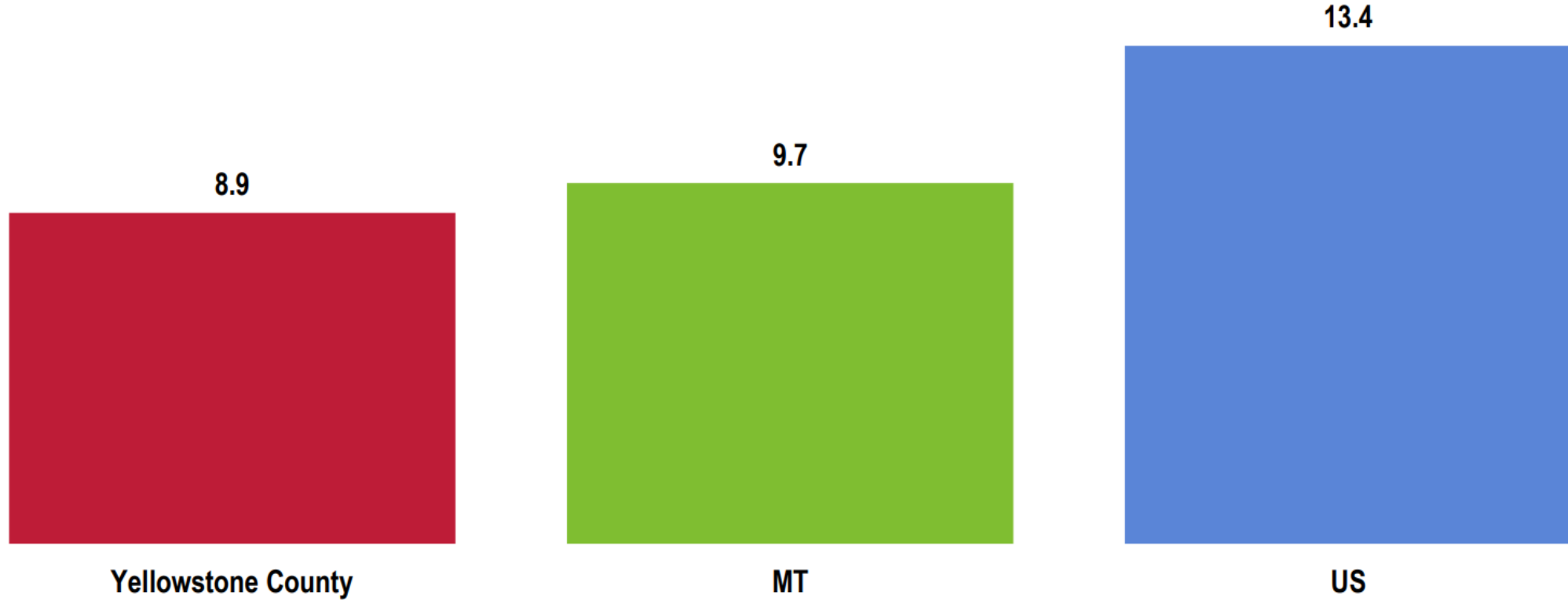


	2012-2014	2013-2015	2014-2016	2015-2017	2016-2018	2017-2019	2018-2020
<span style="color: red;">—</span> Yellowstone County	53.9	57.1	61.5	63.2	58.9	55.3	51.8
<span style="color: green;">—</span> MT	49.9	50.4	50.8	51.9	50.8	50.4	46.7
<span style="color: blue;">—</span> US	46.2	41.8	41.3	41.0	40.4	39.6	38.1

Sources: ● CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted July 2022.

Notes: ● CLRD is chronic lower respiratory disease.

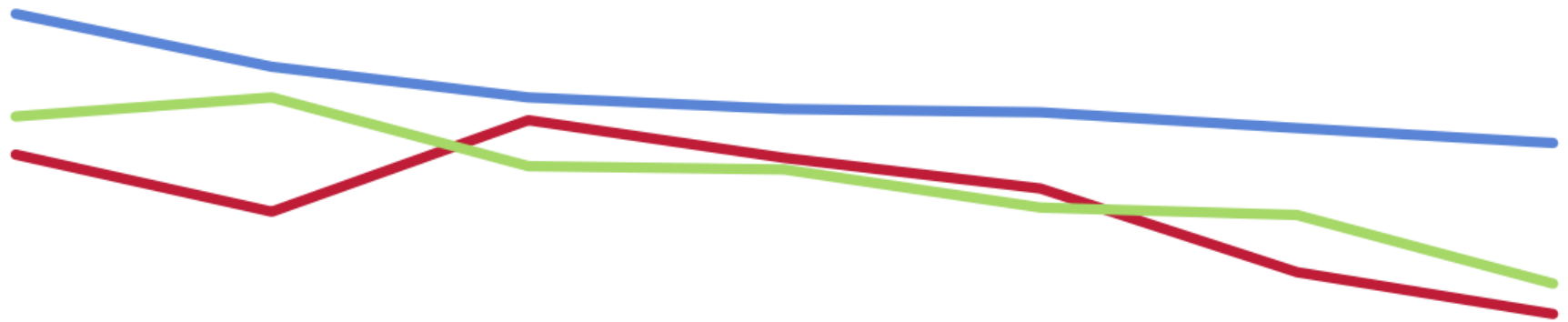
# Pneumonia/Influenza: Age-Adjusted Mortality (2018-2020 Annual Average Deaths per 100,000 Population)



Sources: ● CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted July 2022.

# Pneumonia/Influenza: Age-Adjusted Mortality Trends

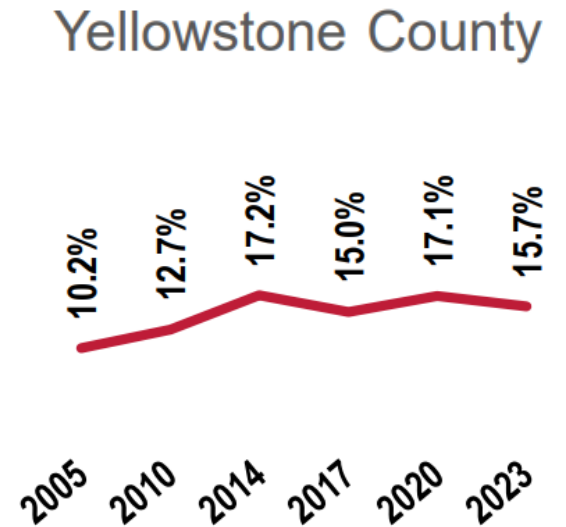
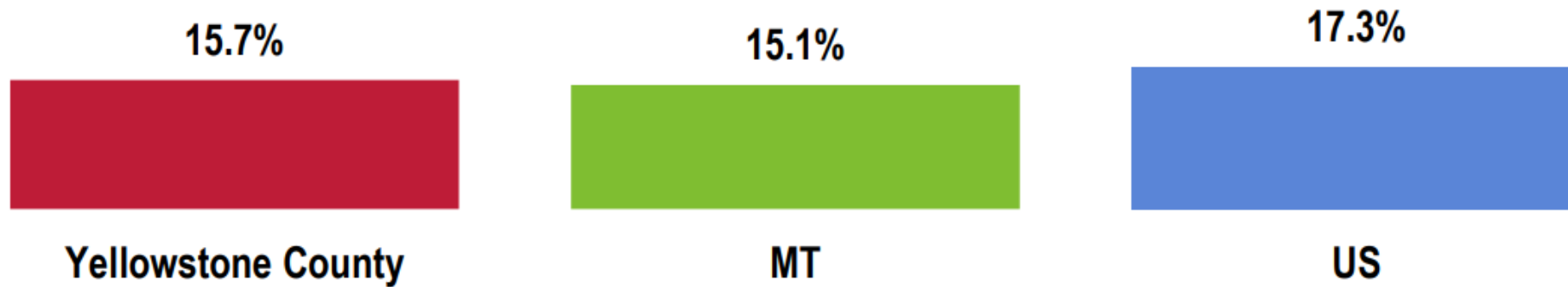
## (Annual Average Deaths per 100,000 Population)



	2012-2014	2013-2015	2014-2016	2015-2017	2016-2018	2017-2019	2018-2020
Yellowstone County	13.1	11.6	14.0	13.0	12.2	10.0	8.9
MT	14.1	14.6	12.8	12.7	11.7	11.5	9.7
US	16.8	15.4	14.6	14.3	14.2	13.8	13.4

Sources: ● CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted July 2022.

# Ever Diagnosed With Asthma



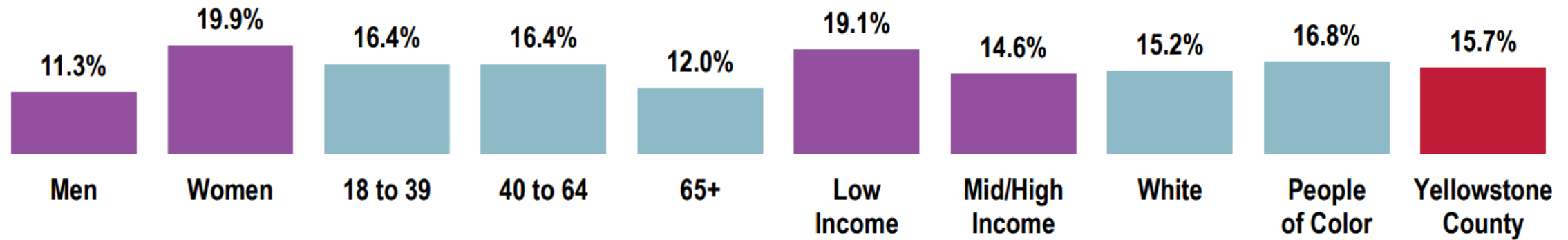
- Sources:
- 2023 PRC Community Health Survey, PRC, Inc. [Item 30]
  - Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2020 Montana data.
  - 2020 PRC National Health Survey, PRC, Inc.

Notes:

- Asked of all respondents.



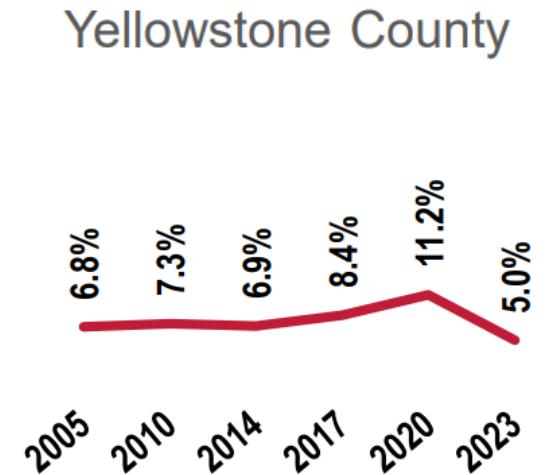
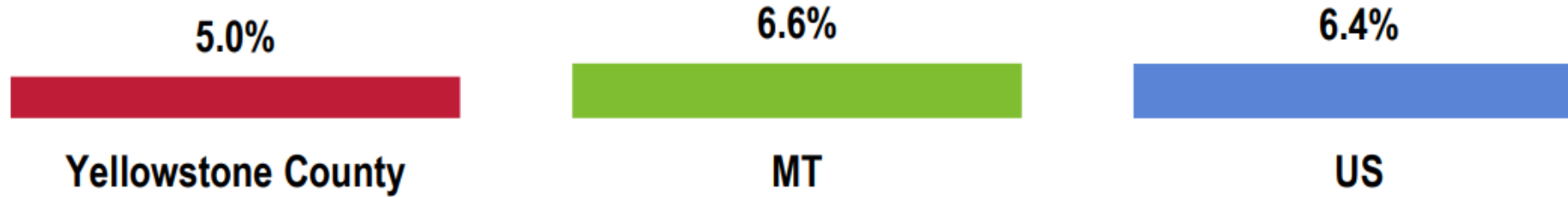
# Ever Diagnosed With Asthma (Yellowstone County, 2023)



Sources: ● 2023 PRC Community Health Survey, PRC, Inc. [Item 30]

Notes: ● Asked of all respondents.

# Prevalence of Chronic Obstructive Pulmonary Disease (COPD)



- Sources:
- 2023 PRC Community Health Survey, PRC, Inc. [Item 23]
  - Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2020 Montana data.
  - 2020 PRC National Health Survey, PRC, Inc.
- Notes:
- Asked of all respondents.
  - Includes those having ever suffered from or been diagnosed with COPD or chronic obstructive pulmonary disease, including bronchitis or emphysema.

# Respiratory Disease: Key Informant Input

## Perceptions of Respiratory Diseases as a Problem in the Community (Key Informants, 2023)

■ Major Problem   ■ Moderate Problem   ■ Minor Problem   ■ No Problem At All



Sources: ● PRC Online Key Informant Survey, PRC, Inc.

Notes: ● Asked of all respondents.

# Respiratory Disease: Key Informant Input

Key informants highlighted topics such as:

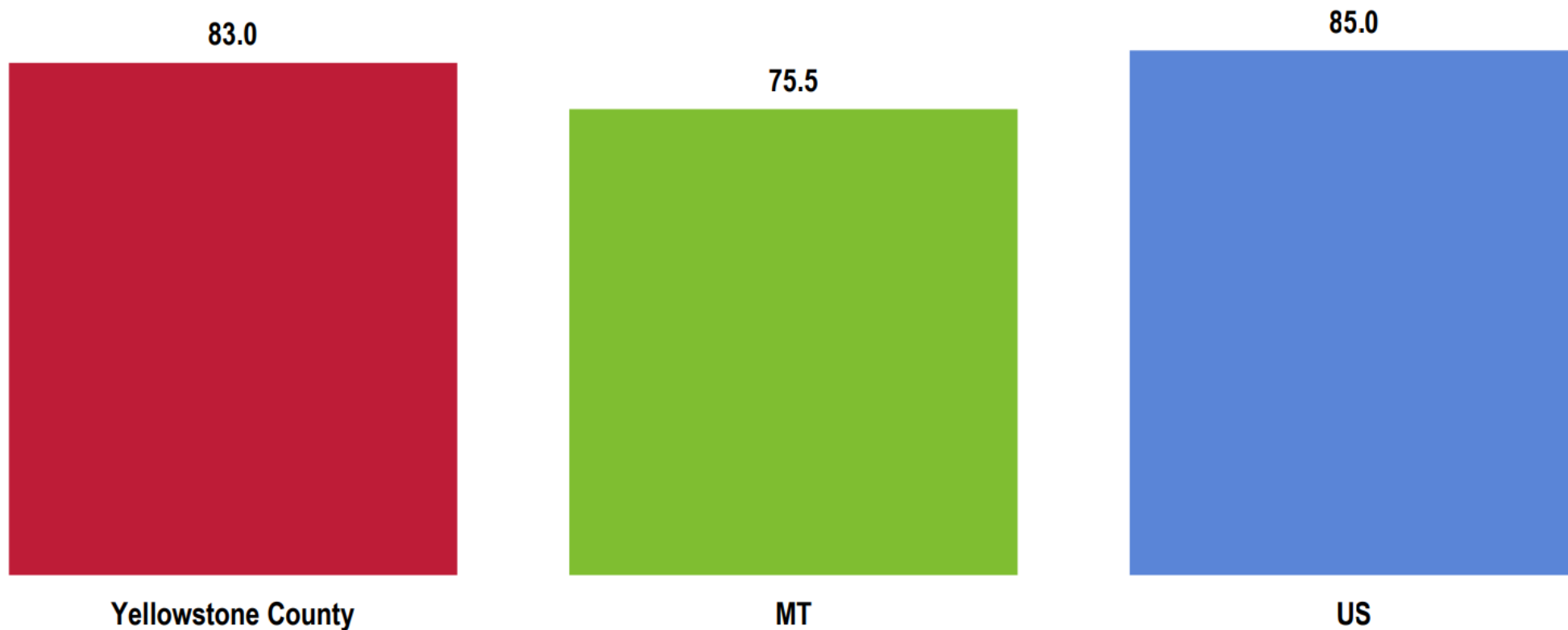
- Tobacco Use
- Awareness/Education
- Environmental concerns

“Understand the issues around respiratory disease such as allergies, asthma, smoking, air quality, etc. Access to or affordable equipment for respiratory issues. And, of course, all the issues around COVID.” – Social Service Provider

“I believe that the people that have these respiratory problems are former smokers.” – Social Service Provider

# COVID-19: Age-Adjusted Mortality

(2020 Average Deaths per 100,000 Population)



Sources: ● CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted July 2022.

# COVID-19: Key Informant Input

## Perceptions of Coronavirus Disease/COVID-19 as a Problem in the Community (Key Informants, 2023)

■ Major Problem    ■ Moderate Problem    ■ Minor Problem    ■ No Problem At All



Sources: ● PRC Online Key Informant Survey, PRC, Inc.

Notes: ● Asked of all respondents.

# COVID-19: Key Informant Input















Key informants highlighted topics such as:

- Awareness/education, including concerns about **understanding and establishing best practices** for current and future variants.
- Individual and community-level **hesitancies or lack of adherence** regarding public health initiatives, which featured the **public's lack of trust** in public health initiatives and vaccinations.
- Community-level impacts, including economic/workplace factors and **disproportionately impacted populations.**

“COVID-19 has been an illness that we as a community have all struggled to understand. Over the past few years, **COVID-19 has been a learn-as-you-go problem** that has been very exhausting to medical workers and mentally/physically hard to handle. Due to it being such a new illness, **no communities have been able to prepare well for outbreaks and constantly having to work with changing protocols** has majorly affected our community.”

– Community Leader

# Respiratory Disease Health Forecast

RESPIRATORY DISEASE	Yellowstone County	vs. MT	vs. US	vs. HP2030	TREND
CLRD (Age-Adjusted Death Rate)	51.8	 46.7	 38.1		 53.9
Pneumonia/Influenza (Age-Adjusted Death Rate)	8.9	 9.7	 13.4		 13.1
COVID-19 (Age-Adjusted Death Rate)	83.0	 75.5	 85.0		
% [Adult] Ever Diagnosed With Asthma	15.7	 15.1	 17.3		 10.2
% COPD (Lung Disease)	5.0	 6.6	 6.4		 6.8
% "Very Concerned" About Environmental Safety in Schools	12.5				



# Published Community Health Needs Assessment at: [www.hbdyc.org](http://www.hbdyc.org)

*Visit the website to contact Healthy By Design  
for additional information regarding the coalition or next steps*

Contact: Amy Queen, Community Health Improvement Manager  
406.247.3223 [amy@hbdyc.org](mailto:amy@hbdyc.org)

