



SOUTH DAKOTA  
DEPARTMENT OF HEALTH

**DOH Performance Indicators**  
**Presentation to Government Operations & Audit Committee**  
**July 25, 2023**



## STRATEGIC PLAN

2020 – 2025

*Vision* Every South Dakotan  
Healthy and Strong

*Mission* Working together to promote, protect,  
and improve health

*Guiding Principles*

- Serve** with integrity and respect
- Focus** on evidence-based prevention and outcomes
- Support** data-driven innovation
- Achieve** health equity in all communities
- Demonstrate** proactive leadership and strengthen partnerships
- Exhibit** transparency and accountability



# STRATEGIC PLAN

2020 – 2025

- ▶  **GOAL 1** \_\_\_\_\_  
*Enhance the accessibility, quality, and effective use of health resources.*
- ▶  **GOAL 2** \_\_\_\_\_  
*Provide services to improve public health.*
- ▶  **GOAL 3** \_\_\_\_\_  
*Plan, prepare, and respond to public health threats.*
- ▶  **GOAL 4** \_\_\_\_\_  
*Maximize partnerships to address underlying factors that determine overall health.*
- ▶  **GOAL 5** \_\_\_\_\_  
*Strengthen and support a qualified workforce.*

<http://doh.sd.gov/strategicplan/>



## **DOH Performance Measures**

- ❖ Fundamental measure of public health
- ❖ Contribute to overall life expectancy
- ❖ Comparable to other states

## 10 Leading causes of death by age group, South Dakota, 2017-2021

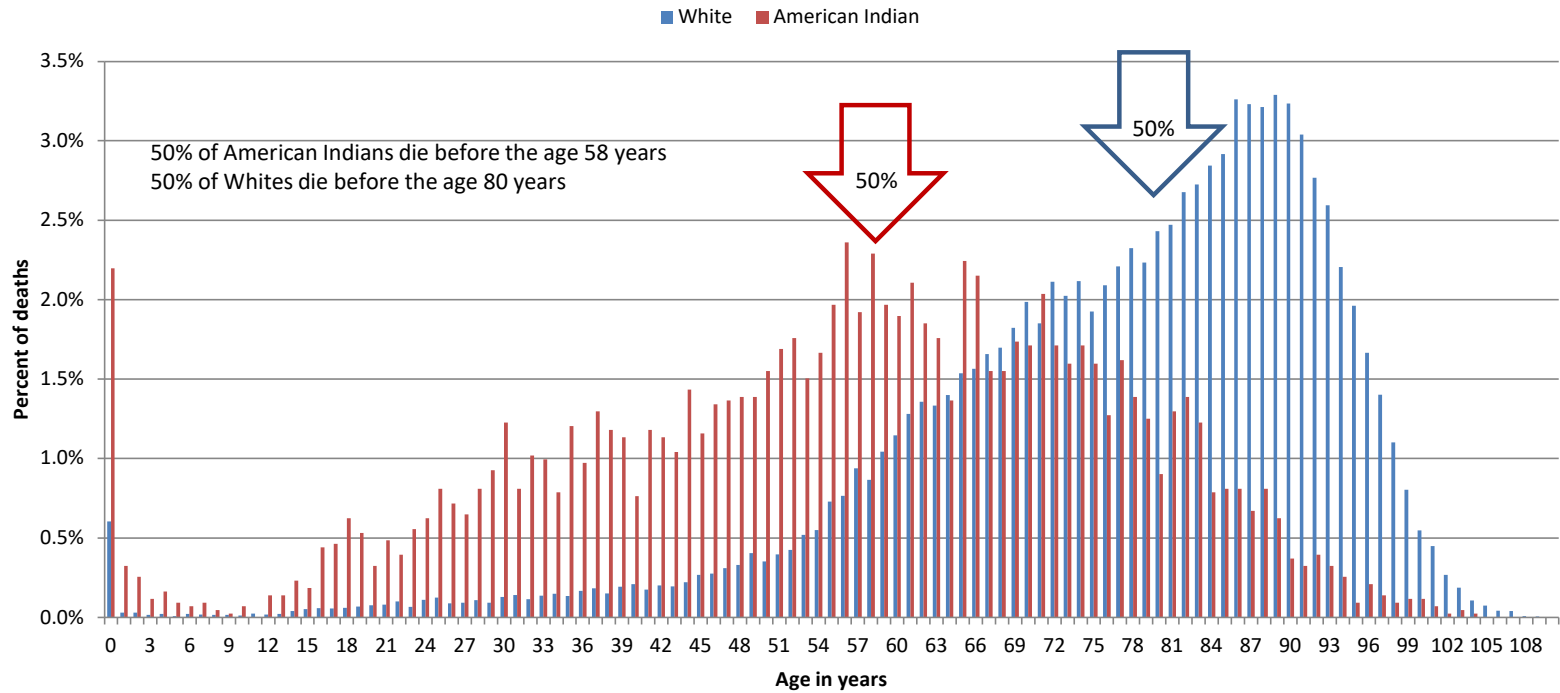
Rank	Age Groups											Total
	<1	1-4	5-14	15-24	25-34	35-44	45-54	55-64	65-74	75-84	85+	
	Total 396	Total 83	Total 122	Total 543	Total 905	Total 1,277	Total 2,213	Total 5,132	Total 7,915	Total 9,754	Total 14,935	Total 43,275
<b>1</b>	Congenital abnormalities 104	Motor vehicle accidents 15	Suicide 26	Suicide 201	Suicide 193	Liver disease 162	Cancer 399	Cancer 1,502	Cancer 2,366	Cancer 2,295	Heart disease 3,657	Heart disease 8,855
<b>2</b>	Short gestation and low birth weight 51	Drowning 7	Motor vehicle accidents 24	Motor vehicle accidents 130	Motor vehicle accidents 130	Heart disease 138	Heart disease 377	Heart disease 1,027	Heart disease 1,628	Heart disease 1,958	Cancer 1,804	Cancer 8,553
<b>3</b>	Accidental suffocation in bed 34	Homicide 7	Congenital abnormalities 11	Homicide 38	Liver disease 102	Cancer 119	Liver disease 282	Liver disease 272	Chronic lower respiratory diseases 562	Chronic lower respiratory diseases 781	Alzheimer's disease 1,628	Chronic lower respiratory diseases 2,417
<b>4</b>	Undetermined cause 30	Congenital abnormalities 7	Cancer 10	Accidental drug overdose 37	Accidental drug overdose 89	Suicide 117	Suicide 139	COVID-19 250	COVID-19 480	COVID-19 552	Stroke 963	COVID-19 2,273
<b>5</b>	SIDS 23	Undetermined cause 5	Drowning 8	Heart disease 18	Homicide 48	Motor vehicle accidents 112	COVID-19 107	Diabetes 239	Diabetes 301	Alzheimer's disease 518	COVID-19 817	Alzheimer's disease 2,261
<b>6</b>	Maternal complications of pregnancy 16		Fire/Smoke injury 7	Cancer 12	Heart disease 47	Accidental drug overdose 76	Diabetes 107	Chronic lower respiratory diseases 223	Stroke 288	Stroke 496	Chronic lower respiratory diseases 796	Stroke 1,987
<b>7</b>	Placenta, cord, and membrane complications 12			Pregnancy & childbirth 7	Cancer 41	Diabetes 65	Motor vehicle accidents 84	Stroke 150	Liver disease 157	Diabetes 358	Dementia 707	Diabetes 1,436
<b>8</b>	Circulatory diseases 9			Accidental firearm injury 7	COVID-19 20	Homicide 48	Accidental drug overdose 64	Motor vehicle accidents 131	Septicemia 123	Accidental falls 217	Accidental falls 530	Liver Disease 1,055
<b>9</b>	Respiratory distress 9			COVID-19 6	Diabetes 20	COVID-19 40	Stroke 49	Suicide 117	Influenza & pneumonia 118	Parkinson's disease 210	Influenza & pneumonia 481	Accidental falls 994
<b>10</b>	Cardiovascular disorders 8			Accidental falls 6	Chronic alcohol abuse 16	Chronic alcohol abuse 30	Chronic alcohol abuse 45	Accidental falls 72	Accidental falls 108	Influenza & pneumonia 185	Diabetes 343	Suicide 932
	All other 100	All other 42	All other 36	All other 81	All other 199	All other 370	All other 560	All other 1,149	All other 1,784	All other 2,184	All other 3,209	All other 12,512

Top 5 causes of death are highlighted.

Source: Office of Health Statistics, SD Dept. of Health



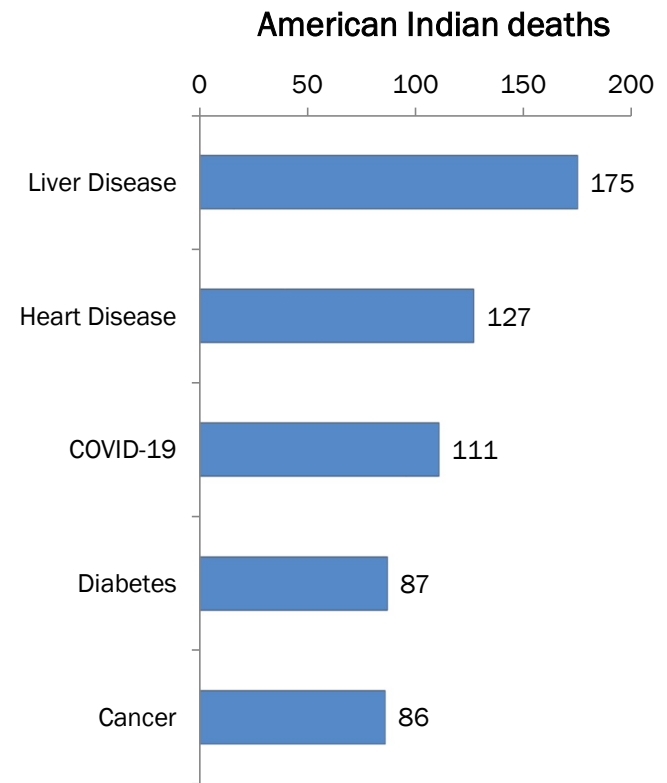
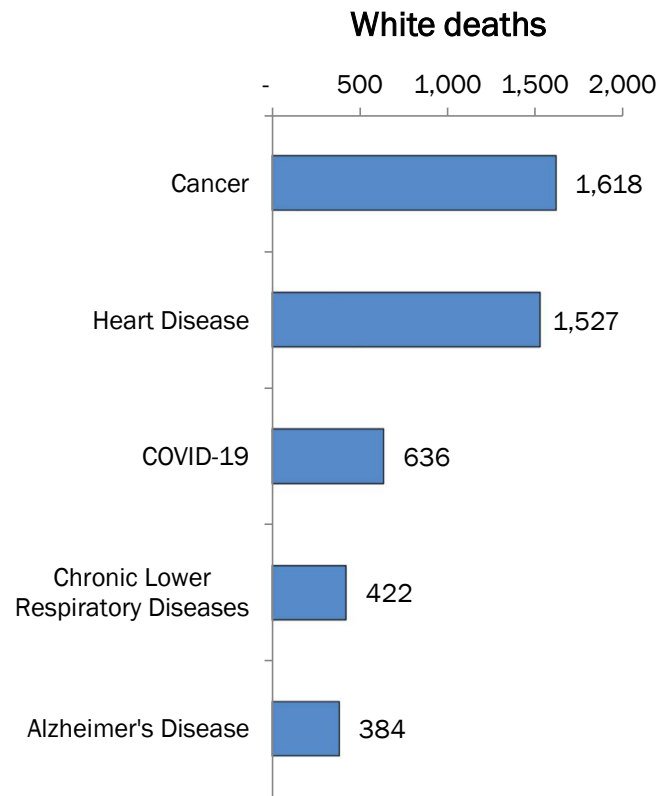
### American Indian and White mortality distribution by age at death, South Dakota 2017-2021



Source: Office of Health Statistics, South Dakota Department of Health



## Top 5 leading causes of death in South Dakota, 2021



Office of Health Statistics, SD Dept. of Health



SOUTH DAKOTA DEPARTMENT OF HEALTH

# **GOAL 1**

## **Healthy Beginnings**





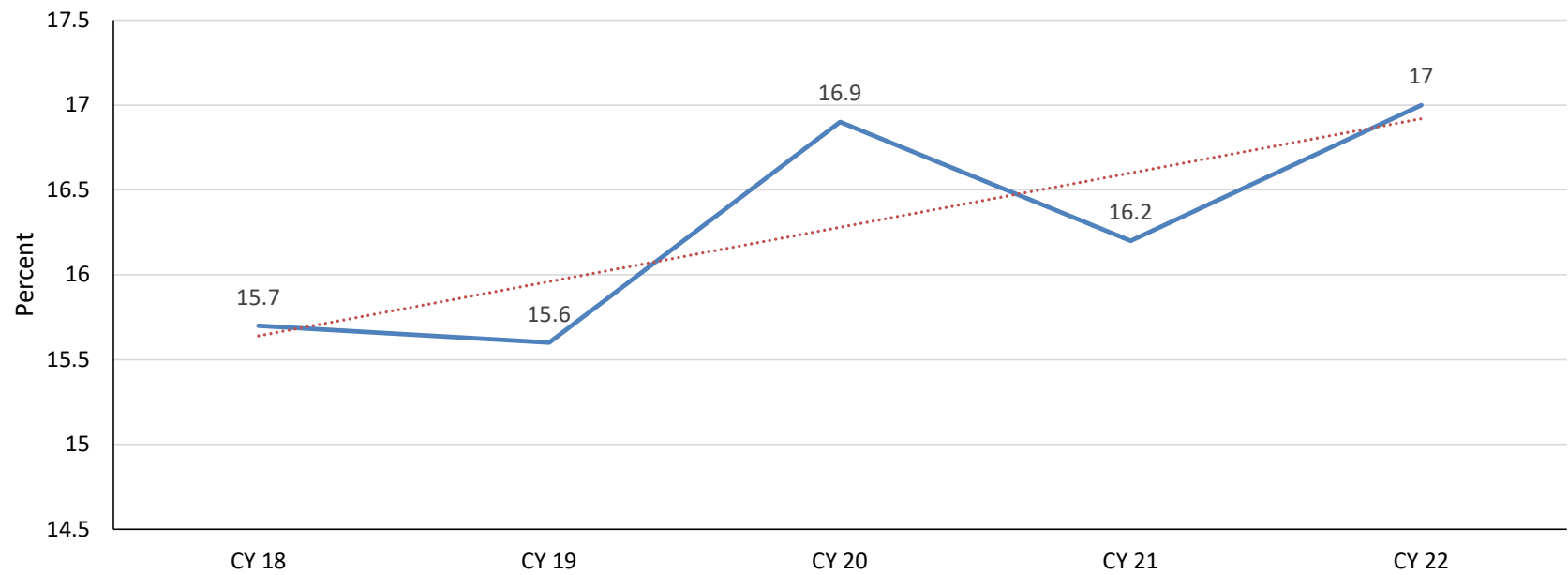
## Childhood Obesity

Over the past several decades, there has been a sharp increase in the proportion of children who are obese. Obesity has increased among all children, regardless of age, sex, and race. The increase in obesity among black and Hispanic children is particularly great. From 1986 to 1998, obesity among black and Hispanic children increased by more than 120 percent, compared to about 50 percent among white children.

[Childhood Obesity: A lifelong threat to health | Health Policy Institute | Georgetown University](#)



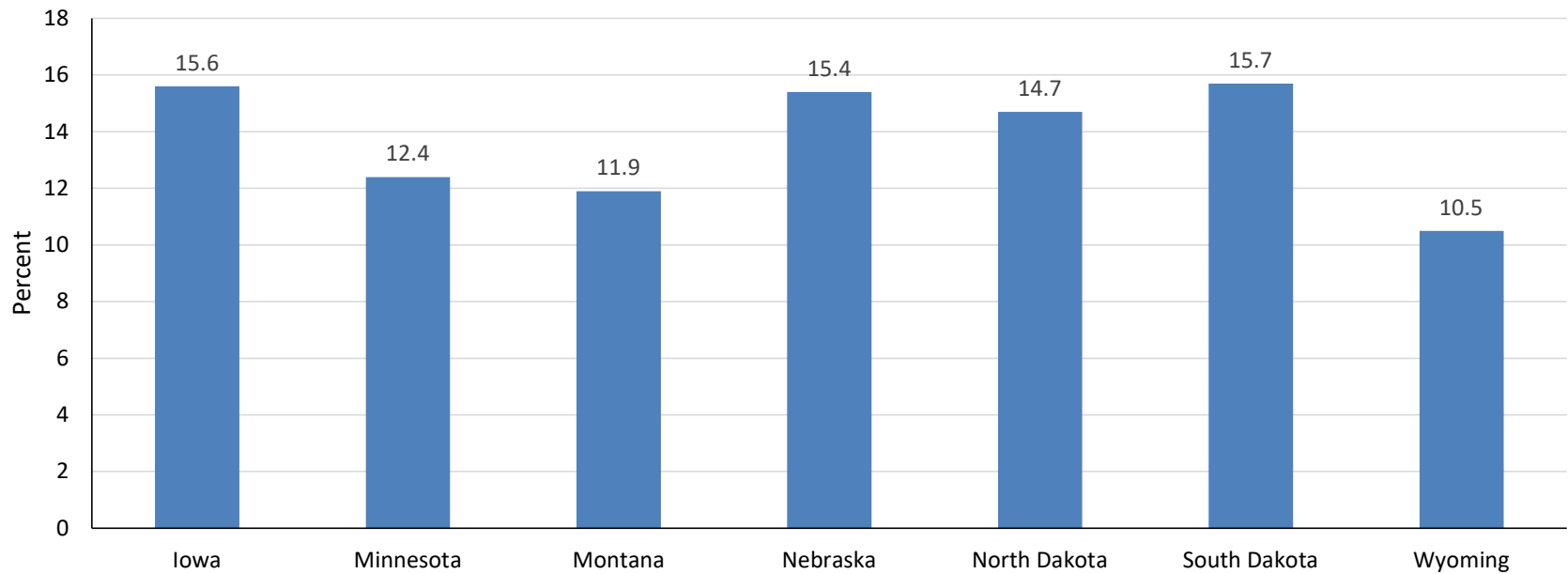
### Percentage of WIC Participants aged 2-4 with obesity, South Dakota (2018-2022)



Source: Food & Nutrition Service – WIC Participant Characteristics



### Percentage of WIC Participants aged 2-4 with obesity, Selected states, 2018



Source: Food & Nutrition Service – WIC Participant Characteristics



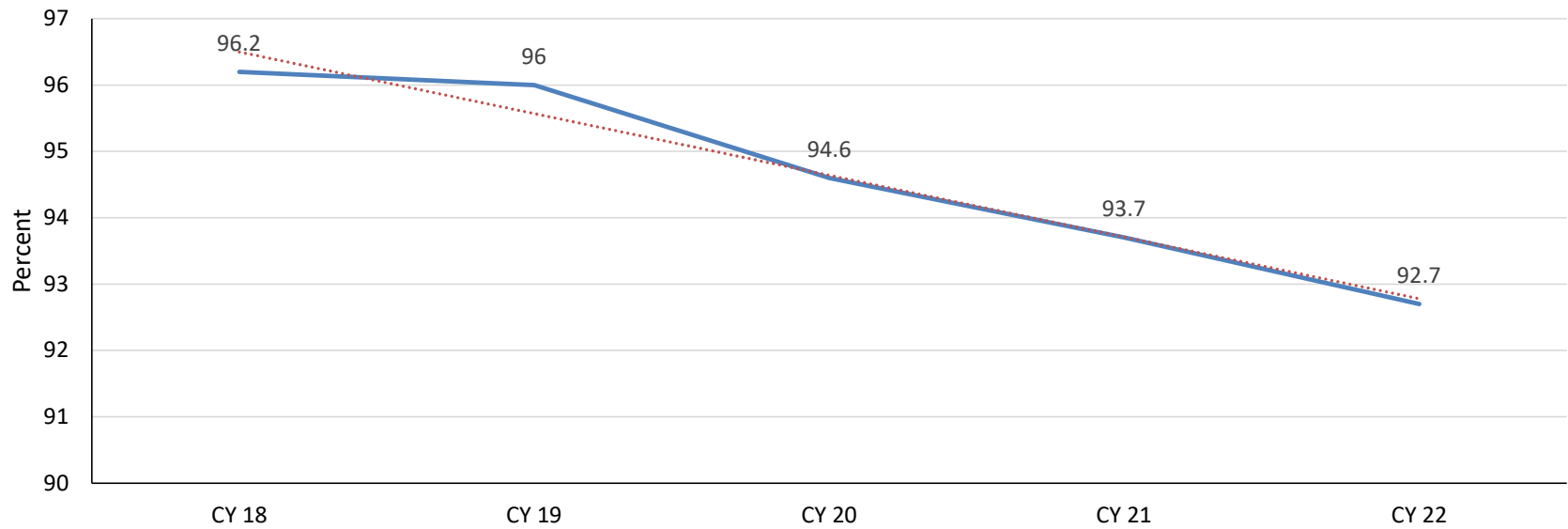
## Childhood Immunizations

Routine immunization reduced the incidence of all targeted diseases, leading to reductions in incidence ranging from 17% (influenza) to 100% (diphtheria, *Haemophilus influenzae* type b, measles, mumps, polio, and rubella). For the 2019 United States population of 328 million people, these reductions equate to >24 million cases of vaccine-preventable disease averted.

[Impact of Routine Childhood Immunization in Reducing Vaccine-Preventable Diseases in the United States | Pediatrics | American Academy of Pediatrics \(aap.org\)](#)



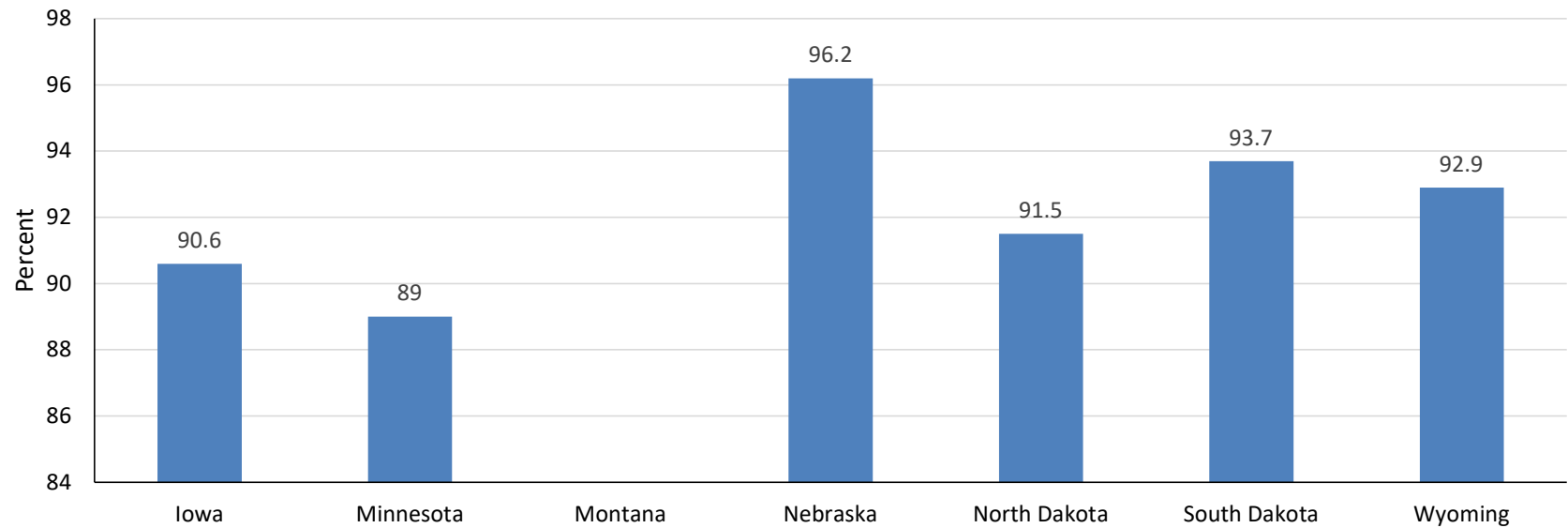
### Percent of children vaccinated for MMR at kindergarten entry, South Dakota (2018-2020)



Source: CDC



### Percent of children vaccinated for MMR at kindergarten entry, Selected states, 2021



Source: CDC  
Data not available for Montana



# **GOAL 2**

## **Maternal & Child Health**



## Infant Mortality

Infant mortality is the death of an infant before his or her first birthday. The infant mortality rate is the number of infant deaths for every 1,000 live births. In addition to giving us key information about maternal and infant health, the infant mortality rate is an important marker of the overall health of a society.

[Infant Mortality | Maternal and Infant Health | Reproductive Health | CDC](#)

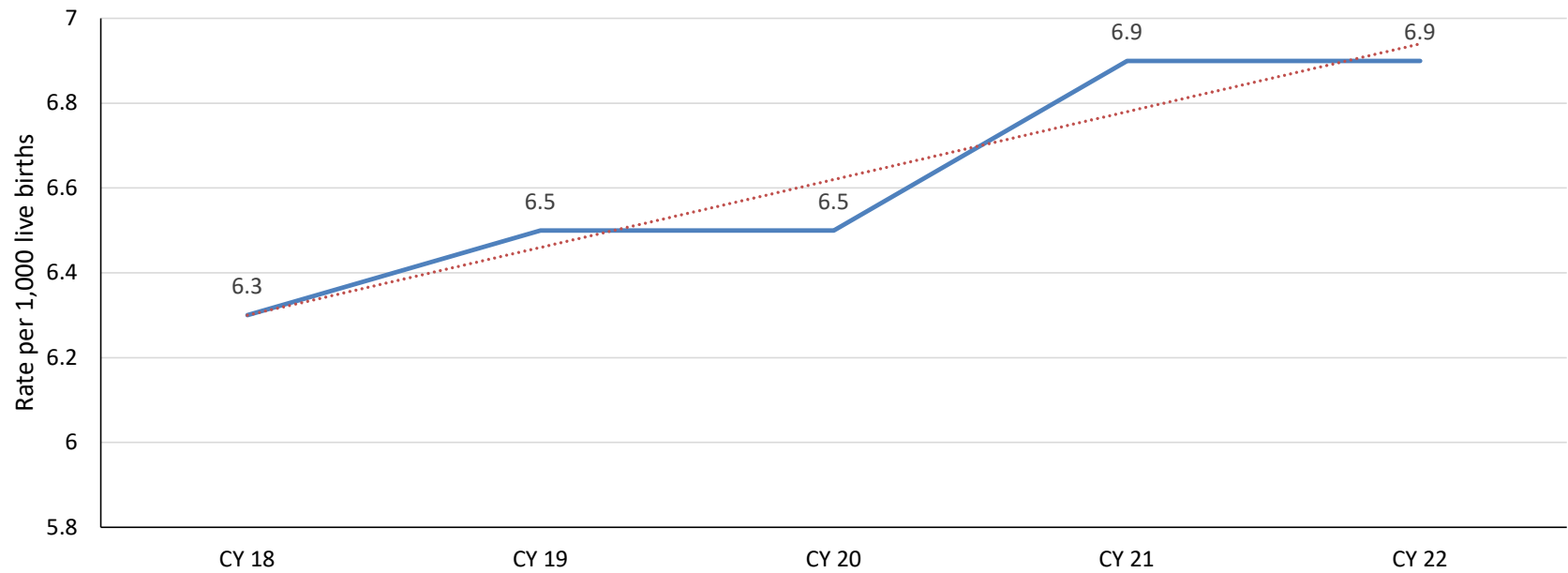
Rates of infant mortality are sensitive indicators of a broad range of factors affecting children's health. As such, infant mortality is the "tip of the iceberg" of child health problems, and changes in infant mortality are a signal of factors affecting child health more broadly. In addition to its role as a general gauge of child health, infant mortality itself represents an important health problem. It is well to remember that infant death rates are the highest of any age group less than 65 years.

[Statement on Infant Mortality | Pediatrics | American Academy of Pediatrics \(aap.org\)](#)





### 5-year infant mortality rate per 1,000 live births, South Dakota (2016-2022)

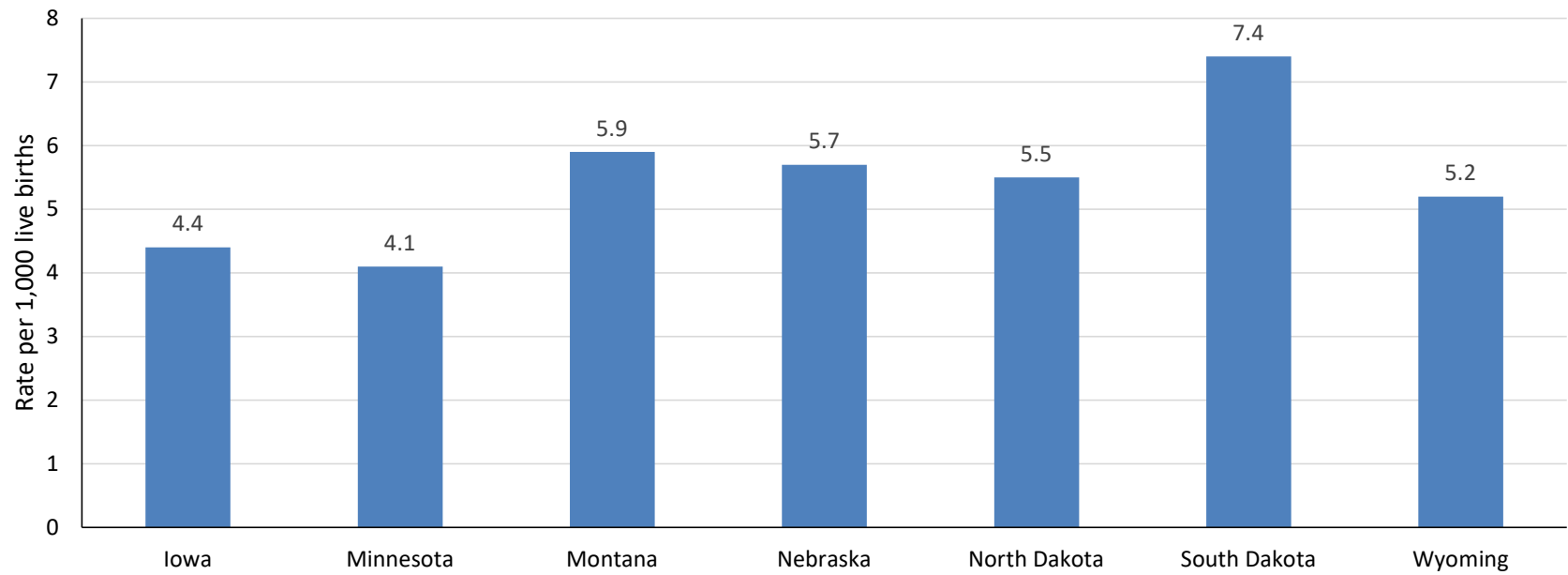


Source: SD Vital Records

Data is 5-year rate (CY18 – 2014-2018; CY19 – 2015-2019; CY20 – 2016-2020; CY21 – 2017-2021; CY22 – 2018-2022). 2022 data is provisional.



### Infant mortality rate per 1,000 live births, Selected states, 2022



Source: National Vital Statistics System



## Maternal Mortality

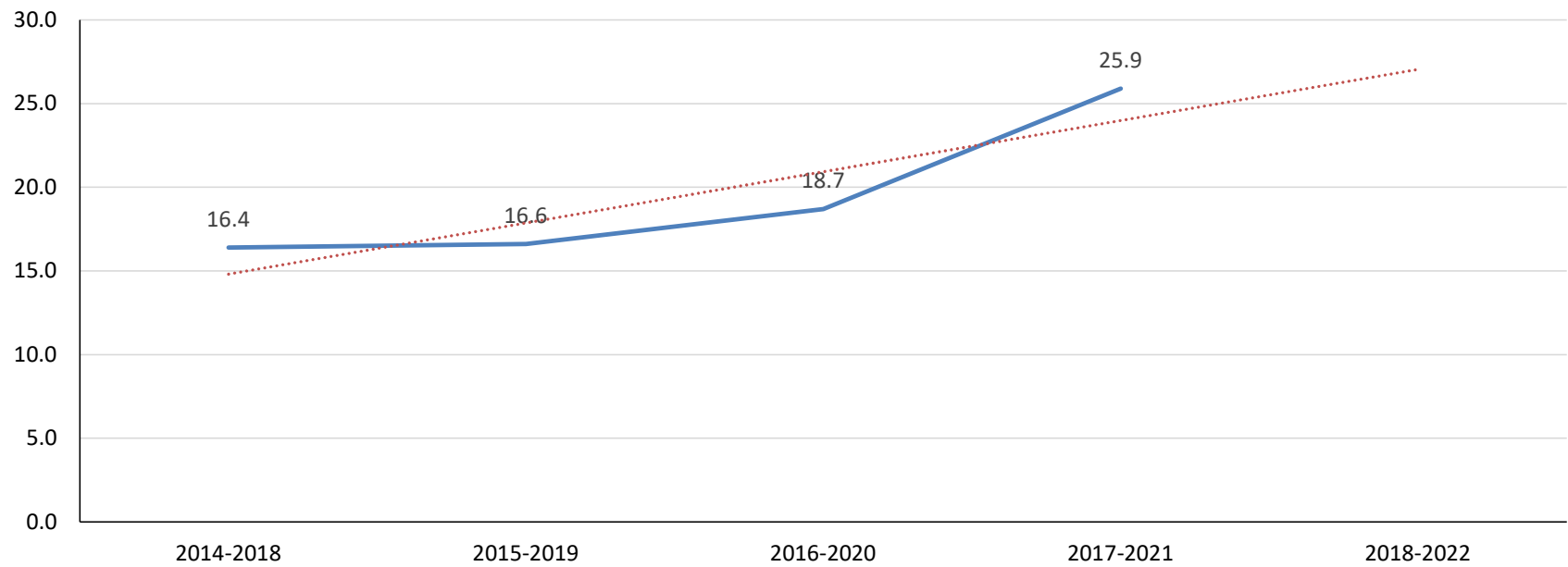
According to CDC, pregnancy-related death is defined as the death of a woman during pregnancy or within one year of the end of pregnancy from a pregnancy complication, a chain of events initiated by pregnancy, or the aggravation of an unrelated condition by the physiologic effects of pregnancy.

About 700 women die each year in the United States as a result of pregnancy or delivery complications. And, women in the United States are more likely to die from childbirth or pregnancy-related causes than other women in high-income countries.

[Working Together to End Maternal Mortality | CDC Foundation](#)



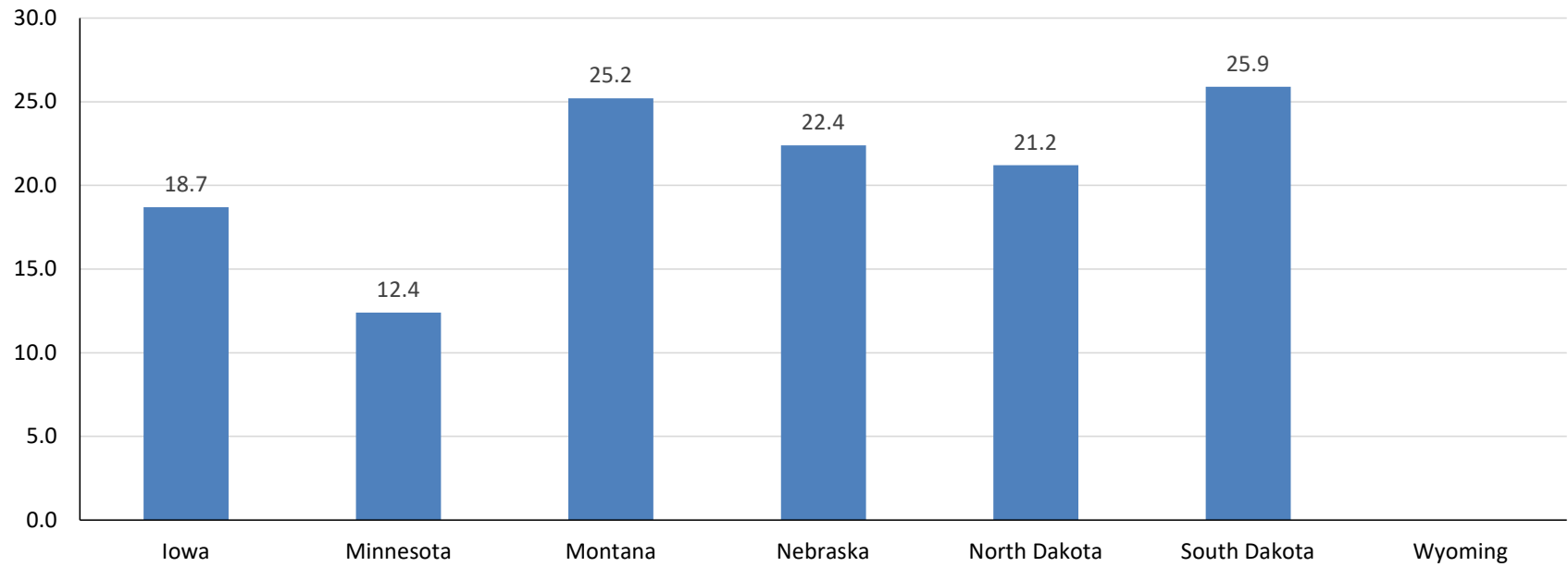
### 5-year maternal mortality rate per 100,000 live births, South Dakota (2018-2022)



Source: National Vital Statistics System. Data is a 5-year rate. 2022 data not yet available.



### Maternal mortality per 100,000 live births, Selected states, 2021



Source: National Vital Statistics System (5-year average (2017-2021))  
Data for Wyoming not available



# Breastfeeding

*“Breastfeeding provides unmatched health benefits for babies and mothers. It is the clinical gold standard for infant feeding and nutrition, with breast milk uniquely tailored to meet the health needs of a growing baby. We must do more to create supportive and safe environments for mothers who choose to breastfeed.”*

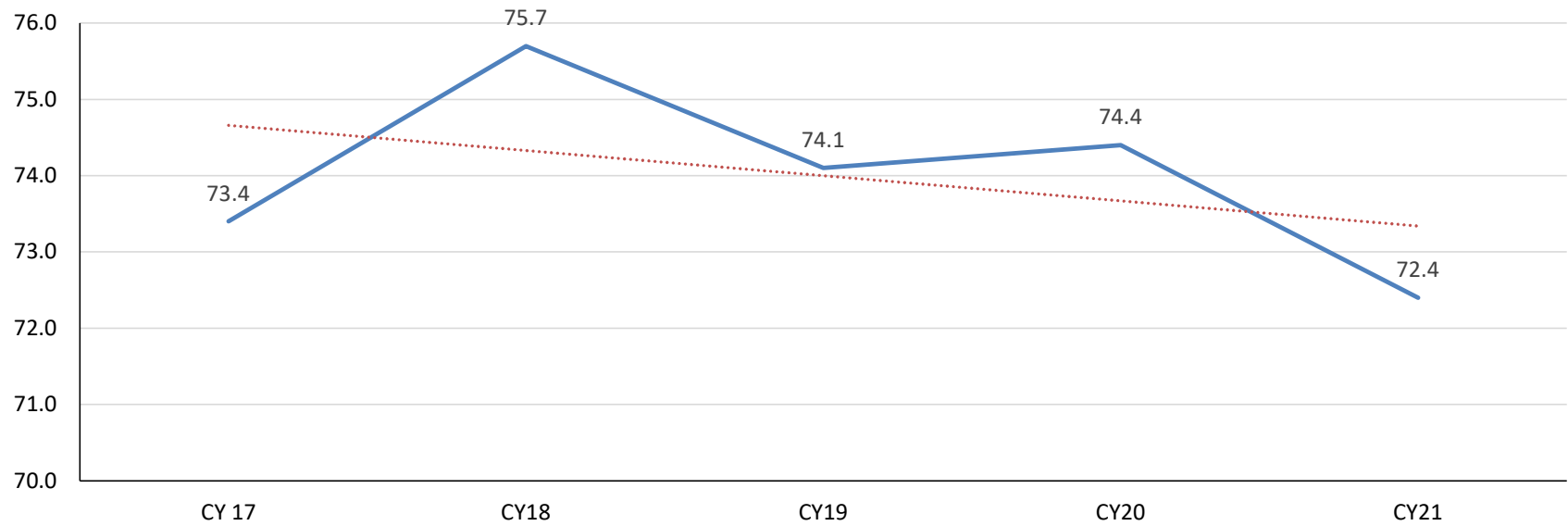
Dr. Ruth Petersen, director of CDC’s Division of Nutrition, Physical Activity, and Obesity  
[Why It Matters | Breastfeeding | CDC](#)

Breastfeeding lowers the risk of asthma, obesity, Type 1 diabetes, severe lower respiratory disease, ear infections, SIDS, gastrointestinal infections (diarrhea/vomiting), and necrotizing enterocolitis (NEC) for preterm infants.

[Recommendations and Benefits | Nutrition | CDC](#)



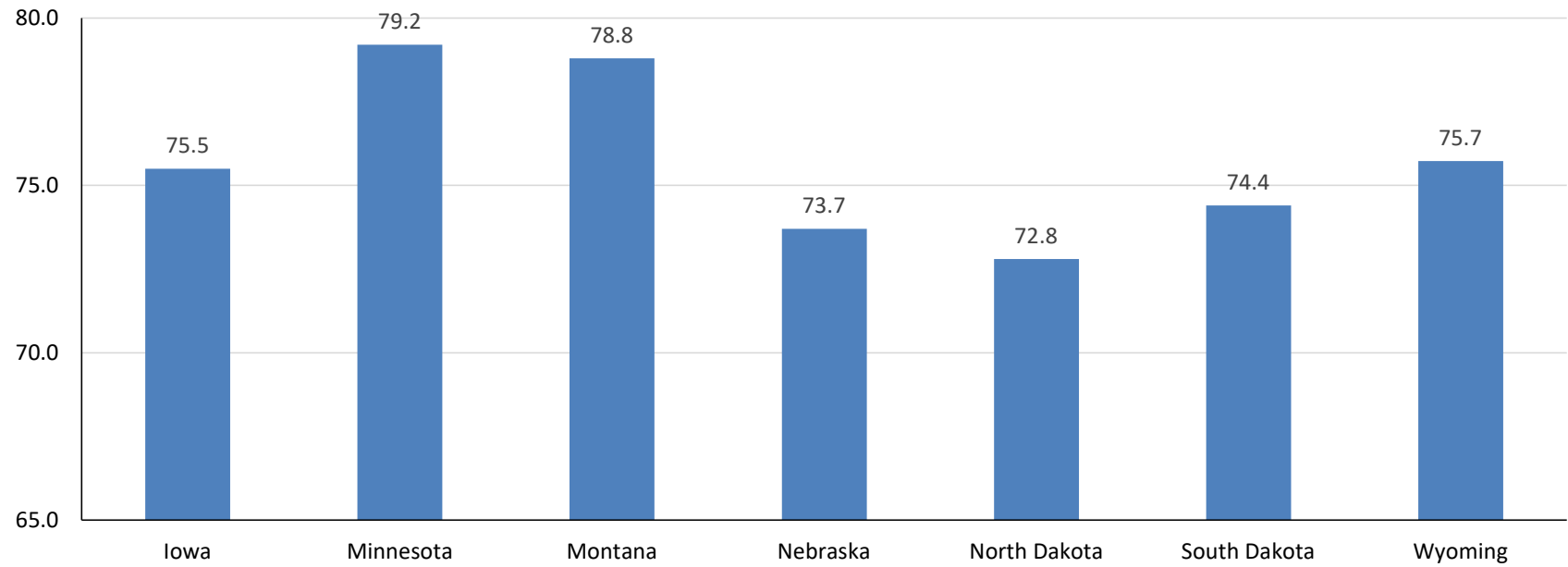
### Percent of infants who were still breastfeeding at 8 weeks, South Dakota (2017-2021)



Source: Pregnancy Risk Assessment Monitoring System



### Percent of infants who were still breastfeeding at 8 weeks, Selected states, 2021



Source: Pregnancy Risk Assessment Monitoring System





# **GOAL 3**

## **Injury & Harm Prevention**



## Suicide

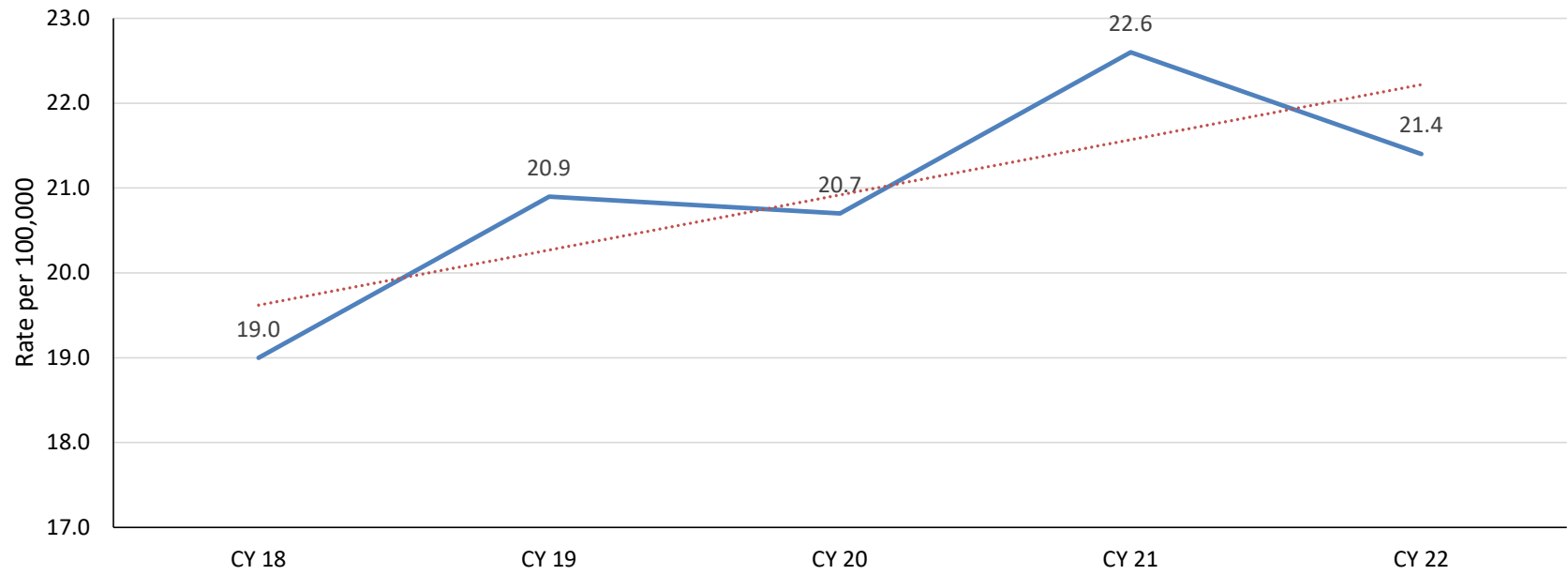
Suicide is a serious public health problem that can have lasting, harmful effects on individuals, families, and communities. While its causes are complex and determined by multiple factors, the goal of suicide prevention is simple: reduce risk factors and increase factors that promote resilience. Suicide is preventable when we all work together.

Suicide was the 10<sup>th</sup> leading cause of death in SD, but is the leading cause among ages 10 to 29 in 2021. SD had the 7<sup>th</sup> highest suicide rate in the United States in 2021 (crude rate). Three South Dakota counties rank in the top 1% highest suicide rates in the nation. The American Indian suicide rate was 2.6 times higher than White suicide rate.

[sdsuicideprevention.org](https://sdsuicideprevention.org)



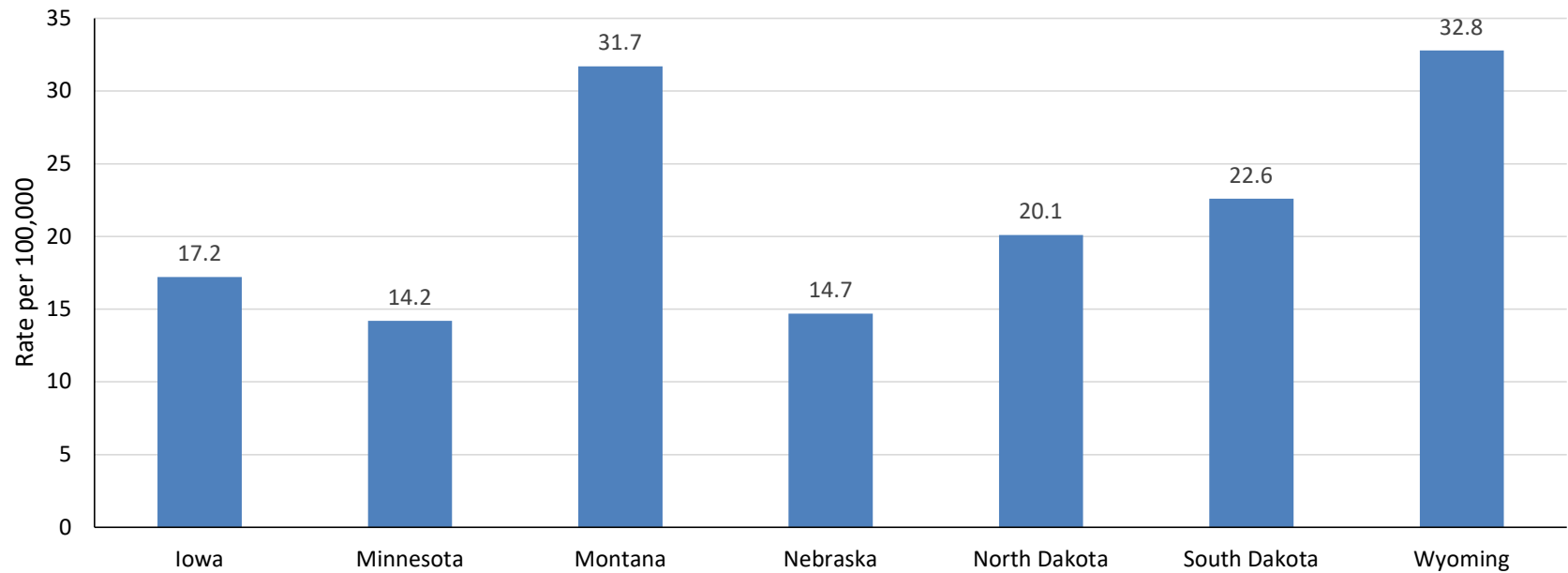
### Crude suicide death rate, South Dakota (2018-2022)



Source: CDC Web-based Injury Statistics Query and Reporting System



### Crude suicide death rate per 100,000, Selected states, 2021



Source: CDC Web-based Injury Statistics Query and Reporting System



## Unintentional Overdoses

Unintentional overdose is a risk for anyone who takes prescription opioids. Long-term health problems, paralysis, coma, and death are all potential life-altering consequences.

Opioid addiction can start before you know it. Anyone who takes prescription opioids can become addicted to them.

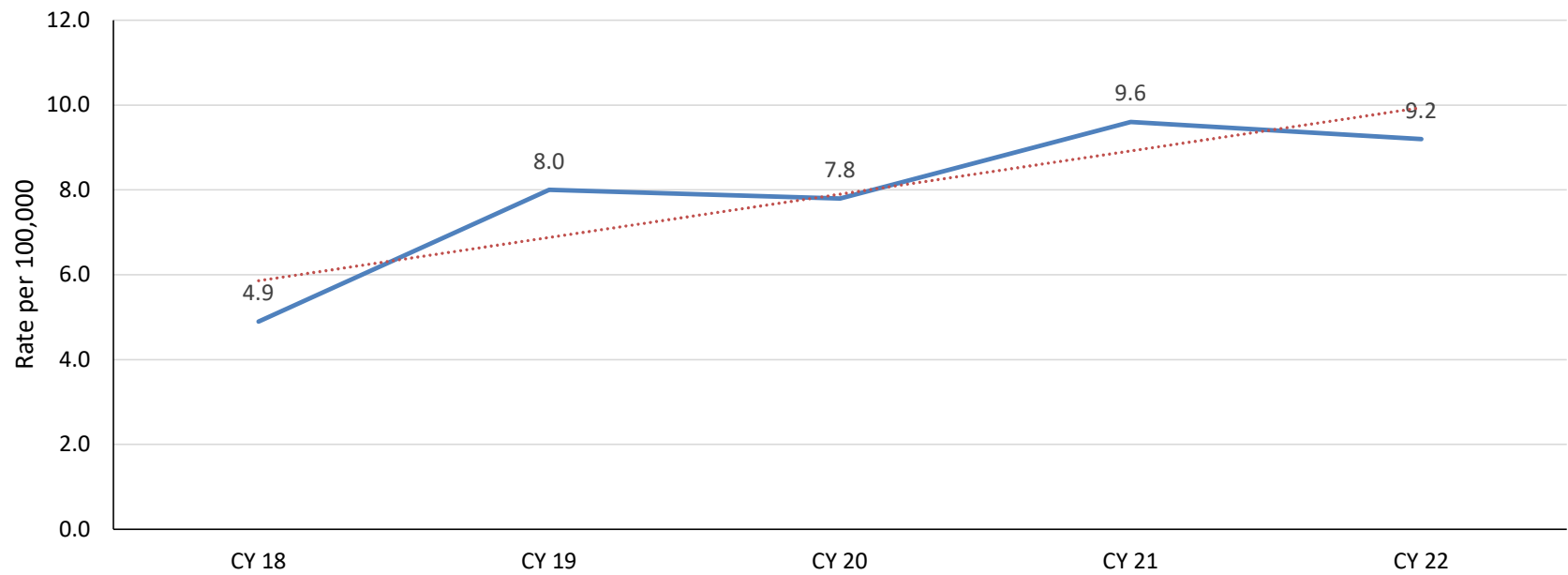
*“These drugs don’t discriminate. It doesn’t care who you are, how much money you make, because once they get their hooks in you, you have got the fight of your life.”*

*David, Woonsocket, SD*

[Avoid Opioid SD](#)



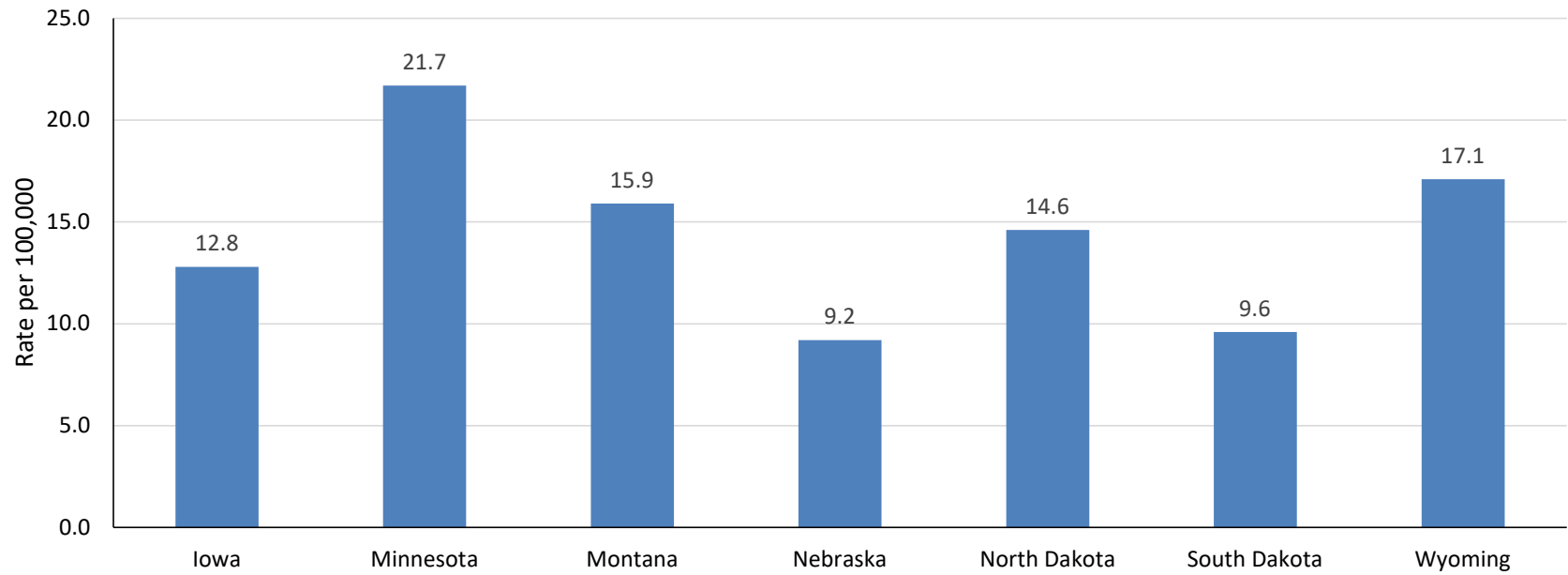
### Crude unintentional overdose death rate, South Dakota (2018-2022)



Source: CDC Web-based Injury Statistics Query and Reporting System. 2022 data is provisional.



### Crude unintentional overdose death rate, Selected states, 2021



Source: CDC Web-based Injury Statistics Query and Reporting System



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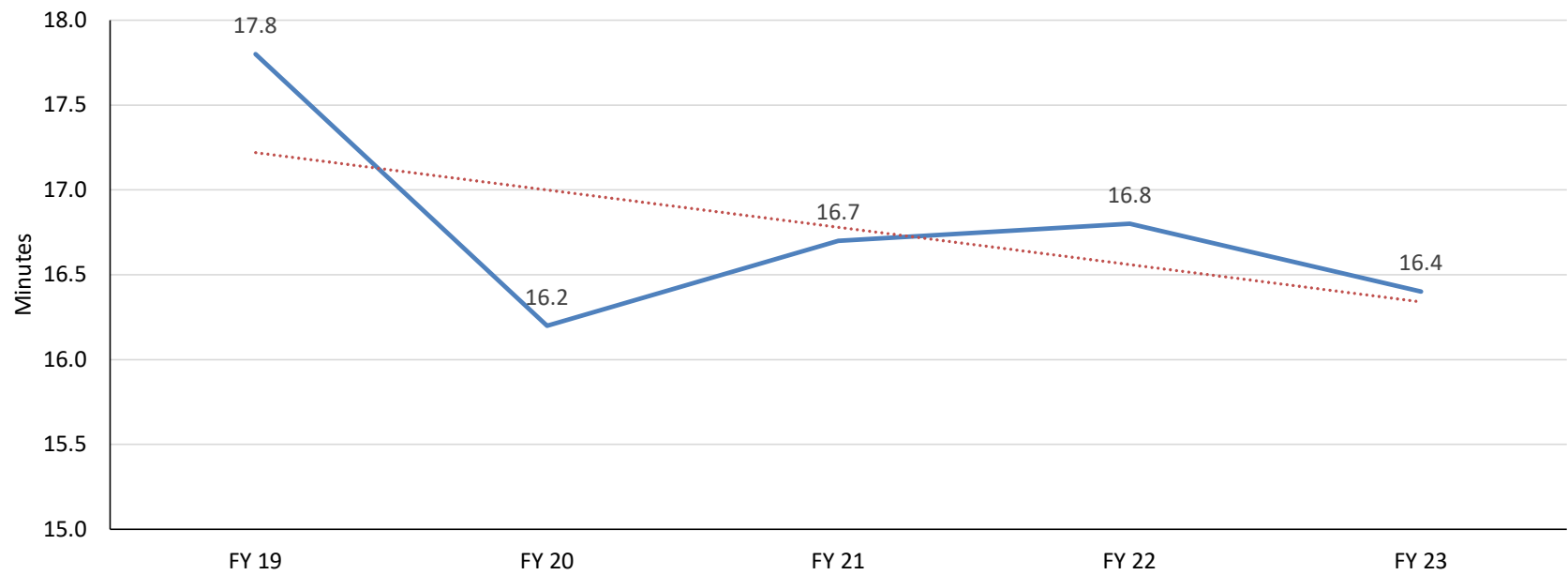
# **GOAL 4**

## **Access to Care**





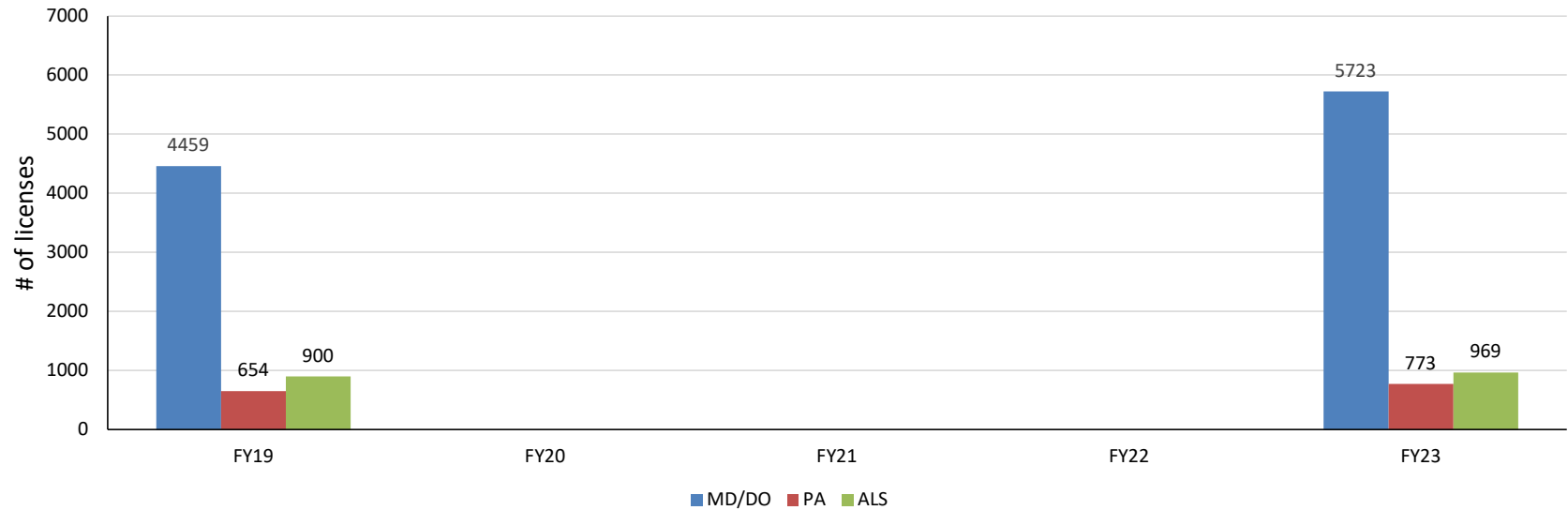
### Average scene time for ground EMS agencies, South Dakota (2018-2022)



Source: SD EMS Office



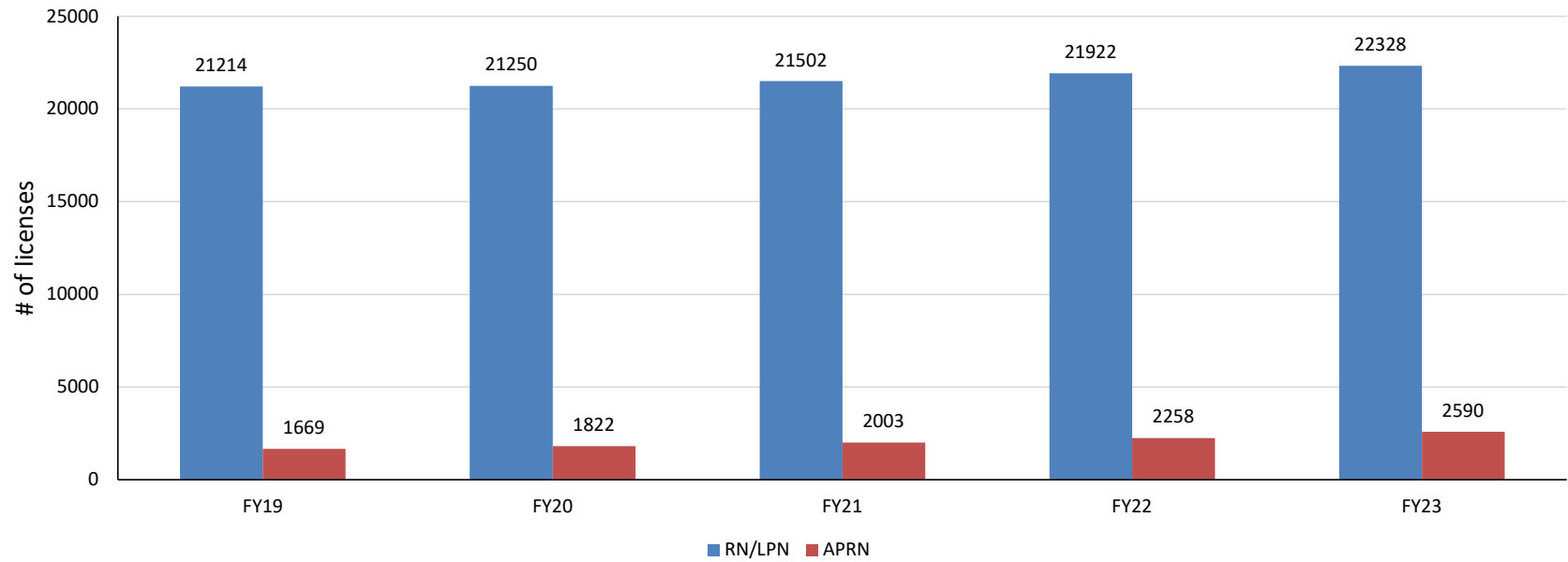
### Physician, physician assistant, and advanced life support licenses, South Dakota FY2019-2023



Source: SD Board of Medical & Osteopathic Examiners (MD/DO, PA, ALS) (data not available for 2020-2022)



### RN, LPN, and Advanced Practice RN Licenses, South Dakota FY2019-2023



Source: SD Board of Nursing (RN/LPN and APRN)



**QUESTIONS????**