SOUTH DAKOTA DEPARTMENT OF HEALTH

South Dakota State Update 2023

Sara Bowman, MPH
Vaccine Preventable Disease Epidemiologist

Learning Objectives

- Vaccination rates by age
- Vaccination rates for COVID and Flu
- Vaccine Exemptions
- New K+6 Vaccination Dashboard
- RSV Vaccine Updates
- Current Events
- CDC Resources

“Vaccines remain one of the greatest public health achievements of our time.”

Source: https://publications.aap.org/pediatrics/article/doi/10.1542/peds.2021-056007/188497/Value-of-the-Immunization-Program-for-Children-in

We have the power to prevent many diseases!

Measles	Mumps	Rubella	Diphtheria
Tetanus	Pertussis	Varicella	Hepatitis B
HIB	Meningococcal Disease	HPV	Pneumococcal Disease

"Paradoxically, one reason for vaccine hesitancy among parents may be the widespread success of immunization."

Source: Immunization in the United States: Recommendations, Barriers, and Measures to Improve Compliance Part 1: Childhood Vaccinations. C. Lee Ventola, 2016

U.S.News NEWS » News Best Countries Best States Healthiest Communities Opinion Elections Sign In

Home / News / World News / Childhood Vaccination Rates ...

Childhood Vaccination Rates Begin to Recover Post-Pandemic - but Not Everywhere, U.N. Says

By Reuters | July 17, 2023, at 8:02 p.m.

Save Comment

https://www.usnews.com/news/world/articles/2023-07-17/chil
post-pandemic-but-not-everywhere-u-n-says

CNN health Life, But Better Fitness Food Sleep Mindfulness Relationships

Measles outbreak in central Ohio ends after 85 cases, all among children who weren't fully vaccinated

By Jacqueline Howard, CNN
Updated 10:07 AM EST, Sun February 5, 2023

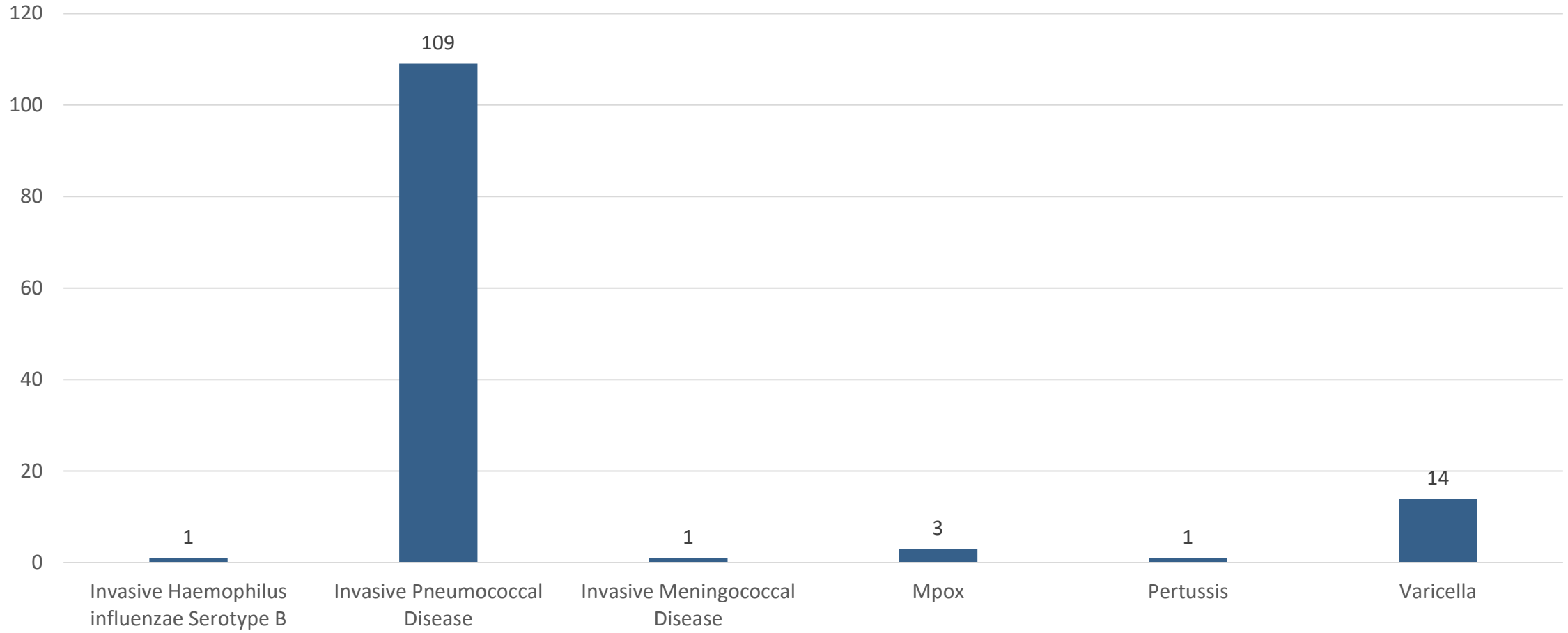
https://www.cnn.com/2023/02/05/health/mea

Health officials say Michigan childhood vaccine rate at lowest since 2011

State data reports that the two lowest vaccinated counties in the U.P. are Keweenaw County (50 percent) and Houghton County (53.9 percent)

https://www.uppermichiganssource.com/2023/08/17/health-officials-say-michigan-childhood-vaccine-rate-lowest-since-2011/

Case Counts of Vaccine Preventable Diseases, South Dakota, 2022



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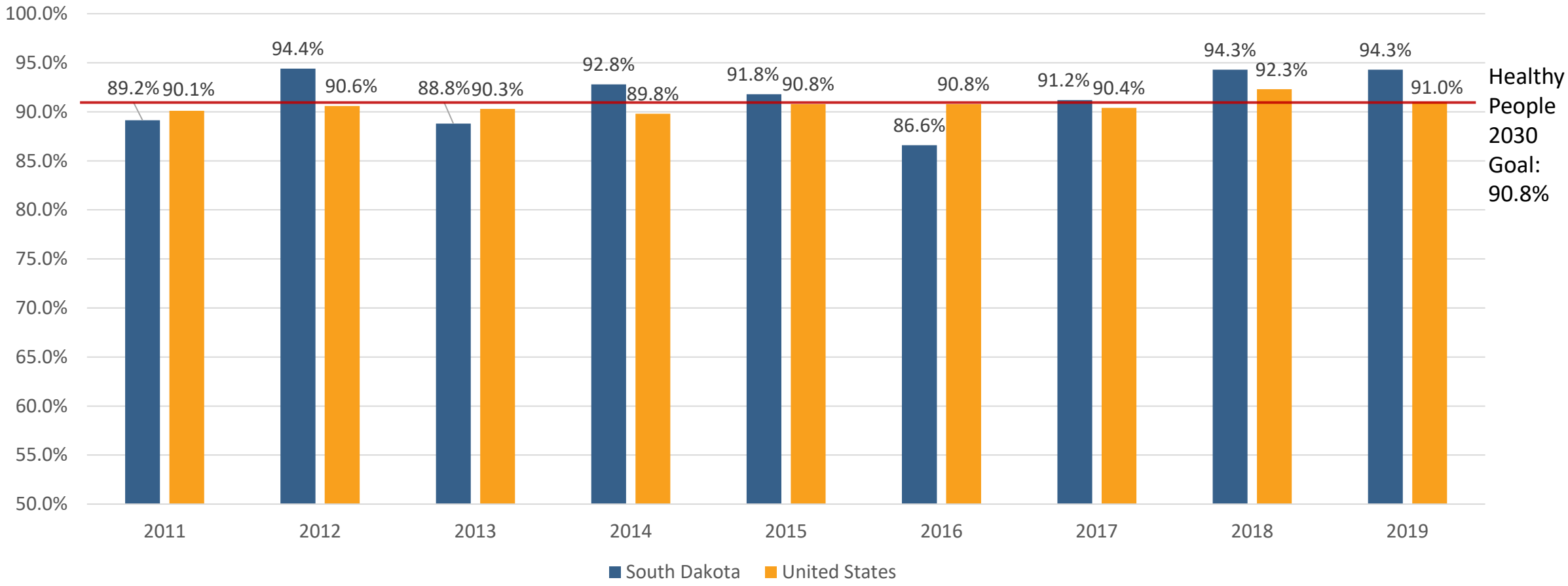
Vaccine Coverage Rates for Infants and Preschool Age Children

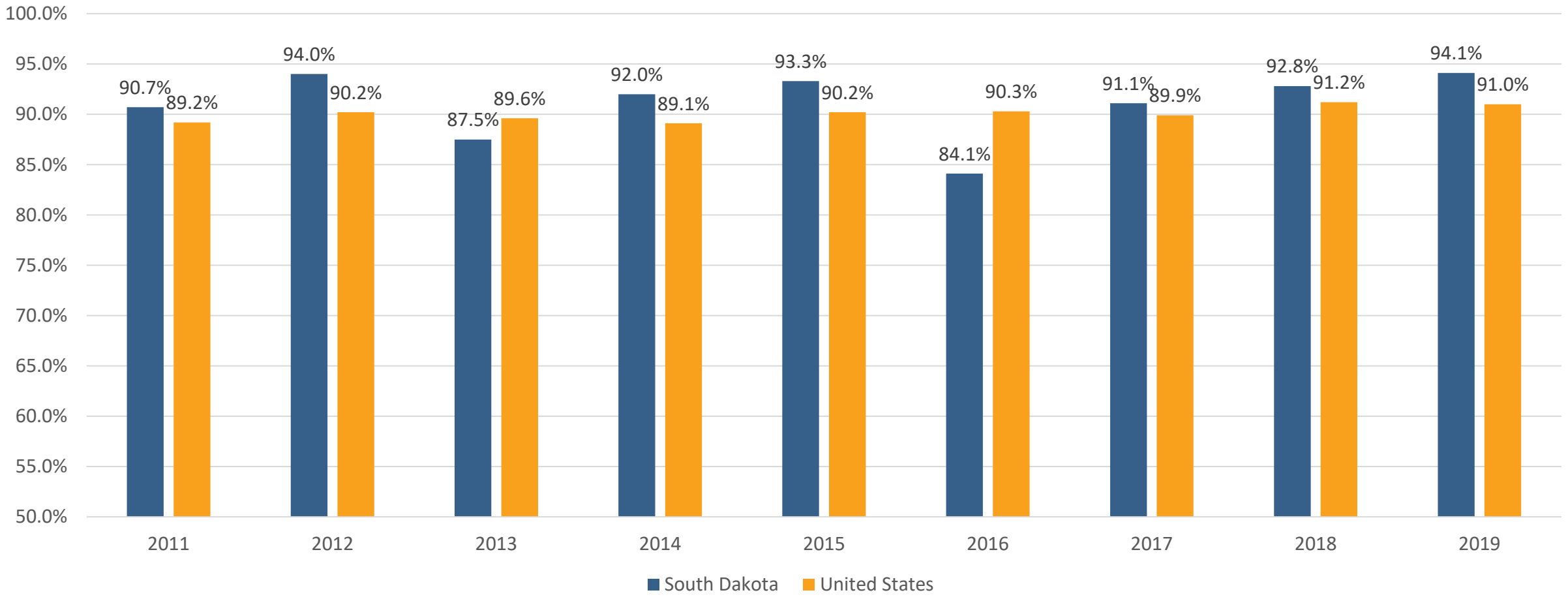
1 Dose MMR Coverage at Age 24 Months, South Dakota and National, Birth Years 2011-2019



Source: Infant Vax View, CDC

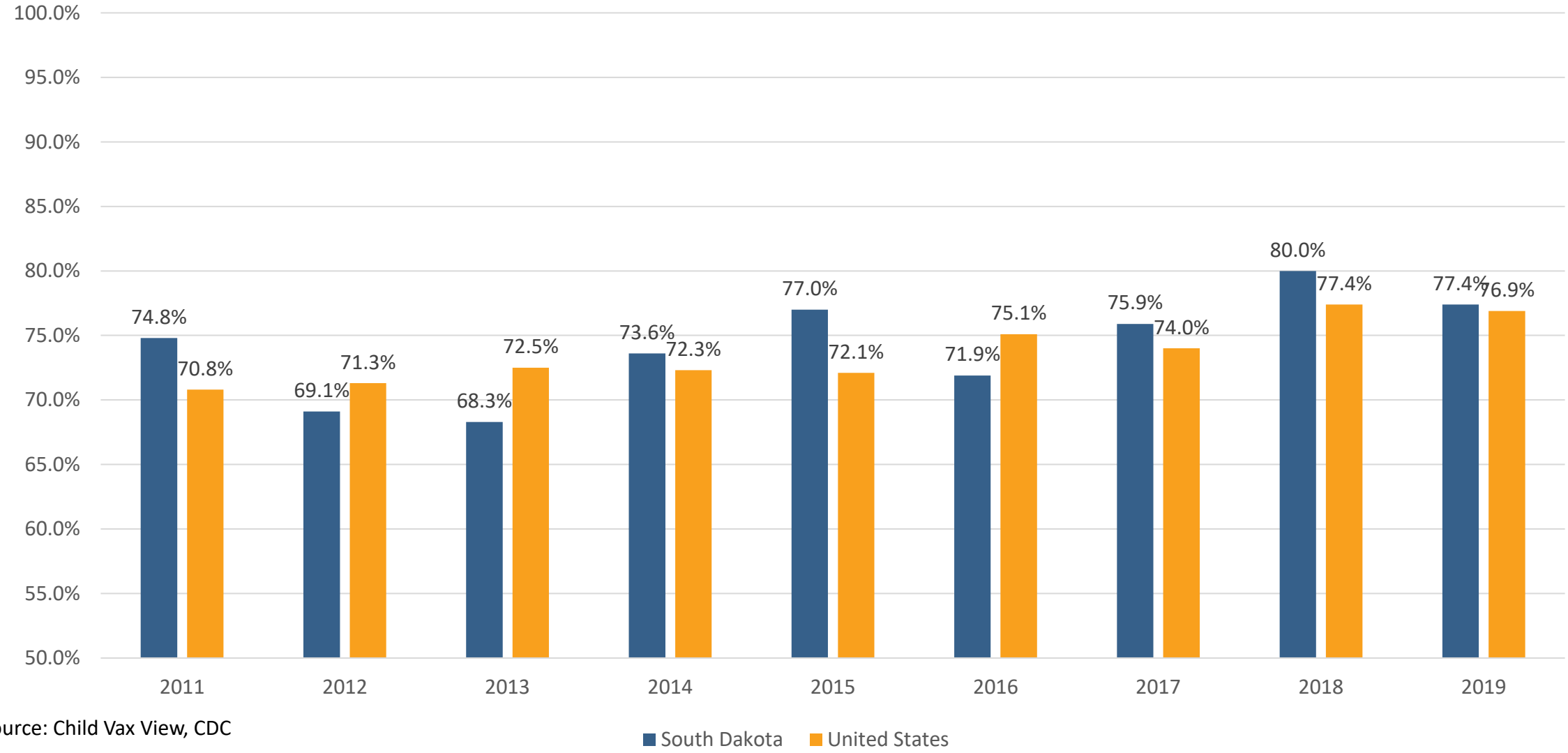
MMR: Measles, Mumps and Rubella Vaccine

Varicella Vaccine Coverage Age 24 months, South Dakota and National, Birth Years 2011-2019



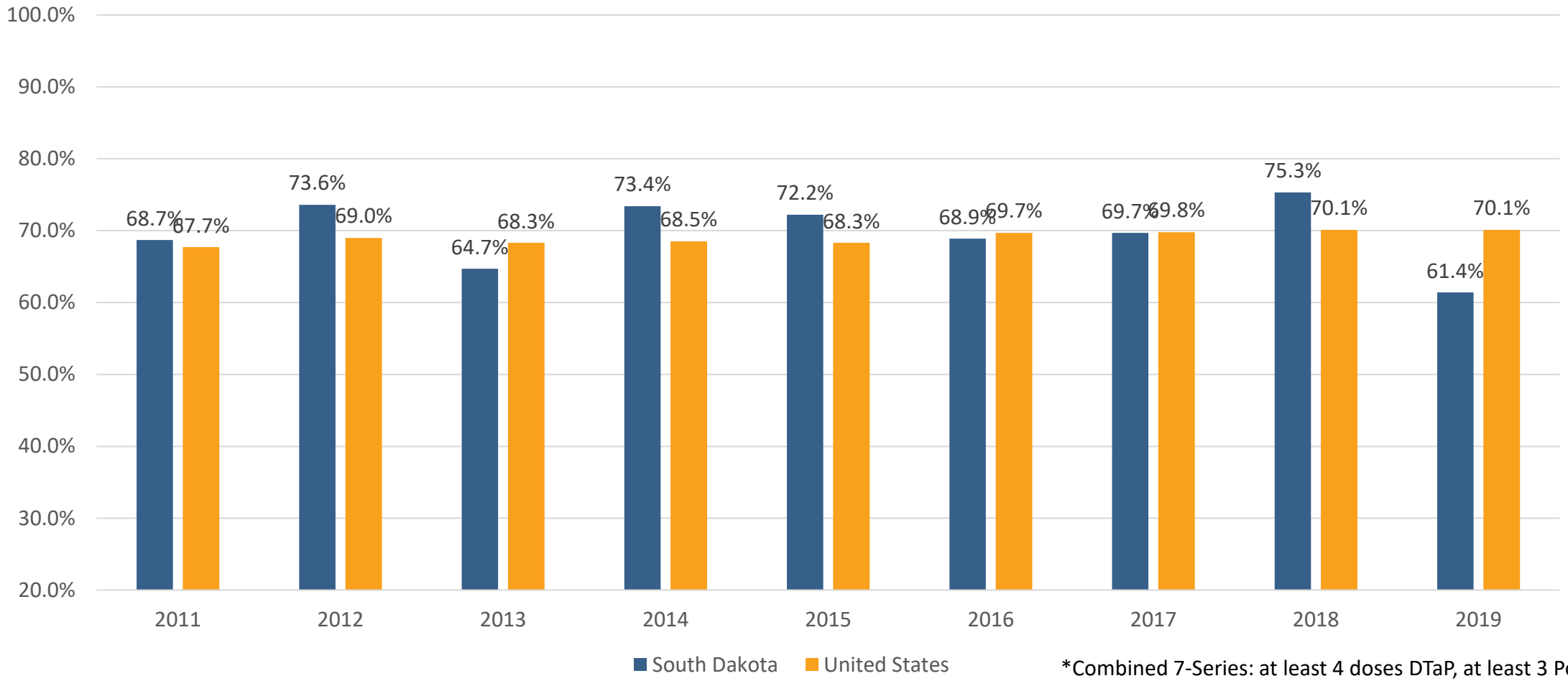
Source: Child Vax View, CDC

Rotavirus Vaccine Coverage at 8 Months of age, South Dakota and National, Birth Years 2011-2019



Source: Child Vax View, CDC

Combined 7 series* Coverage Rates at Age 24 Months, South Dakota and National, Birth Years 2011-2019



*Combined 7-Series: at least 4 doses DTaP, at least 3 Polio, at least 1 MMR, at least 3 HIB, at least 3 Hepatitis B, at least 1 Varicella, at least 4 Pneumococcal Conjugate

Source: Child Vax View, CDC

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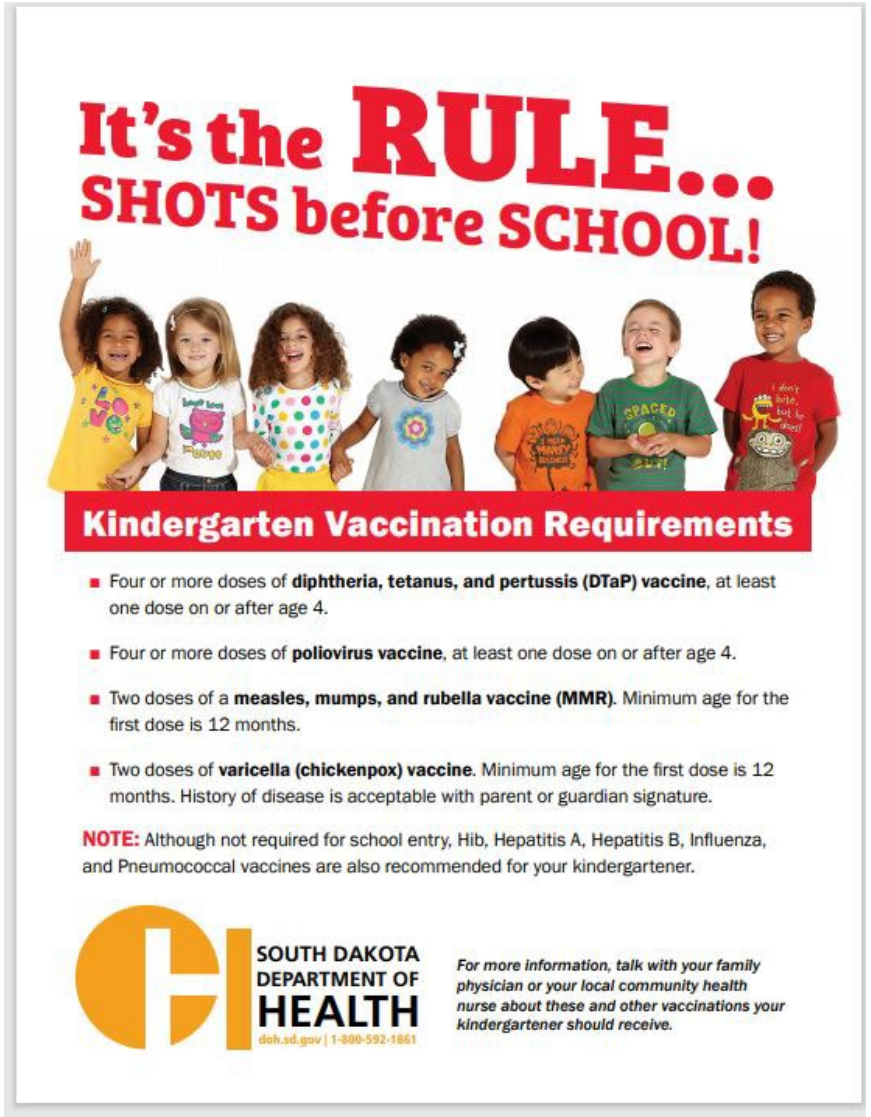
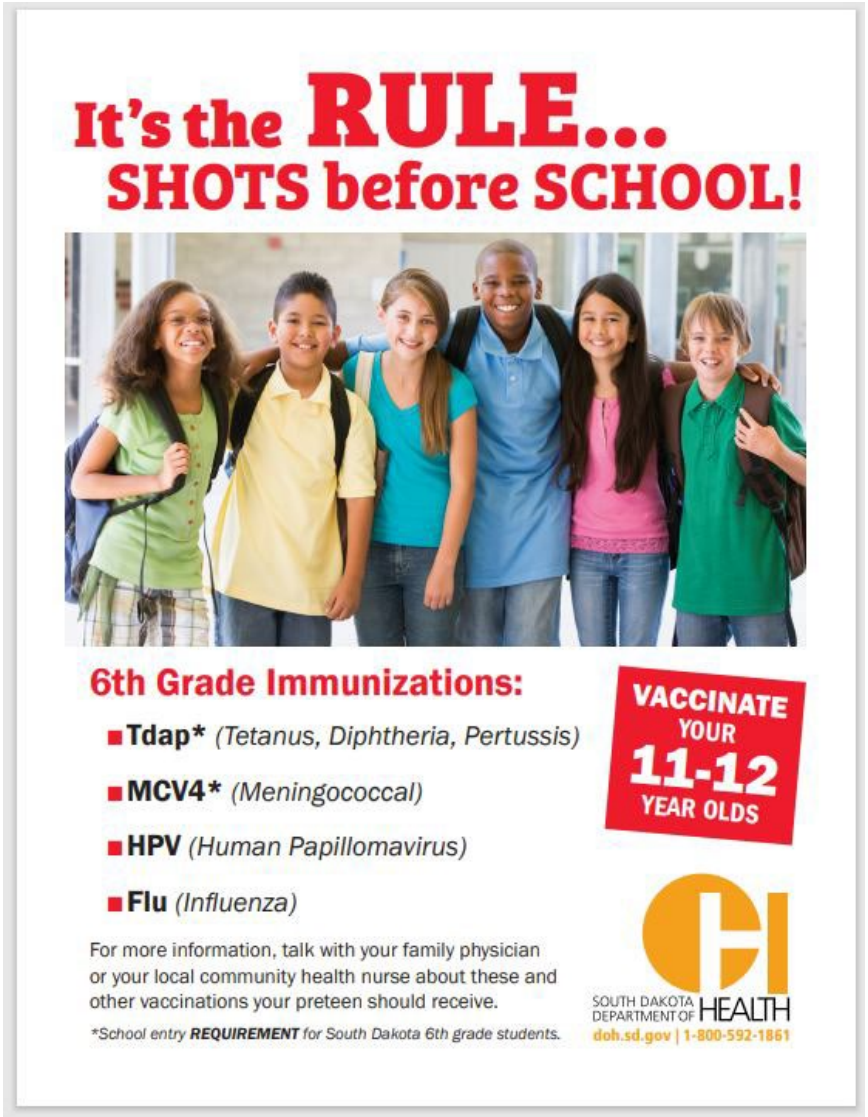
Vaccine Coverage for School Age Children

Current School Vaccination Requirements

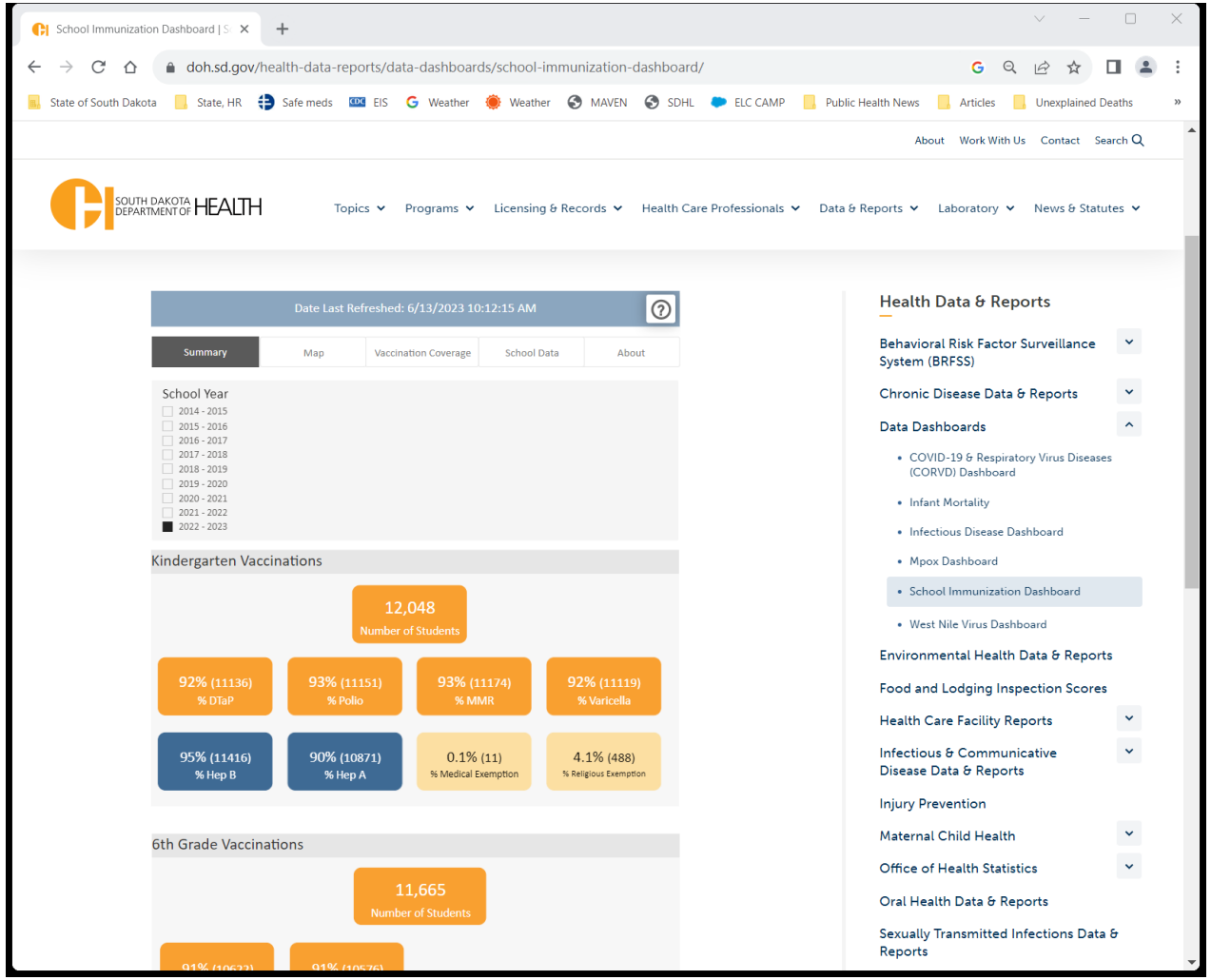




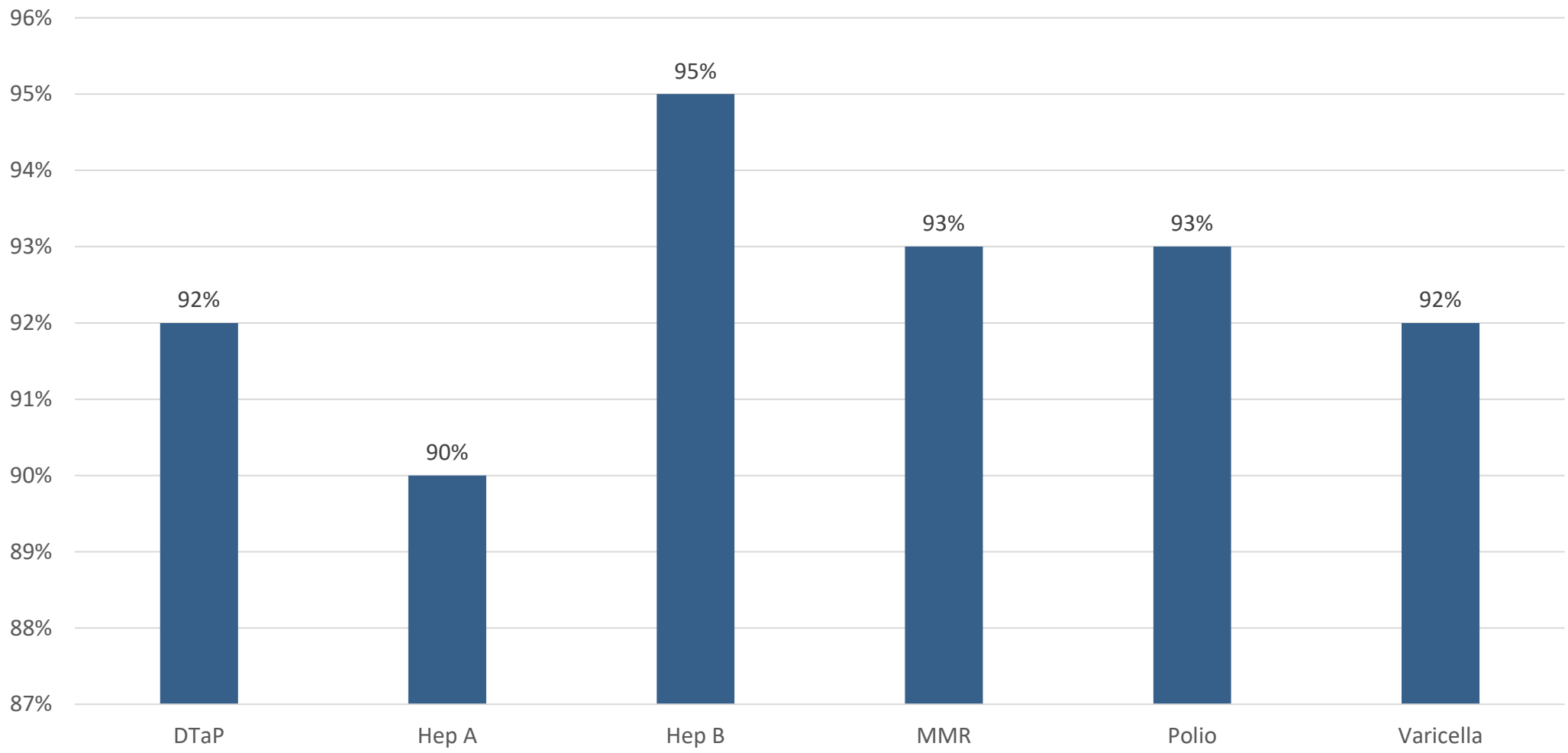
Source: South Dakota Department of Health, https://doh.sd.gov/topics/immunizations-vaccinations/immunizations-required-for-sd-school-entry/

New DOH Dashboard!

- School Immunization Dashboard:
- https://doh.sd.gov/health-data-reports/data-dashboards/school-immunization-dashboard/



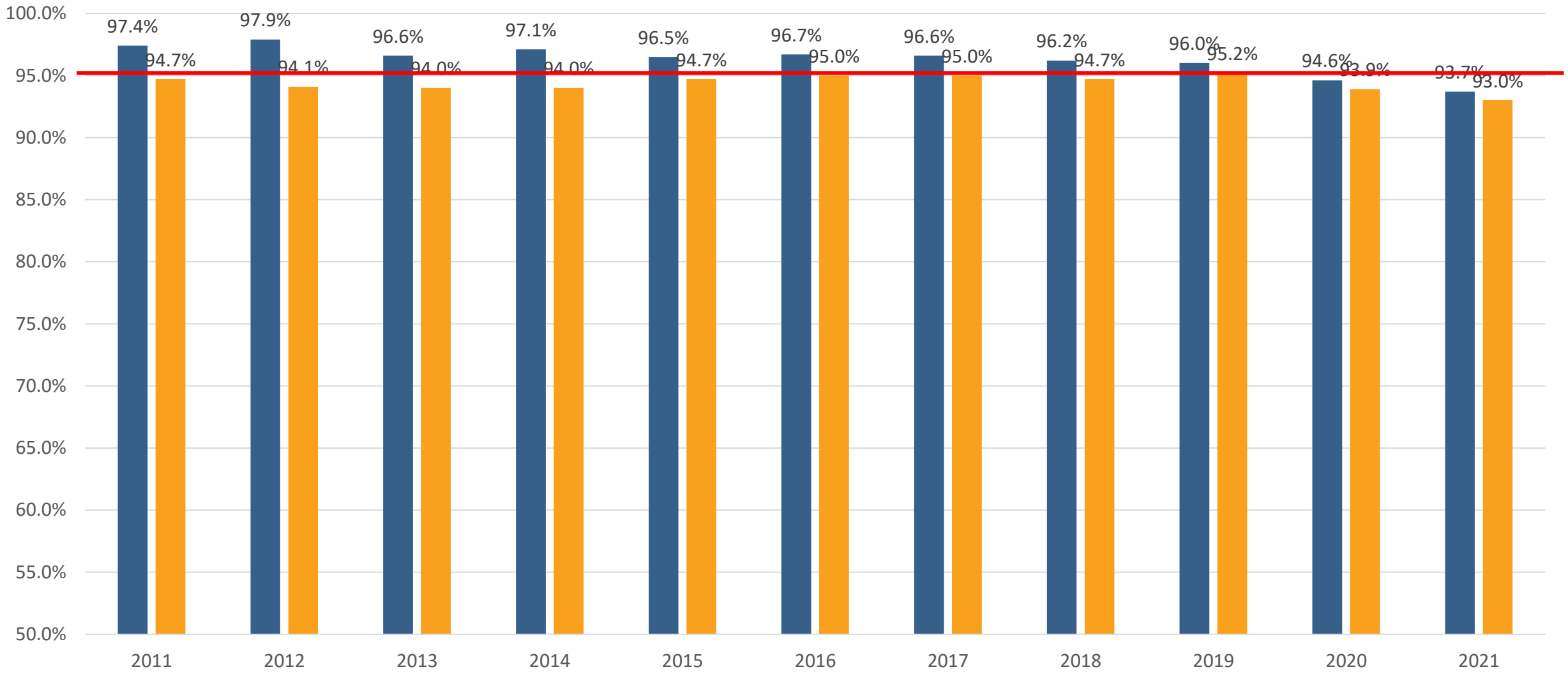
Vaccine Coverage at Kindergarten Entry, South Dakota, 2022-2023 School Year



Source: South Dakota Department of Health https://doh.sd.gov/health-data-reports/data-dashboards/school-immunization-dashboard/

DTaP: Diphtheria, Tetanus, and Pertussis Vaccine
MMR: Measles, Mumps, and Rubella Vaccine

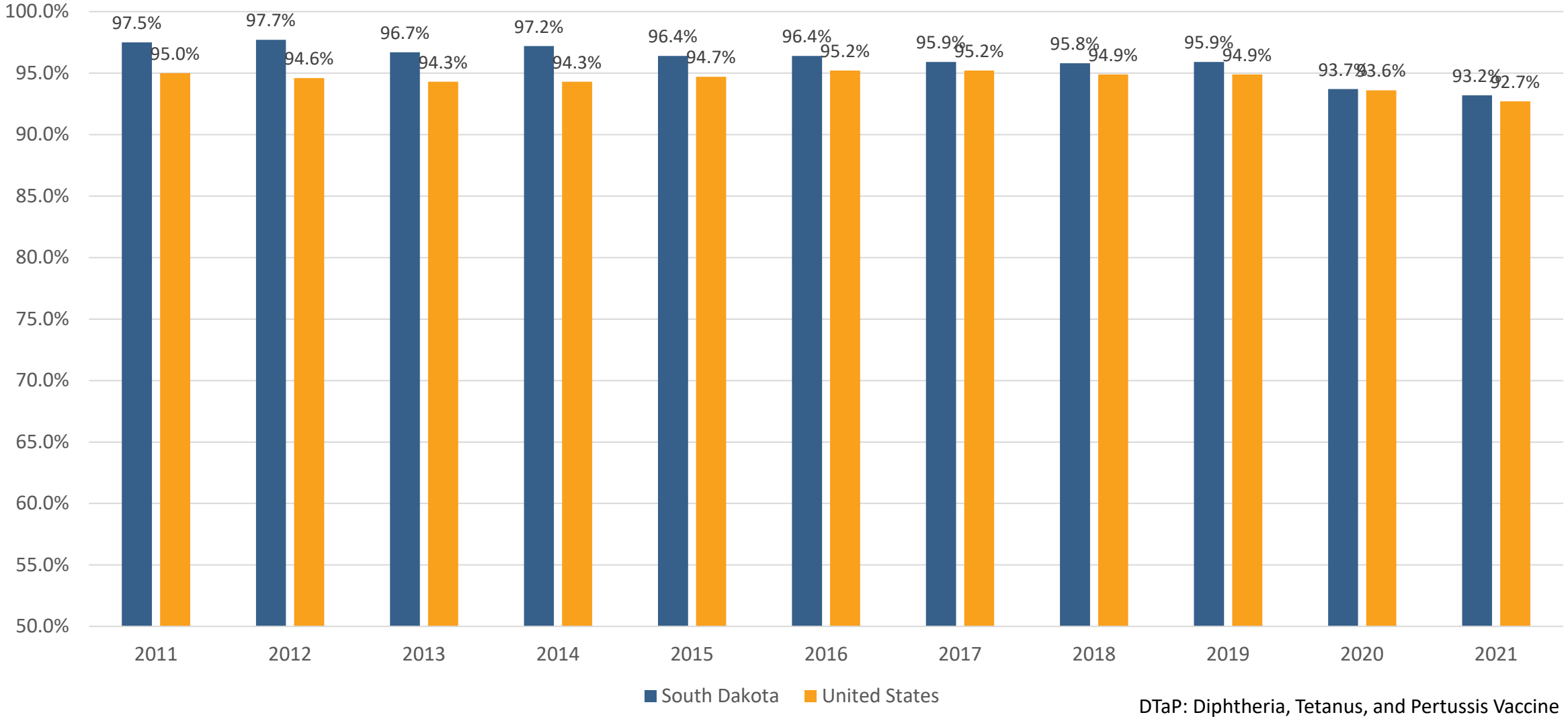
2 Dose MMR Coverage at Kindergarten Entry, South Dakota and National, School Years 2011-2021



Source: School Vax View, CDC

MMR: Measles, Mumps, and Rubella Vaccine

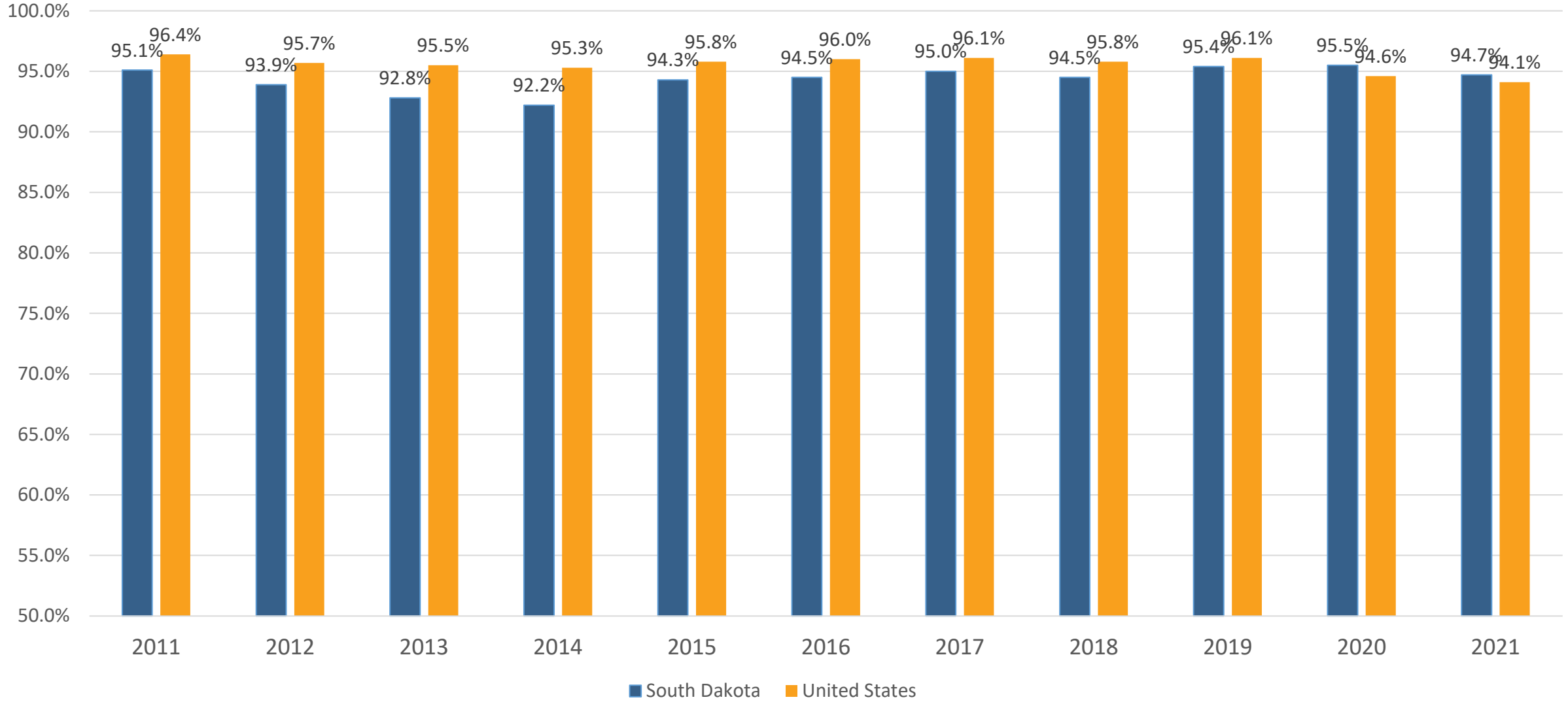
DTaP Coverage at Kindergarten Entry South Dakota and National, School Years 2011-2021



DTaP: Diphtheria, Tetanus, and Pertussis Vaccine

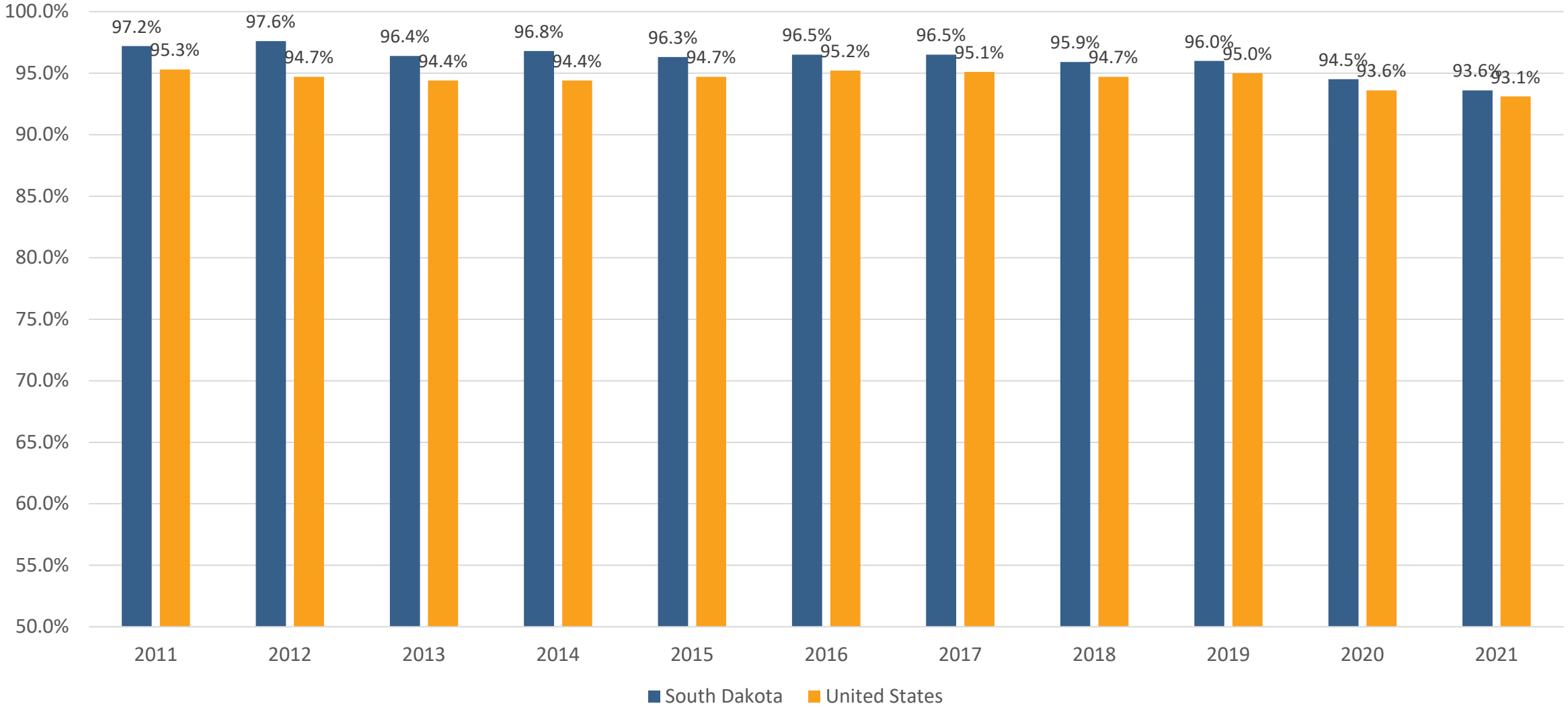
Source: School Vax View, CDC

Hepatitis B Vaccine Coverage at Kindergarten Entry, South Dakota and National, School Years 2011-2021



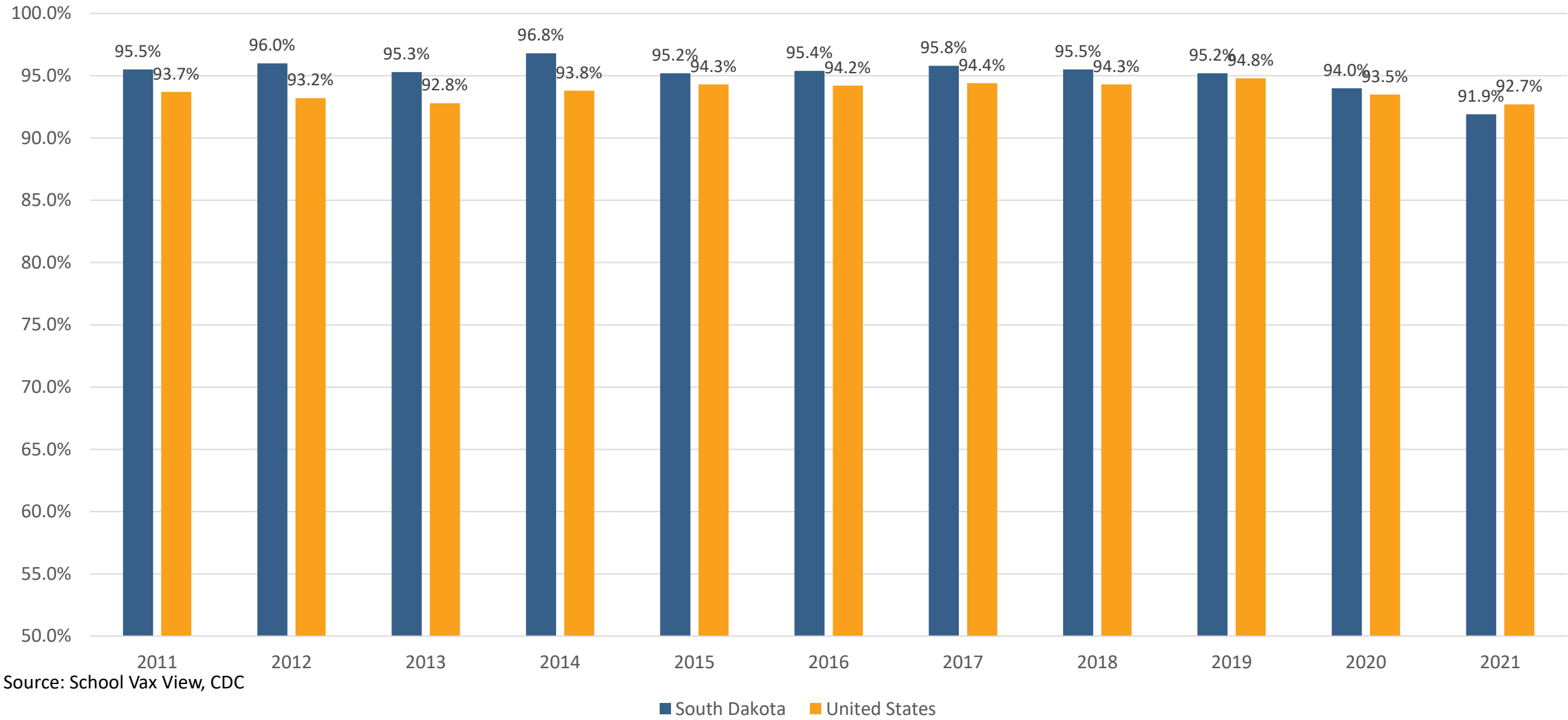
Source: School Vax View, CDC

Polio Vaccine Coverage, Kindergarten Entry, South Dakota and National, School Years 2011-2021



Source: School Vax View, CDC

Varicella Vaccine Coverage, Kindergarten Entry, South Dakota and National, School Years 2011-2021



Source: School Vax View, CDC

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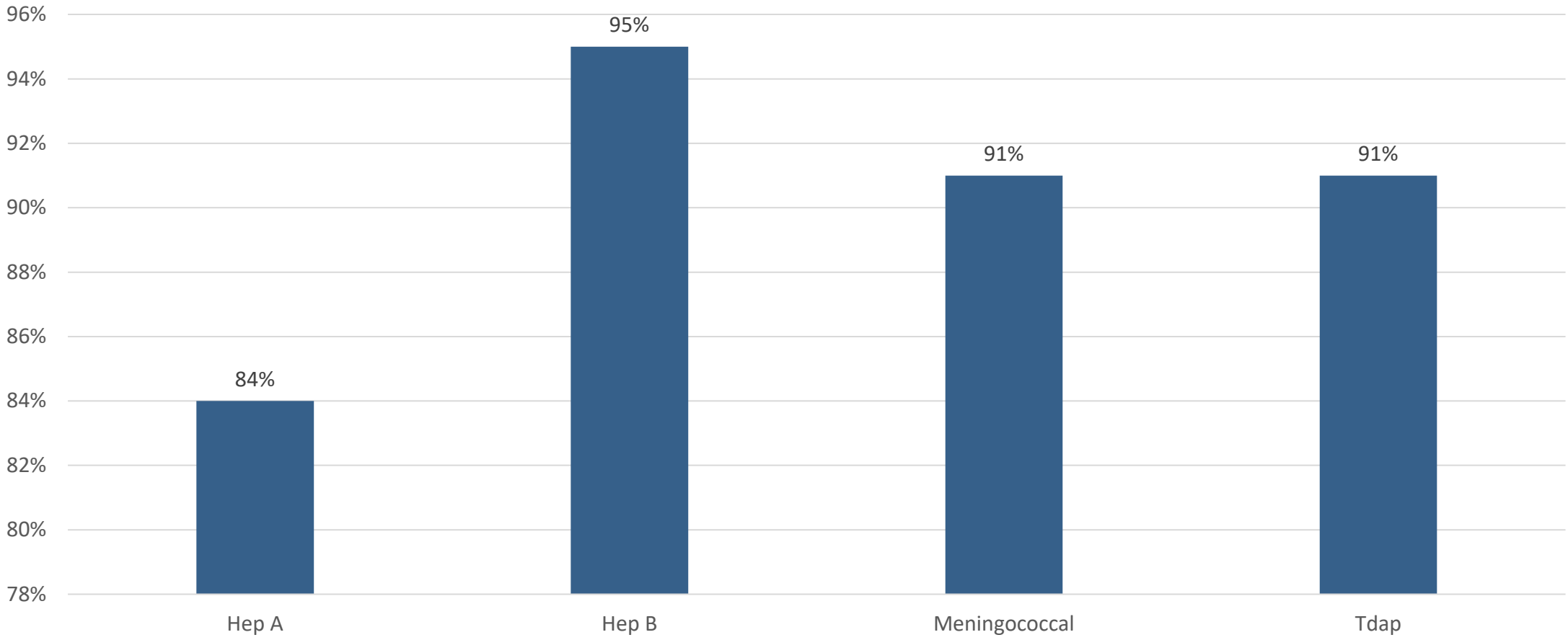
Vaccine Coverage Rates for Teens

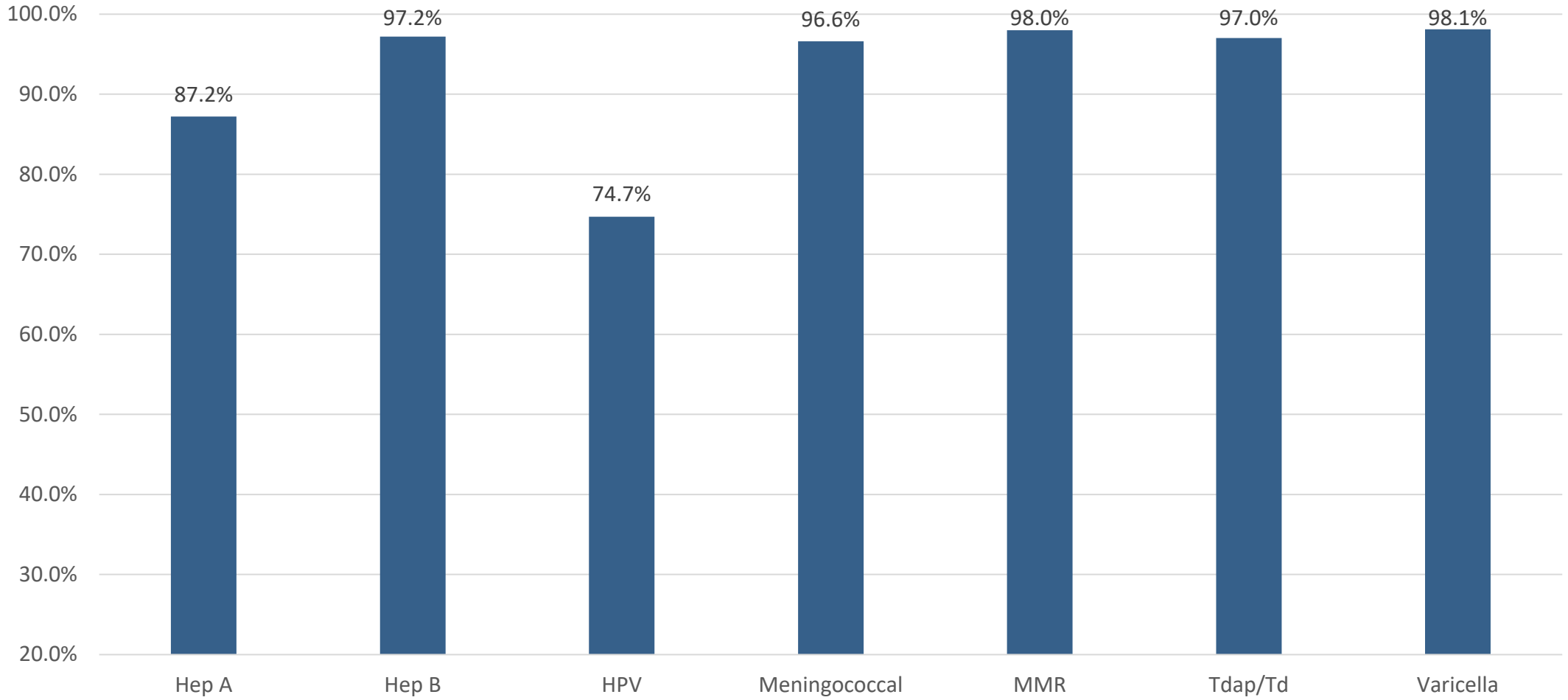
Vaccine Coverage for 6th Grade, 2022-2023 School Year, South Dakota



Source: South Dakota Department of Health https://doh.sd.gov/health-data-reports/data-dashboards/school-immunization-dashboard/

Tdap: Tetanus, Diphtheria, and Pertussis Vaccine

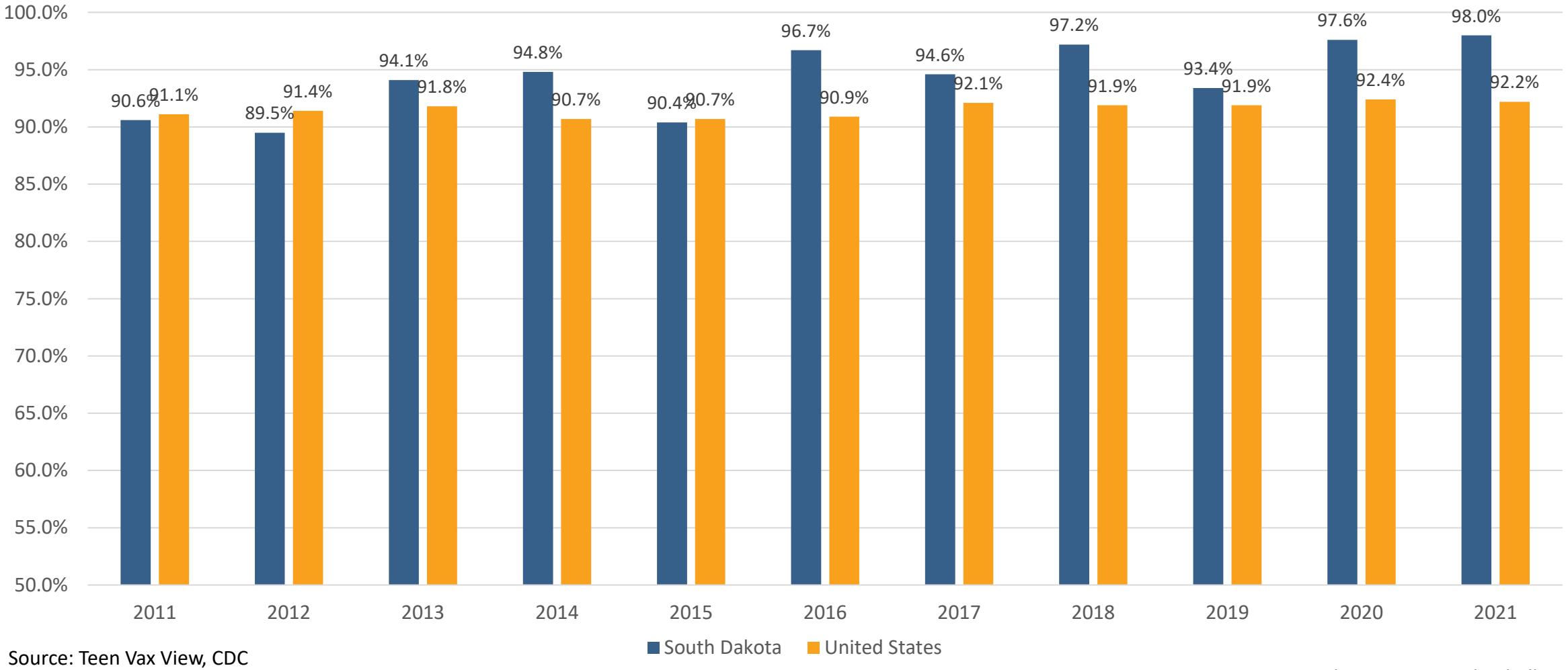
Adolescents, Ages 13-17 years, Vaccine Coverage South Dakota, 2021-22 School Year



HPV: Human Papilloma Virus Vaccine
MMR: Measles, Mumps, and Rubella Vaccine
Tdap: Tetanus, Diphtheria, and Pertussis Vaccine
Td: Tetanus and Diphtheria Vaccine

Source: Teen Vax View, CDC

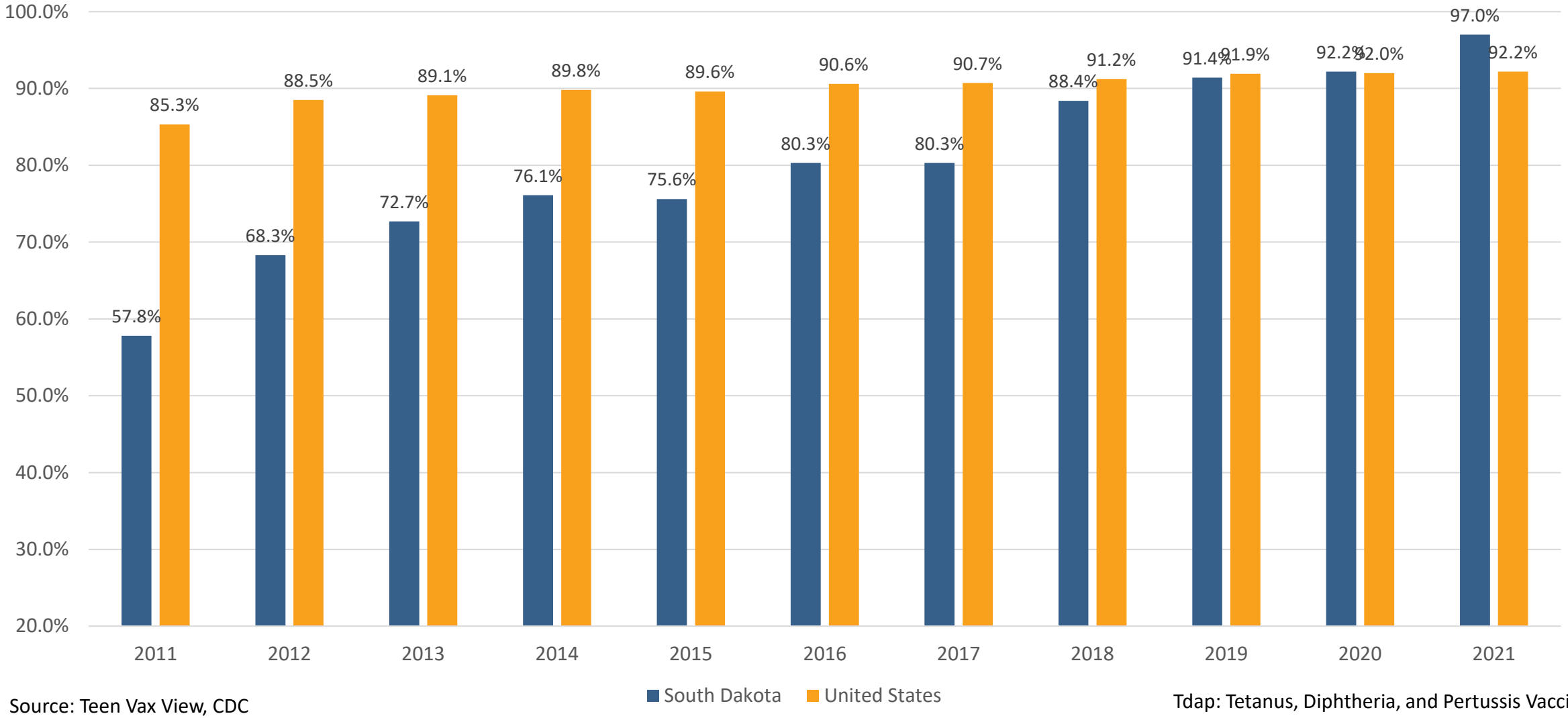
At Least 2 MMR Doses, Ages 13-17 Years, South Dakota and National, 2011-2021 School Years



Source: Teen Vax View, CDC

MMR: Measles, Mumps, and Rubella Vaccine

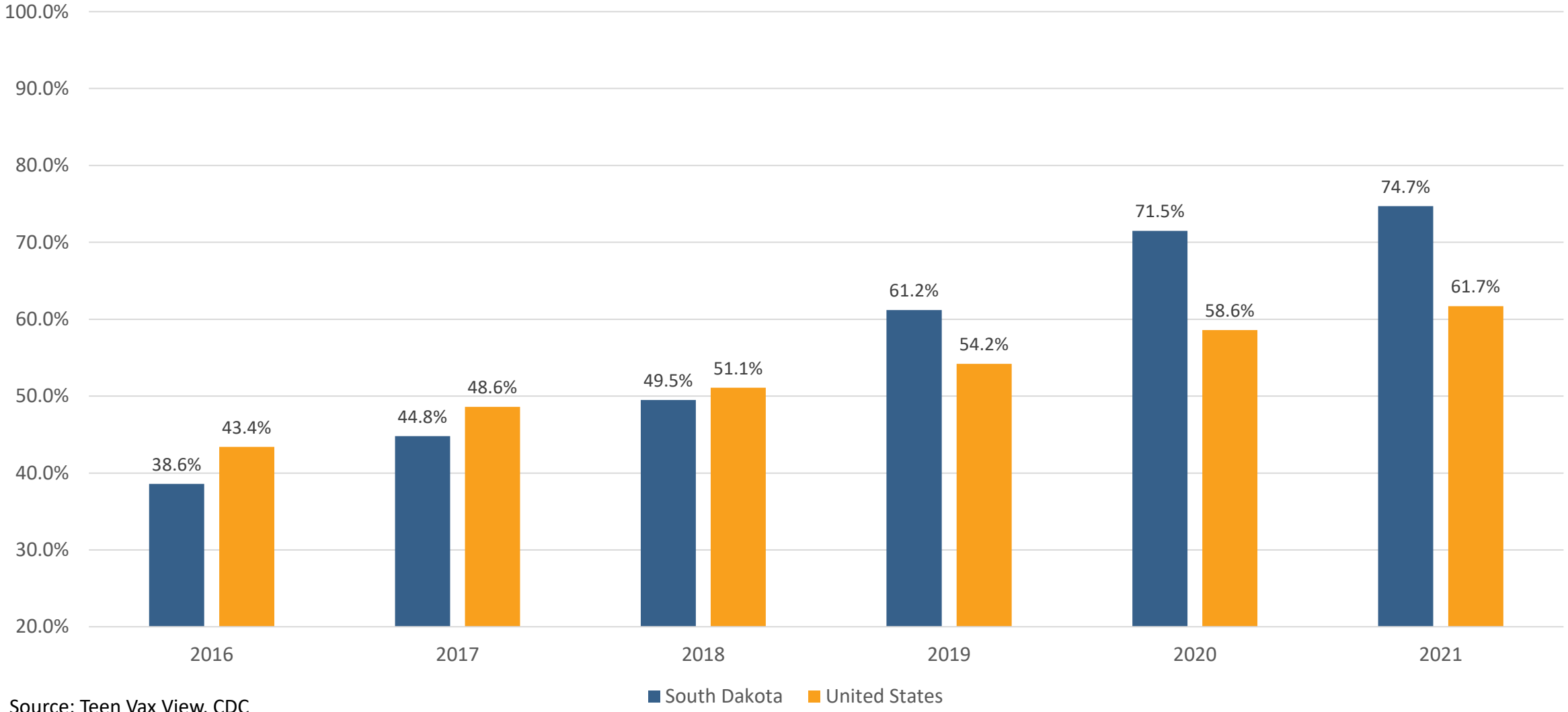
At least one Tdap or Td Dose Ages 13-17 Years, South Dakota and National, 2011-2021 School Years



Source: Teen Vax View, CDC

Tdap: Tetanus, Diphtheria, and Pertussis Vaccine
Td: Tetanus and Diphtheria Vaccine

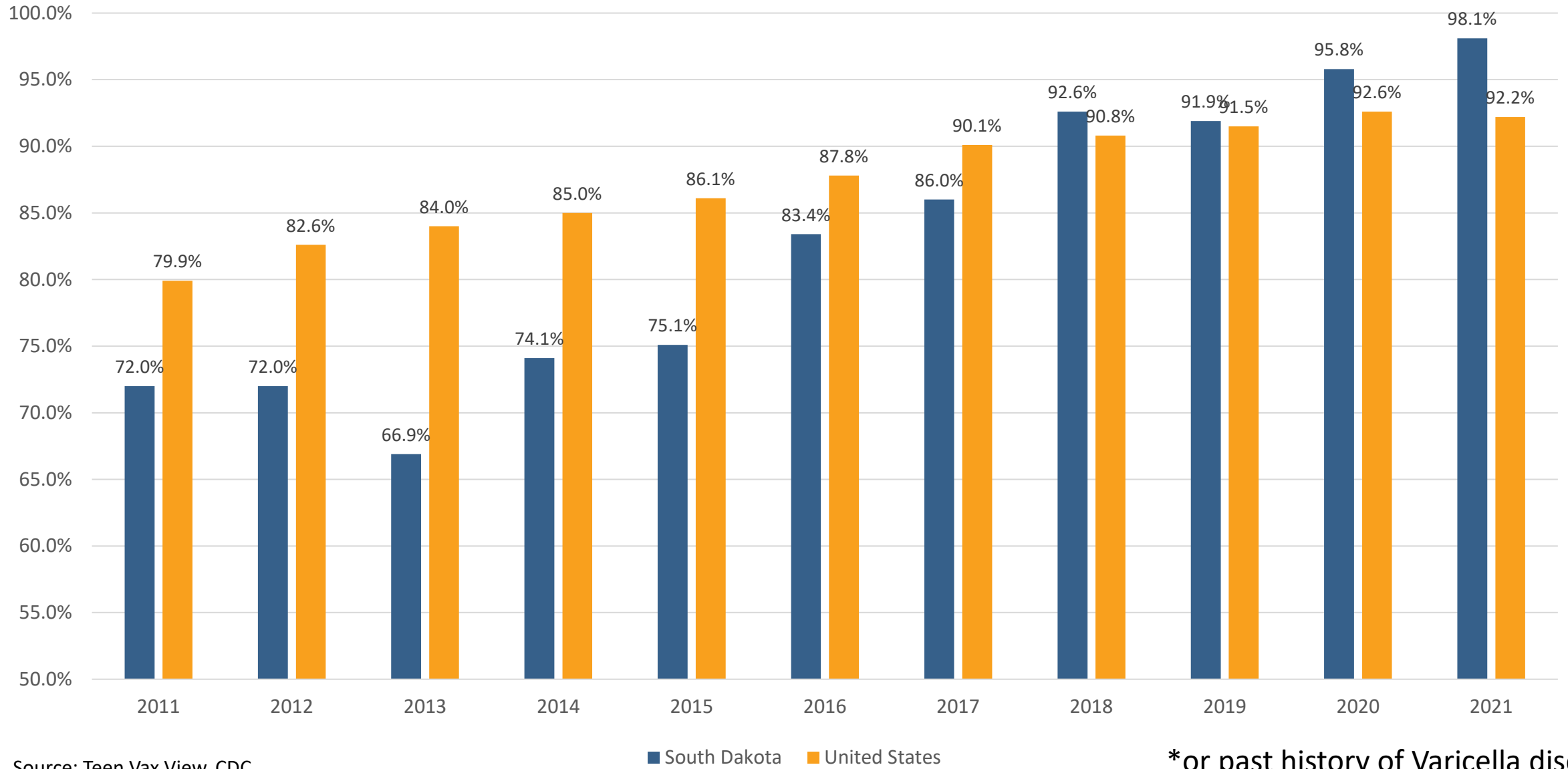
Up to Date HPV Vaccine Coverage Ages 13-17 Years South Dakota and National, 2016—2021 School Years



Source: Teen Vax View, CDC

HPV: Human Papilloma Virus Vaccine

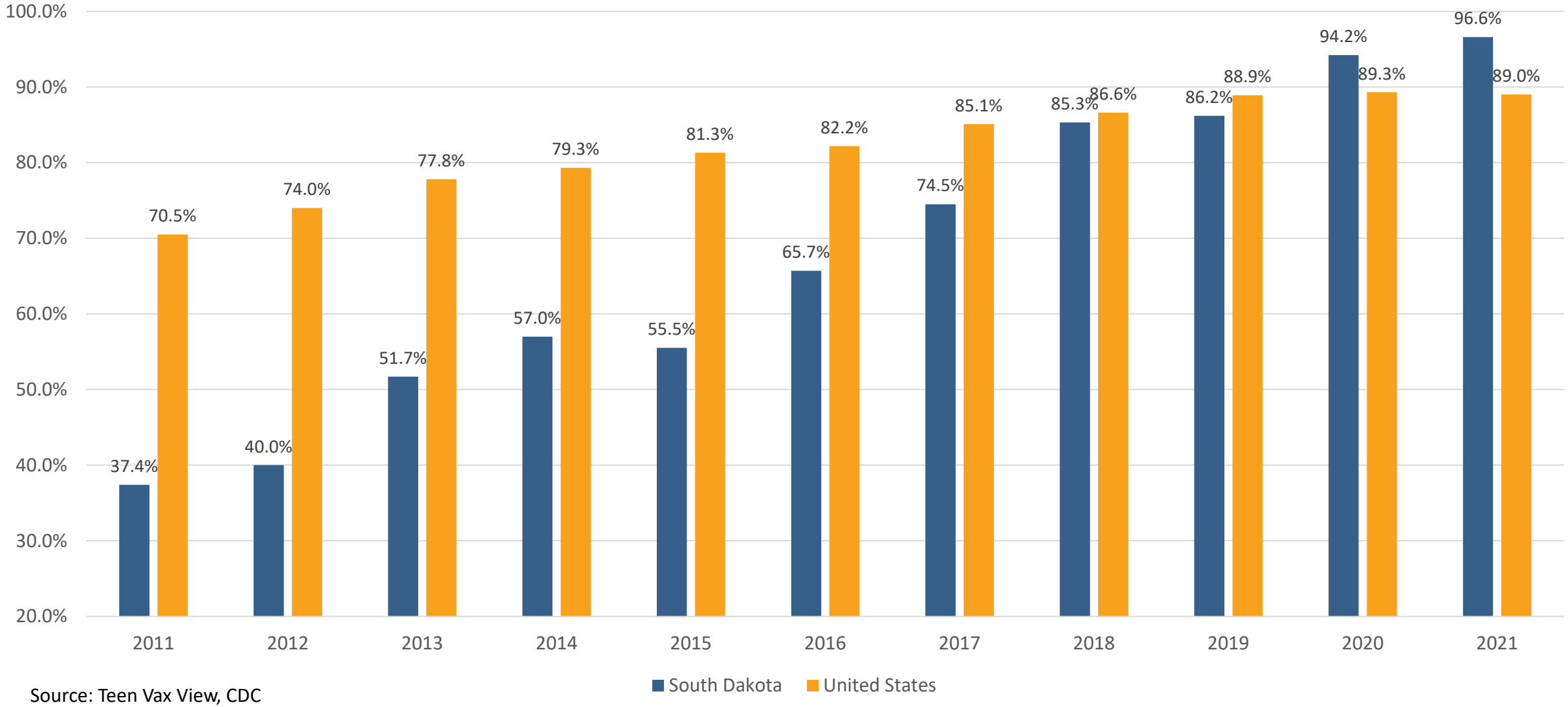
Varicella Vaccine Coverage* Ages 13-17 Years South Dakota, 2011-2021 School Years



Source: Teen Vax View, CDC

*or past history of Varicella disease

Meningococcal (MenACWY) Vaccine Coverage Ages 13-17 Years South Dakota and National, 2011-2021



Source: Teen Vax View, CDC

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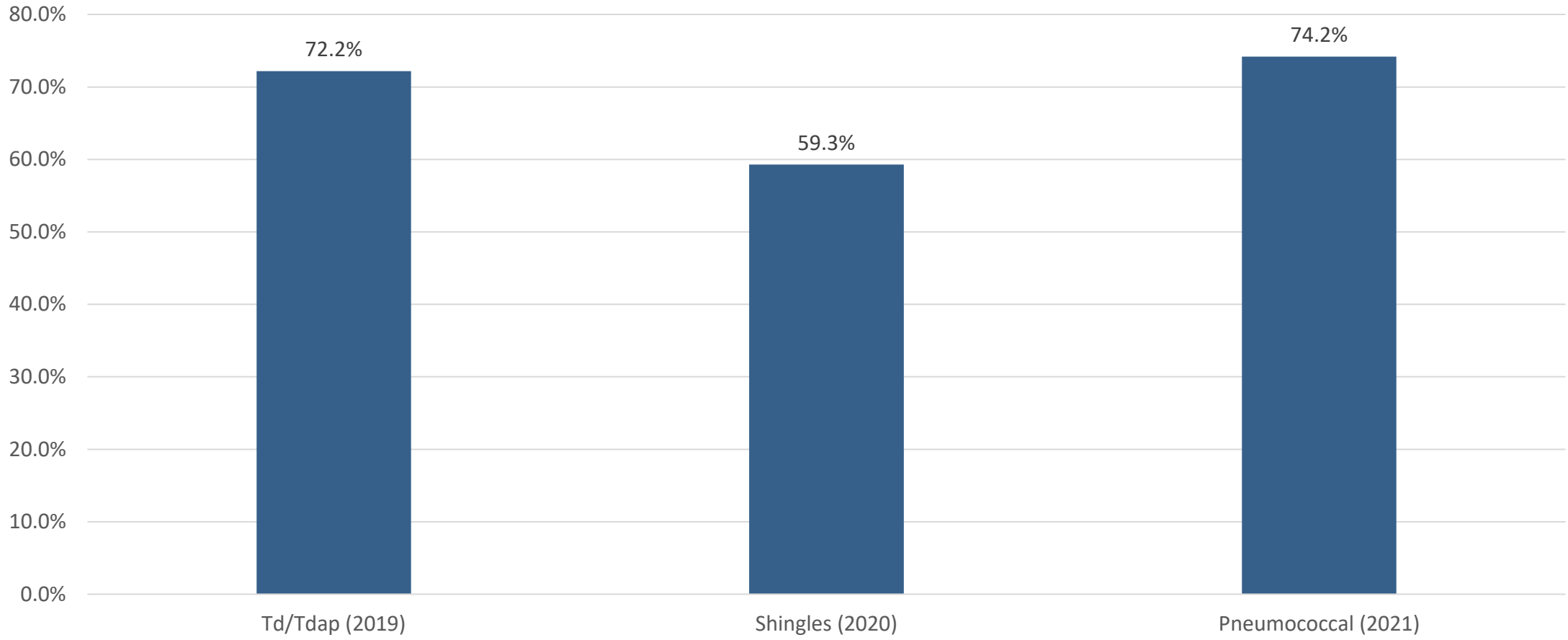
Vaccine Coverage Rates for Adults

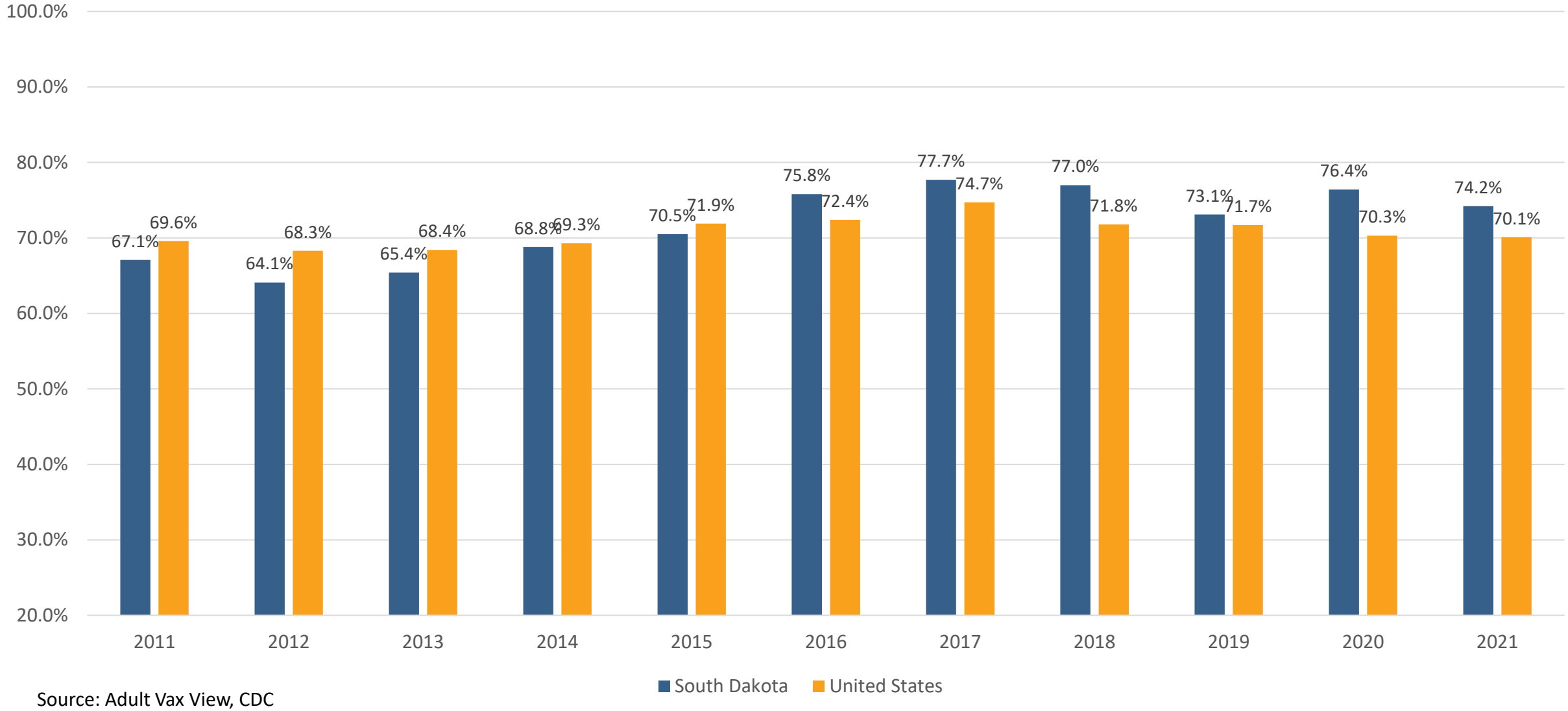
South Dakota Adult Vaccine Coverage, Ages 65 and Up



Source: Adult Vax View, CDC

Td: Tetanus and Diphtheria Vaccine
Tdap: Tetanus, Diphtheria, and Pertussis Vaccine

Pneumococcal Vaccine Coverage, Ages 65 Years and Up South Dakota and National, 2011-2021



Source: Adult Vax View, CDC

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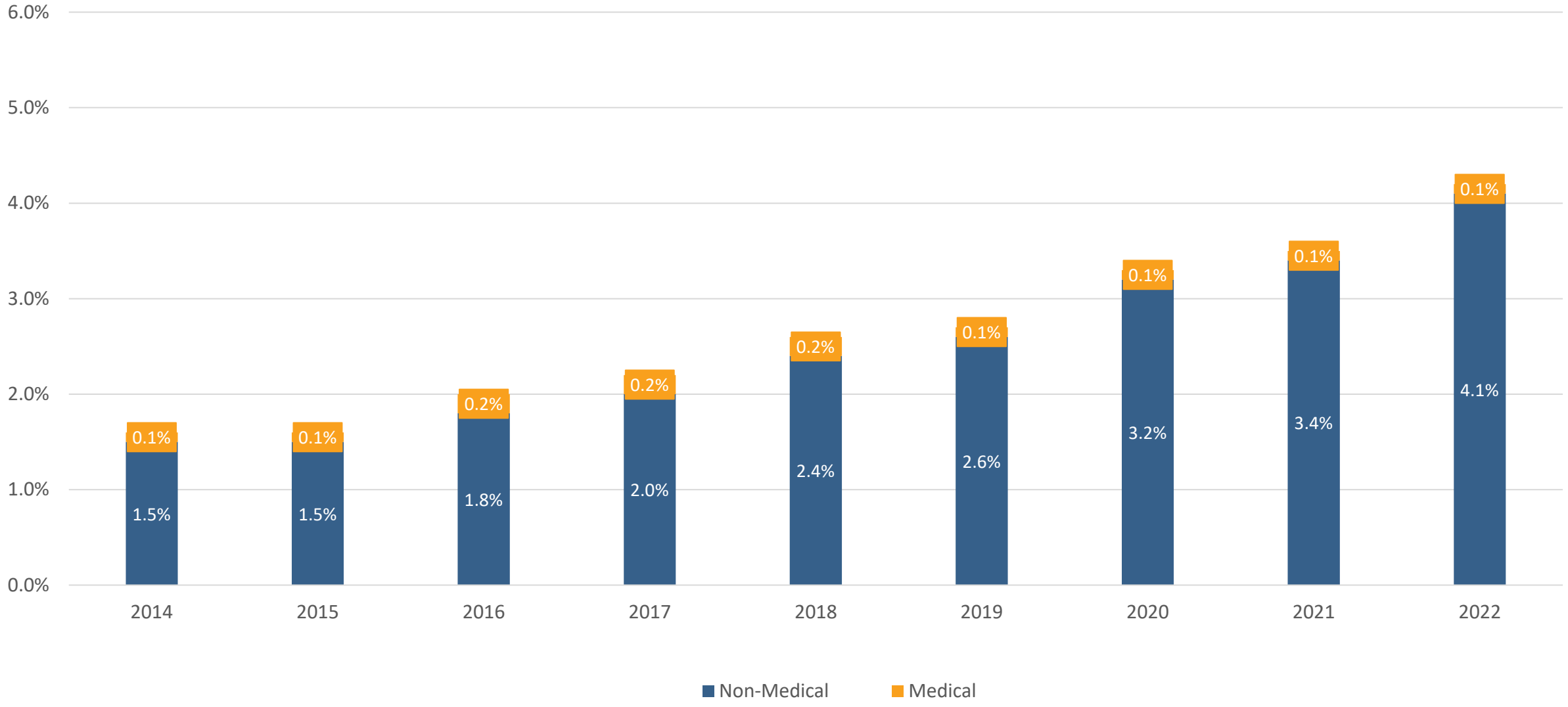
Vaccine Exemptions

National Picture of Vaccine Exemptions

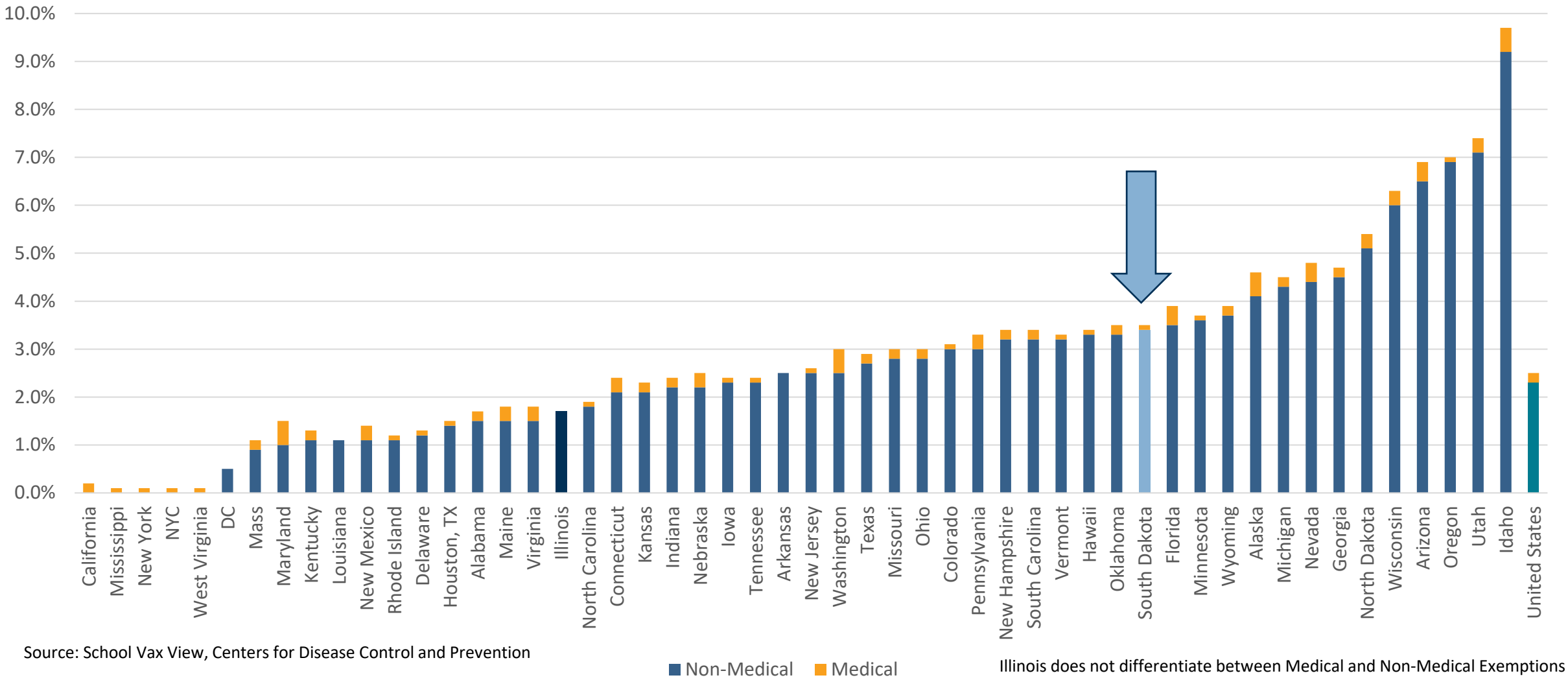
- Massachusetts: Considering ending religious exemptions
- Connecticut: Courts ruled that the state can continue to not allow religious exemptions
- Mississippi: Courts ruled that the state must allow religious exemptions
- Maine: Legislation that would have allowed philosophical and religious exemptions failed

Sources:
1.https://www.axios.com/local/boston/2023/07/19/massachusetts-students-vaccine-religious-exemption
2. https://ctmirror.org/2023/08/07/ct-religious-exemption-vaccines-schools-federal-appeals-court-decision-wnpr/
3. https://apnews.com/article/mississippi-vaccines-religion-747269fe3edcc20530a9aa17e6ad1a3b
4. https://www.mainepublic.org/politics/2023-05-04/maine-house-and-senate-reject-bills-carving-out-exemptions-for-school-mandated-vaccines

South Dakota Vaccine Exemption Rates at Kindergarten Entry, 2014-2022 School Years



Vaccine Exemptions at Kindergarten Entry, States 2021-2022 School Year



Source: School Vax View, Centers for Disease Control and Prevention

Illinois does not differentiate between Medical and Non-Medical Exemptions

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Influenza Vaccines

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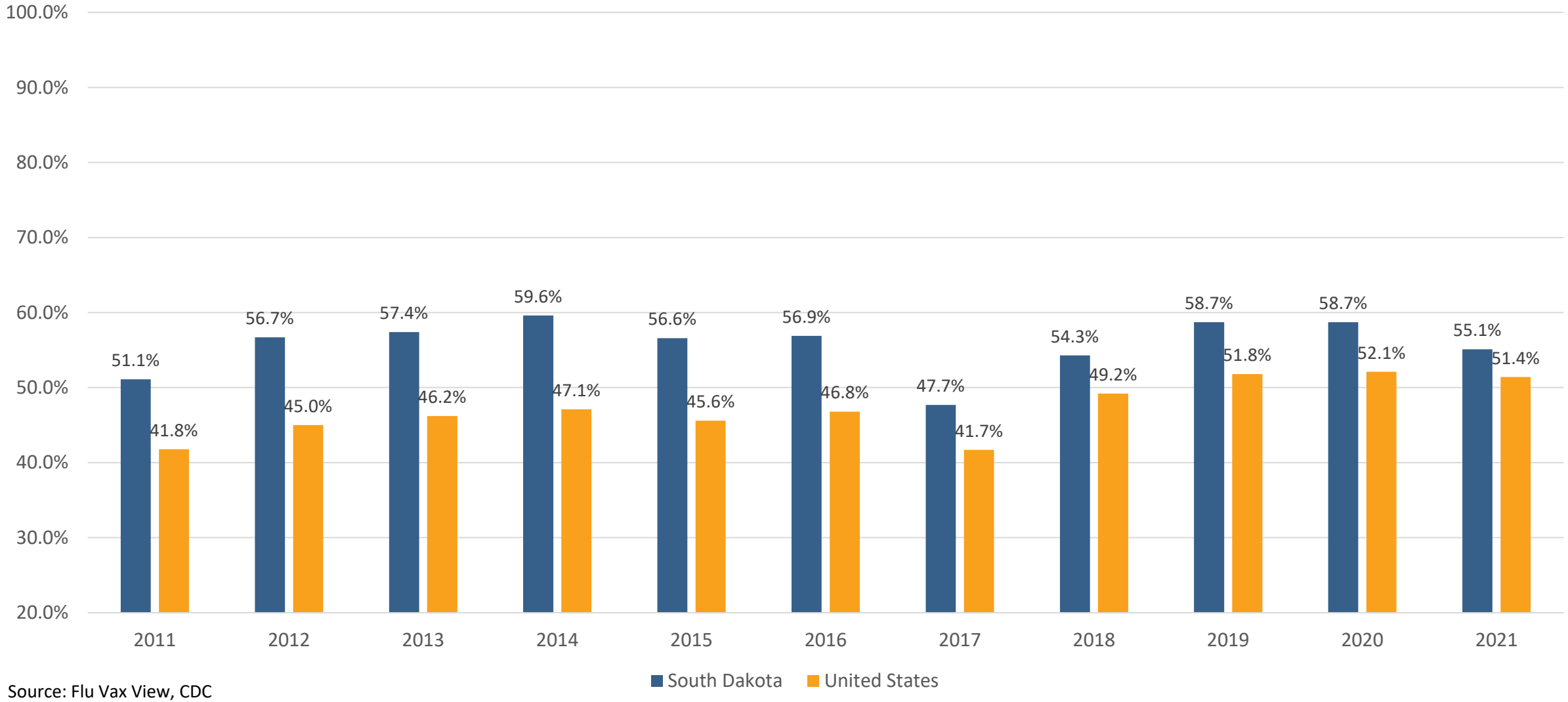
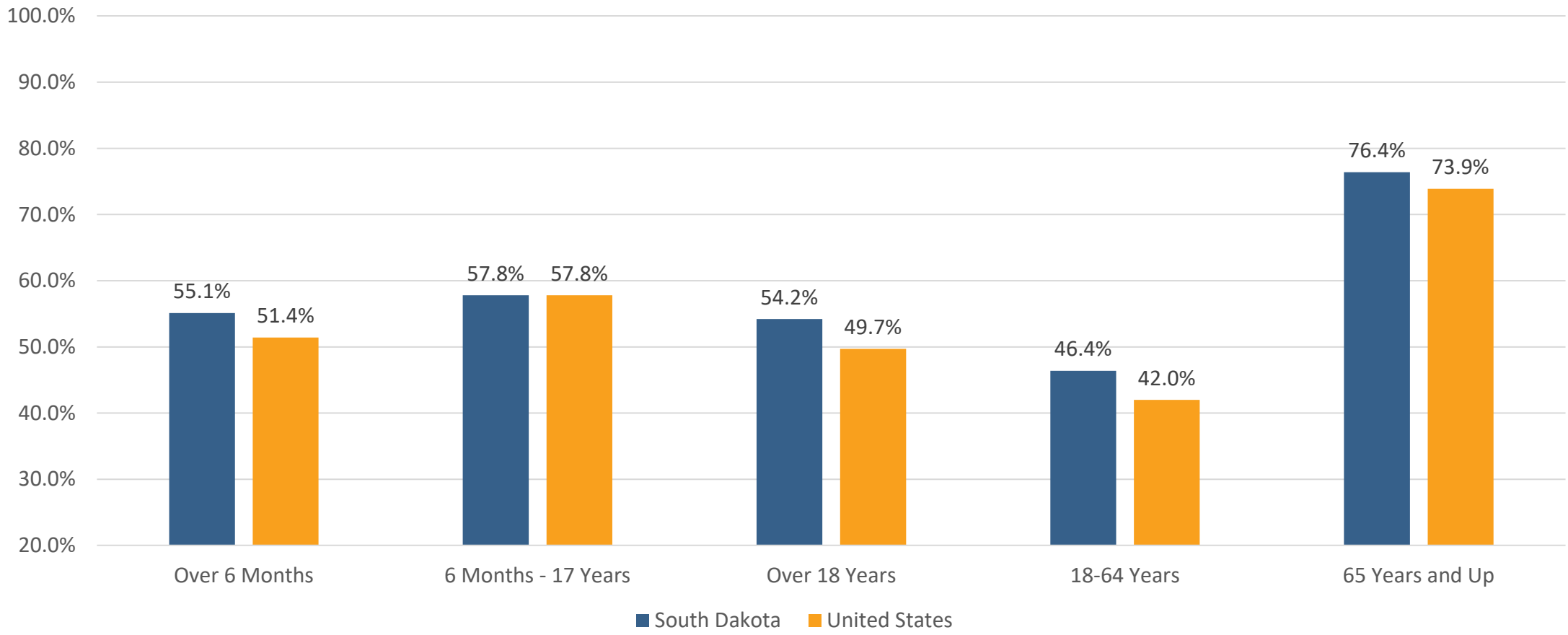
An annual influenza (flu) vaccine is recommended for everyone ages 6 months and older.

Influenza Vaccine Coverage, ages 6 months and up, 2011-2021 Flu Seasons



Source: Flu Vax View, CDC

Influenza Vaccine Coverage, By Age, End of the 2021-2022 Flu Season



Source: Flu Vax View, CDC

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COVID-19 Vaccines

Current and Upcoming COVID-19 Vaccines

- Discontinuation of the original monovalent vaccine products as of April 2023
- Discontinuation of the Bivalent mRNA Vaccine as of Sept 11, 2023
- Janssen COVID-19 vaccine is no longer available in the United States

Source: https://www.cdc.gov/vaccines/covid-19/clinical-considerations/interim-considerations-us.html
https://www.cdc.gov/media/releases/2023/p0912-COVID-19-Vaccine.html
This guidance was current as of 09/19/2023.

This guidance was current as of 09/19/2023.

Interim Clinical Considerations for Use of COVID-19 Vaccines in the United States

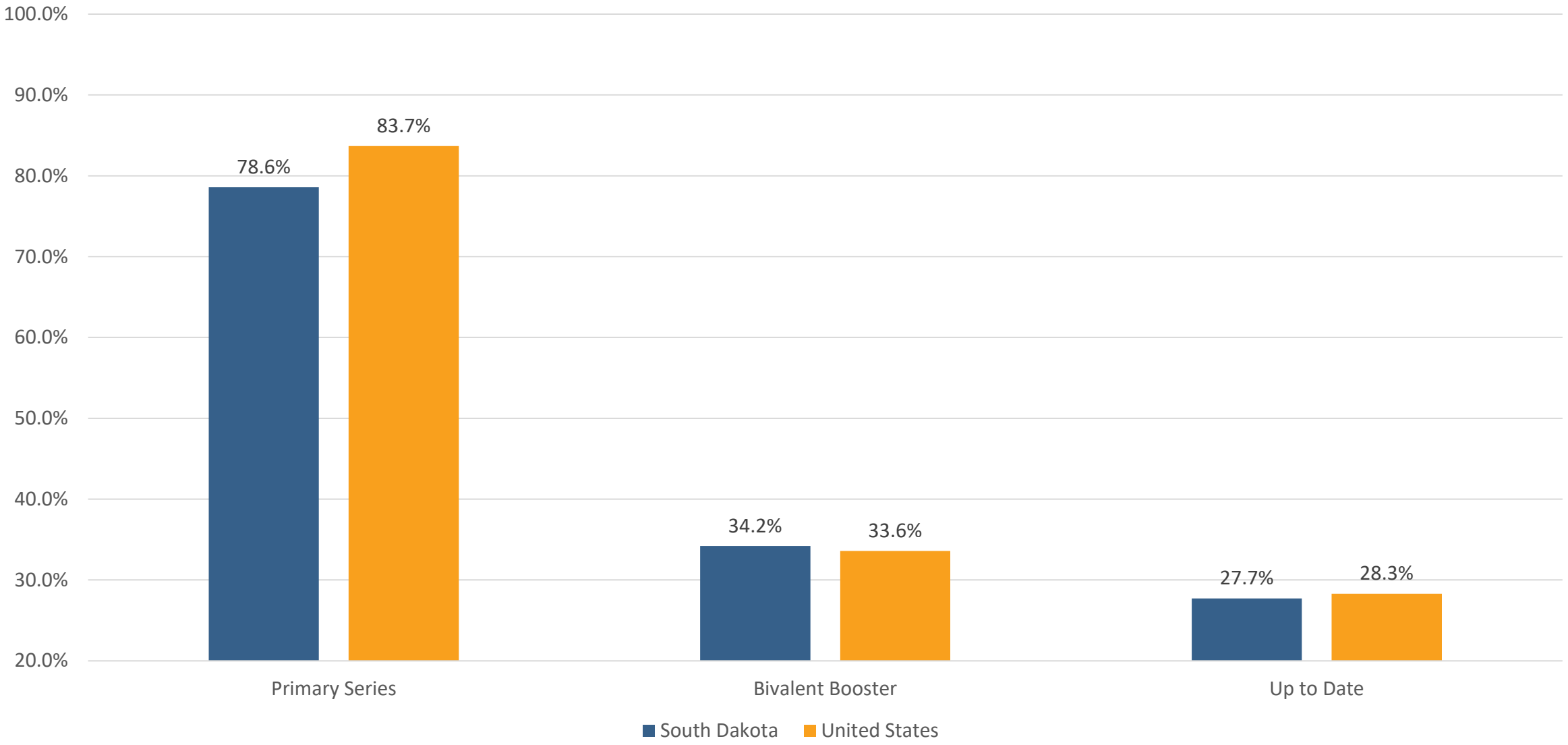
Print

Summary of recent changes (last updated September 15, 2023):

- Recommendations for use of the 2023–2024 formulations of Moderna COVID-19 Vaccine and Pfizer-BioNTech COVID-19 Vaccine:
  - Everyone ages 5 years and older is recommended to receive 1 dose of updated (2023–2024 Formula) mRNA COVID-19 vaccine
  - Children ages 6 months–4 years
    - Initial vaccination: should receive either 2 doses of updated (2023–2024 Formula) Moderna or 3 doses of updated (2023–2024 Formula) Pfizer-BioNTech COVID-19 vaccine
    - Received previous mRNA doses: need 1 or 2 doses of updated (2023–2024 Formula) Moderna or updated (2023–2024 Formula) Pfizer-BioNTech COVID-19 vaccine, depending on the number of prior doses
  - People who are moderately or severely immunocompromised
    - Initial vaccination: should receive a 3-dose series of updated (2023–2024 Formula) Moderna or updated (2023–2024 Formula) Pfizer-BioNTech COVID-19 vaccine
    - Received previous mRNA doses: need 1 or 2 doses of updated (2023–2024 Formula) Moderna or updated (2023–2024 Formula) Pfizer-BioNTech COVID-19 vaccine, depending on the number of prior doses
    - May receive 1 or more additional updated (2023–2024 Formula) mRNA COVID-19 vaccine doses
  - Bivalent mRNA COVID-19 vaccines are no longer recommended in the United States
- Updated guidance for COVID-19 vaccination and myocarditis or pericarditis
- Updated guidance for COVID-19 vaccination and Multisystem Inflammatory Syndrome (MIS) in children (MIS-C) and in adults (MIS-A)
- Reorganization and consolidation of sections on contraindications and precautions, including allergic reactions to COVID-19 vaccines

Source: CDC, Clinical Guidance for COVID-19 Vaccination | CDC

COVID-19 Vaccine Coverage United States, Ages 18 and Up



Source: COVID Vax View, CDC

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Emerging Issues & Current Events

Travel Reminders

- Everyone should have their vaccination status checked before international travel.
- Several imported measles cases have occurred this year (none in SD) that involved an un- or under-vaccinated child travelling to a county where measles is circulating.
- Many areas of the world are seeing measles and diphtheria outbreaks.
- Many other diseases like Polio are eliminated in the US but continue to circulate in other countries, so importation is always a possibility.

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MPOX

- Public health emergency allowed to expire in May 2023 but cases are still occurring nationally
- 3 cases in the state, most recent was in 2022
- Vaccine is still available to those who are eligible

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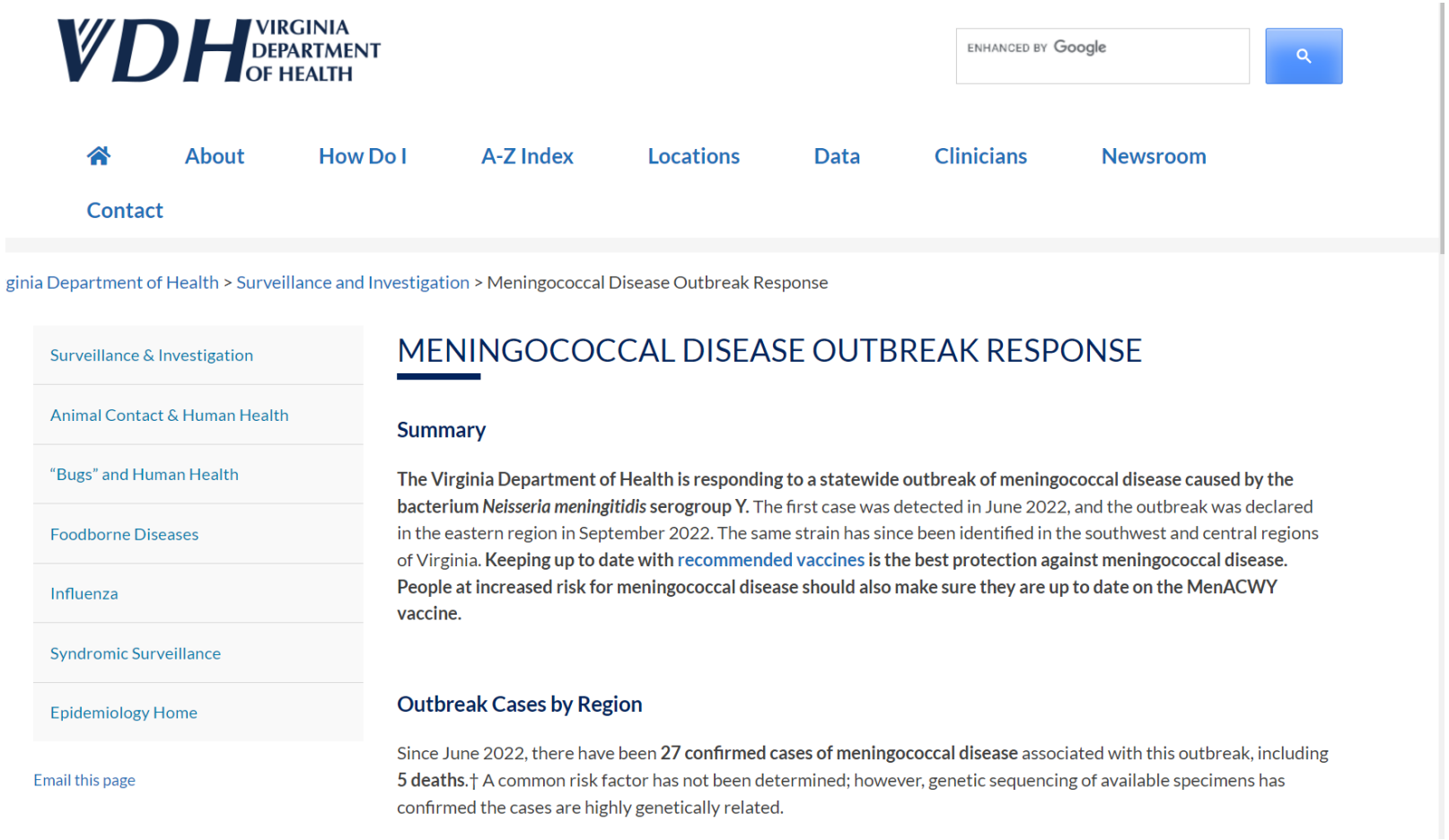
Virginia Meningococcal Outbreak



VDH VIRGINIA DEPARTMENT OF HEALTH

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ginia Department of Health > Surveillance and Investigation > Meningococcal Disease Outbreak Response

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- Animal Contact & Human Health
- "Bugs" and Human Health
- Foodborne Diseases
- Influenza
- Syndromic Surveillance
- Epidemiology Home

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MENINGOCOCCAL DISEASE OUTBREAK RESPONSE

Summary

The Virginia Department of Health is responding to a statewide outbreak of meningococcal disease caused by the bacterium *Neisseria meningitidis* serogroup Y. The first case was detected in June 2022, and the outbreak was declared in the eastern region in September 2022. The same strain has since been identified in the southwest and central regions of Virginia. **Keeping up to date with recommended vaccines is the best protection against meningococcal disease. People at increased risk for meningococcal disease should also make sure they are up to date on the MenACWY vaccine.**

Outbreak Cases by Region

Since June 2022, there have been **27 confirmed cases of meningococcal disease** associated with this outbreak, including **5 deaths**.† A common risk factor has not been determined; however, genetic sequencing of available specimens has confirmed the cases are highly genetically related.

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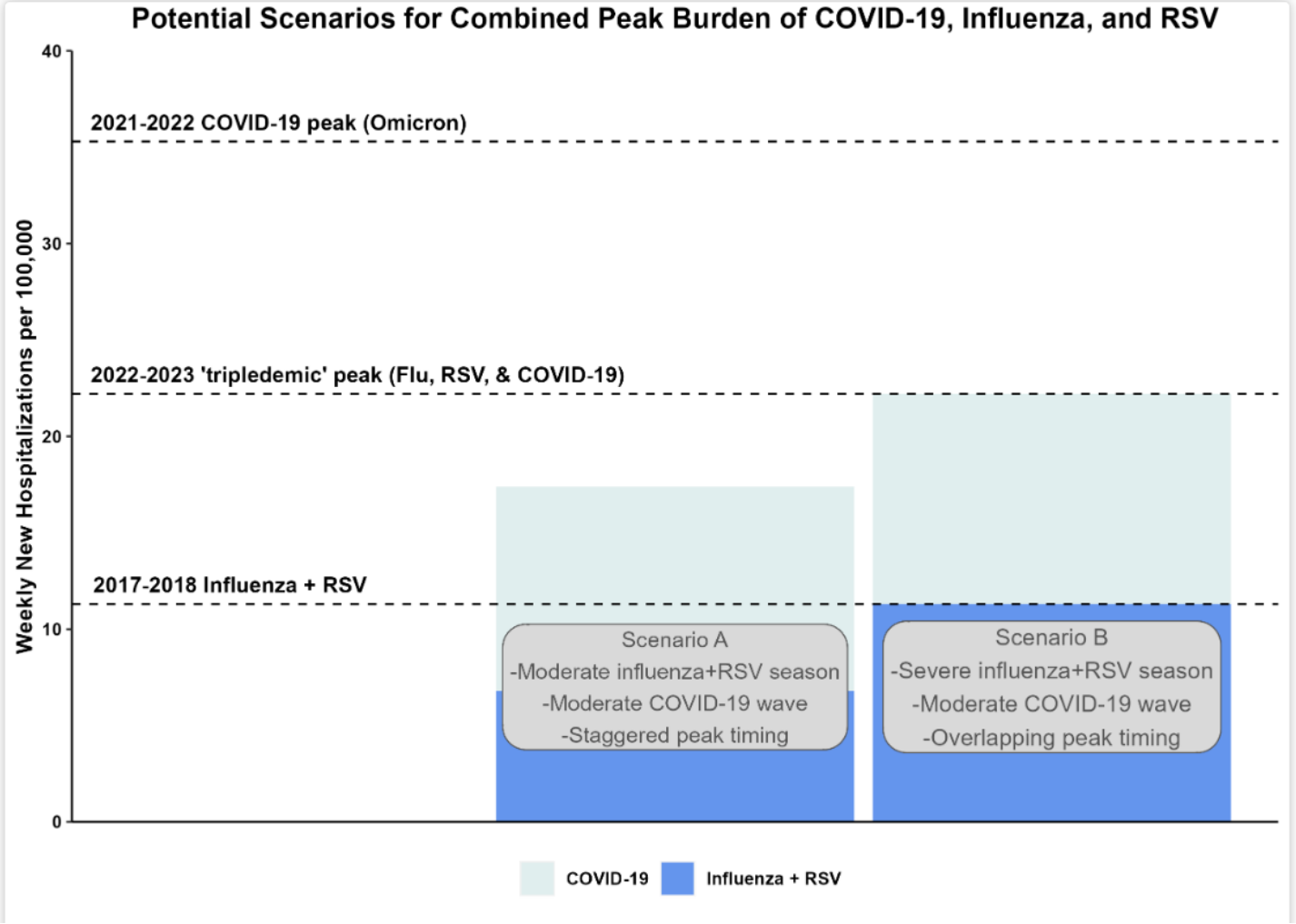
Source: https://www.vdh.virginia.gov/surveillance-and-investigation/meningococcal-disease-outbreak-response/ Accessed 09/18/2023

Respiratory Virus Season Forecast from CDC



Source: CDC, https://www.cdc.gov/forecast-outbreak-analytics/about/season-outlook.html#:~ :text =Infectious%20disease%20experts%20and%20scenario,occurred%20at%20last%20winter's%20peak.

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Respiratory Syncytial Virus (RSV)

- New Monoclonal antibody product for infants
  - Planned roll-out for Fall 2023
- Vaccine for During Pregnancy
  - 32-36 weeks of pregnancy
- Vaccine for Adults ages 60 and Up
  - Available now!

Source: https://www.cdc.gov/rsv/index.html
https://www.fda.gov/news-events/press-announcements/fda-approves-first-vaccine-pregnant-individuals-prevent-rsv-infants#:~:text=Abrysvo%20is%20approved%20for%20use,years%20of%20age%20and%20older.

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Resources from CDC

Catch Up Immunization Schedule

- Available from the CDC: https://www.cdc.gov/vaccines/schedules/hcp/imz/catchup.html

Children Age 4 Months through 6 Years

Vaccine	Minimum Age for Dose 1	Minimum Interval Between Doses			
		Dose 1 to Dose 2	Dose 2 to Dose 3	Dose 3 to Dose 4	Dose 4 to Dose 5
Hepatitis B	Birth	4 weeks	8 weeks and at least 16 weeks after first dose. Minimum age for the final dose is 24 weeks.		
Rotavirus	6 weeks Maximum age for first dose is 14 weeks, 6 days.	4 weeks	4 weeks Maximum age for final dose is 8 months, 0 days.		
Diphtheria, tetanus, and acellular pertussis	6 weeks	4 weeks	4 weeks	6 months	6 months
Haemophilus influenzae type b	6 weeks	No further doses needed if first dose was administered at age 15 months or older. 4 weeks	No further doses needed if previous dose was administered at age 15 months or older.	8 weeks (as final dose) This dose only necessary for children age 12 through 59 months who	

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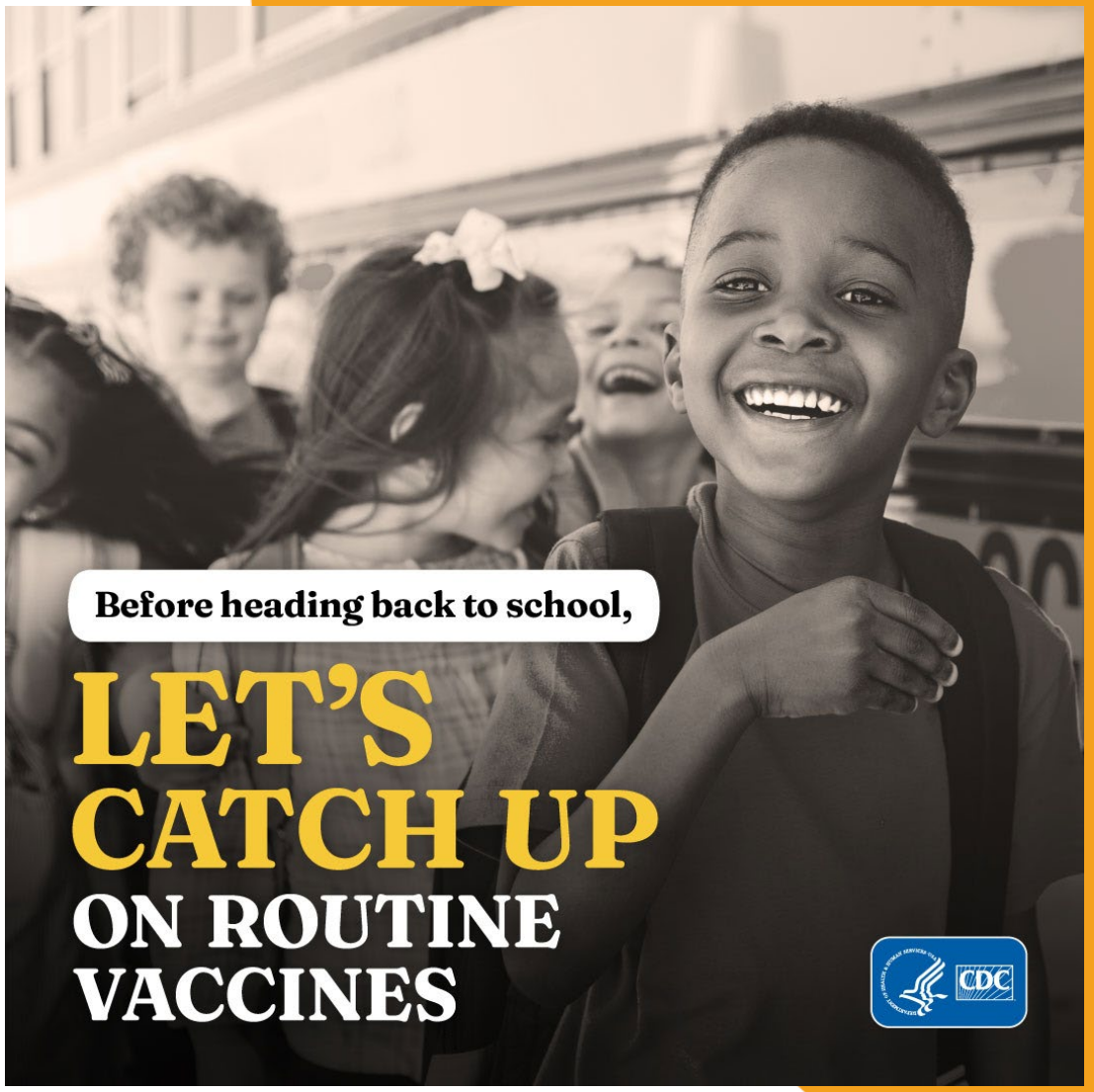
CDC Resources

- “Let’s Catch Up on Routine Vaccines”
  - https://www.cdc.gov/vaccines/events/back-to-school/index.html



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Sources and Further Reading

- CDC, Child Vax View: https://www.cdc.gov/vaccines/imz-managers/coverage/childvaxview/index.html
- CDC, School Vax View: https://www.cdc.gov/vaccines/imz-managers/coverage/schoolvaxview/index. html
- CDC, Teen Vax View: https://www.cdc.gov/vaccines/imz-managers/coverage/teenvaxview/index.html
- CDC, Flu Vax View: https://www.cdc.gov/flu/fluvaxview/index.htm
- CDC, COVID Vax View: https://www.cdc.gov/vaccines/imz-managers/coverage/covidvaxview/index.html
- CDC, Catch up Immunization Schedule: https://www.cdc.gov/vaccines/schedules/hcp/imz/catchup.html
- CDC, Immunization Schedule: https://www.cdc.gov/vaccines/schedules/index.html
- NEW! South Dakota School Immunization Dashboard: https://doh.sd.gov/health-data-reports/data-dashboards/school-immunization-dashboard/
- South Dakota Department of Health, Immunizations Required for SD School Entry: https://doh.sd.gov/topics/immunizations-vaccinations/immunizations-required-for-sd-school-entry/