



# All About Adolescent Vaccinations

The latest information on COVID-19, HPV, and adolescent immunization

Thursday, June 10, 2020, 10:00-11:00

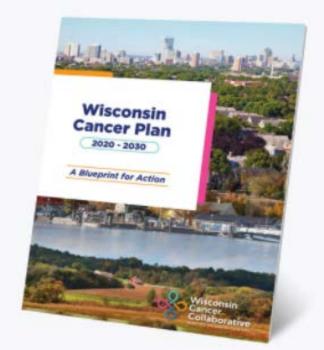
#### Who We Are

The Wisconsin Cancer Collaborative is a statewide coalition of 140 organizations working together to reduce the burden of cancer for everyone in Wisconsin.

#### Join Us!



### Wisconsin Cancer Plan 2020-2030



www.wicancer.org

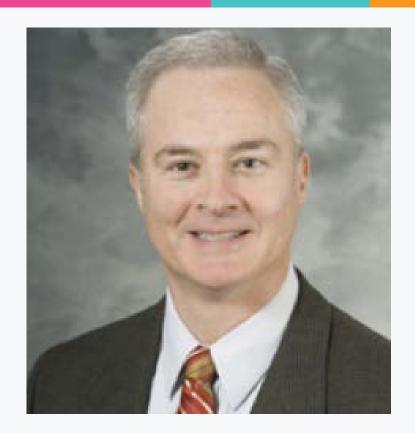
#### Agenda

- Welcome
- Intro
- Presentation by Dr. Conway
- Questions





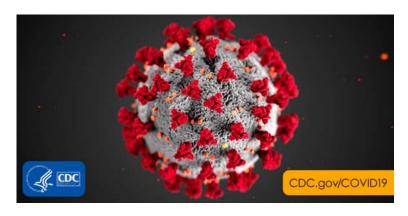
www.wicancer.org



**Dr. James Conway** *Medical Director for UW Health Immunization Programs* 



# Adolescent Vaccinations: The latest information on COVID-19, HPV, and adolescent immunization

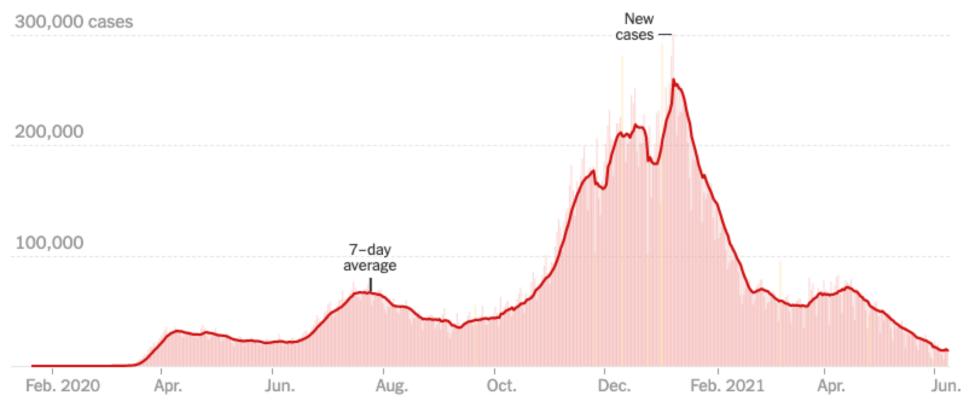


#### James H. Conway, MD FAAP

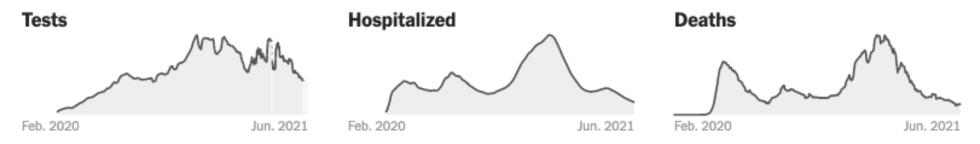
Professor of Pediatrics – Division of Infectious Diseases
Medical Director – UW Health Immunization Programs
Director, Office of Global Health
Associate Director, Global Health Institute



#### New reported cases

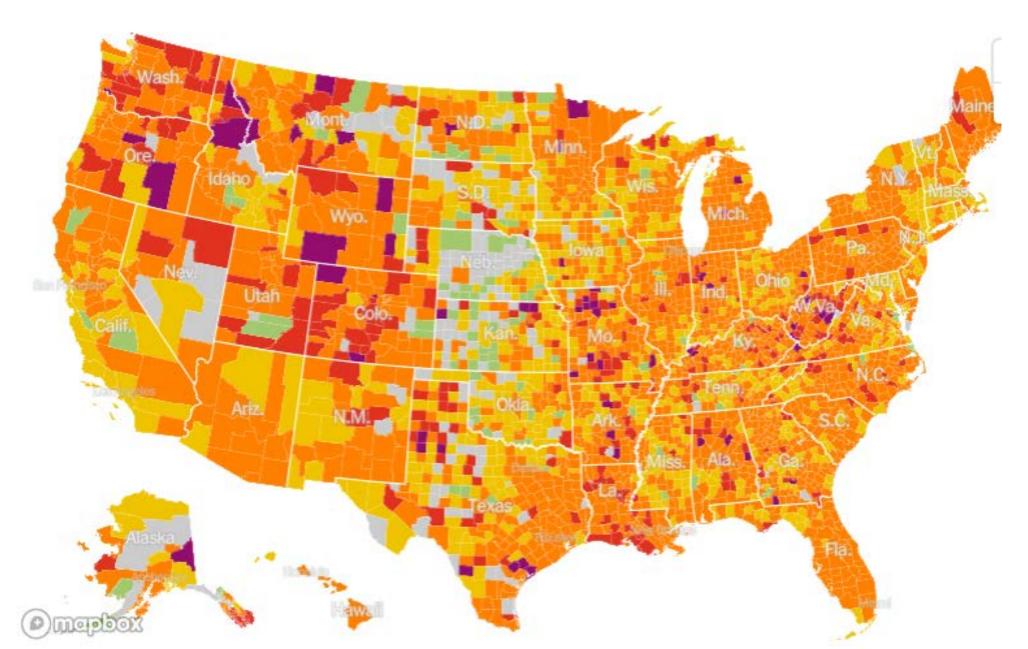


These are days with a reporting anomaly. Read more here.



Covid-19 risk for unvaccinated people is based on cases and test positivity.

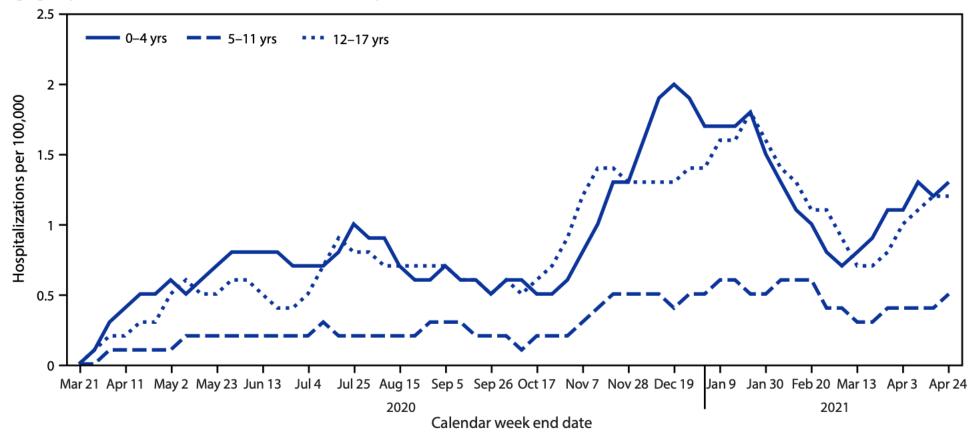




# Hospitalization of Adolescents Aged 12–17 Years with Laboratory-Confirmed COVID-19 — COVID-NET, 14 States, March 1, 2020–April 24, 2021

Early Release / June 4, 2021 / 70

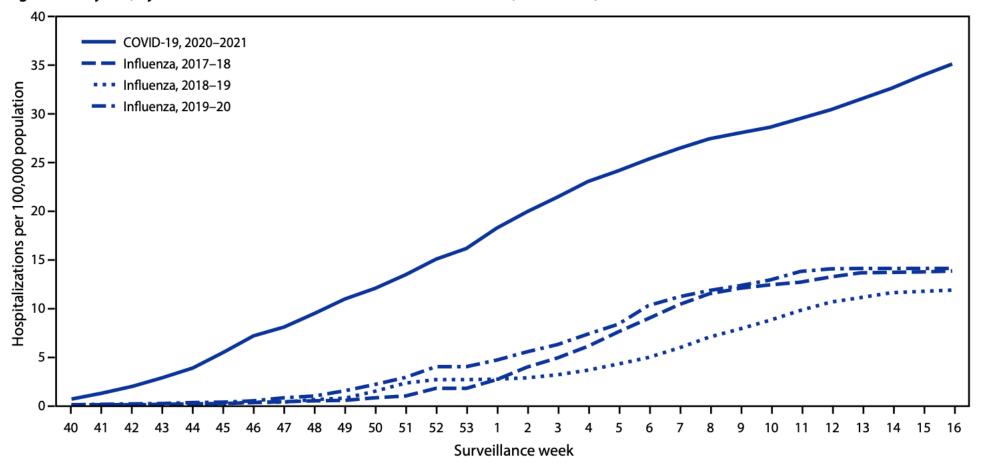
FIGURE 1. Three-week moving average COVID-19-associated hospitalization rates\* among children and adolescents aged <18 years, by age group — COVID-NET, 14 states,† March 1, 2020-April 24, 2021



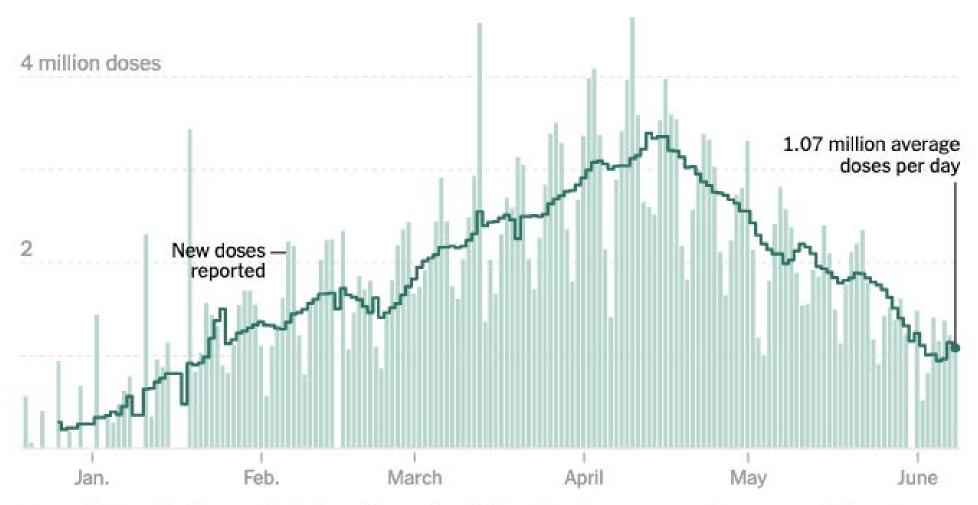
# Hospitalization of Adolescents Aged 12–17 Years with Laboratory-Confirmed COVID-19 — COVID-NET, 14 States, March 1, 2020–April 24, 2021

Early Release / June 4, 2021 / 70

FIGURE 2. Cumulative rates for COVID-19-associated hospitalizations\* compared with influenza-associated hospitalizations† among adolescents aged 12-17 years, by surveillance week§ — COVID-NET¶ and FluSurv-NET,\*\* 14 states,†† 2017-2021§§



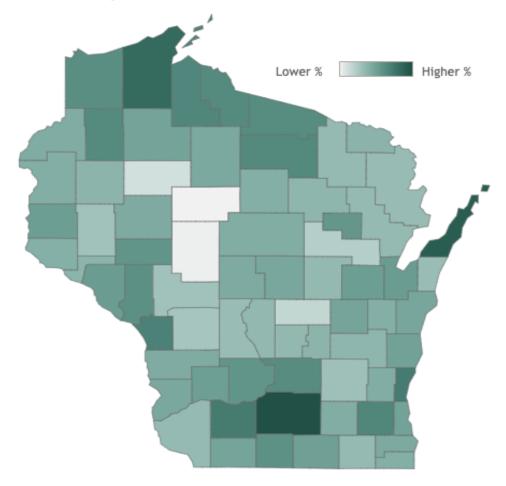
#### New reported doses administered by day



Source: Centers for Disease Control and Prevention | Note: Line shows a seven-day average. Data not updated on some weekends and holidays. Includes the Johnson & Johnson vaccine as of March 5.

#### Percent of Wisconsin residents who have received at least one dose by county

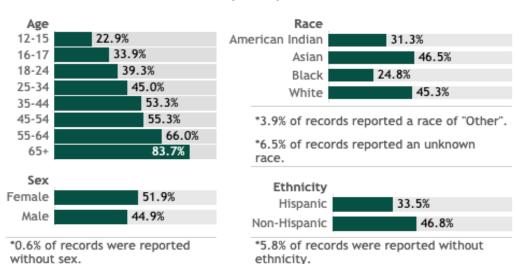
#### Click a county to filter data



#### Percent of Wisconsin residents who have received at least one dose

The orange represents the population for whom the vaccine is authorized. The gray indicates the population under 12 years of age for whom the vaccines are not authorized.





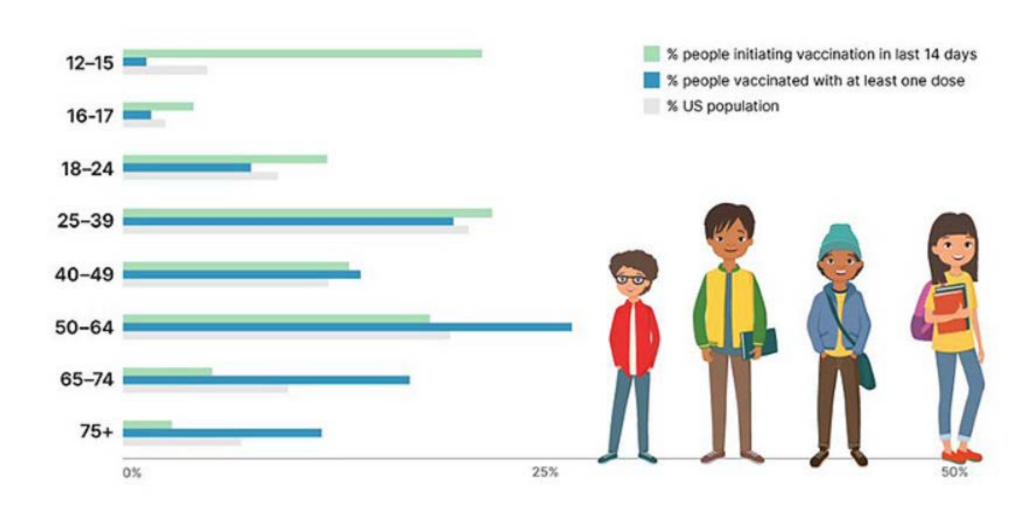
View more data on racial and ethnic disparities in Wisconsin

#### Vaccine doses for Wisconsin residents by week



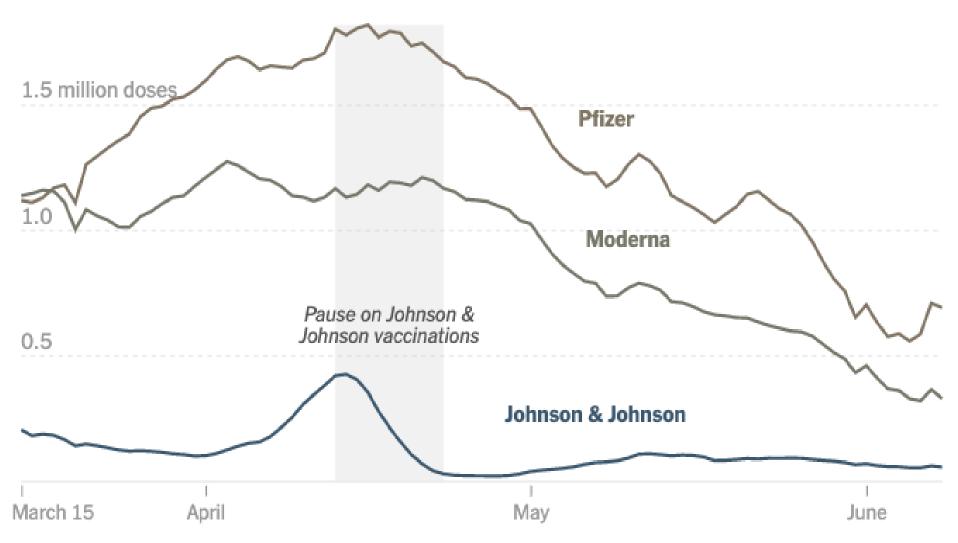
# Vaccination Demographics by Age Group

Newly added: 12-15 Age Group



#### Daily reported doses given by manufacturer

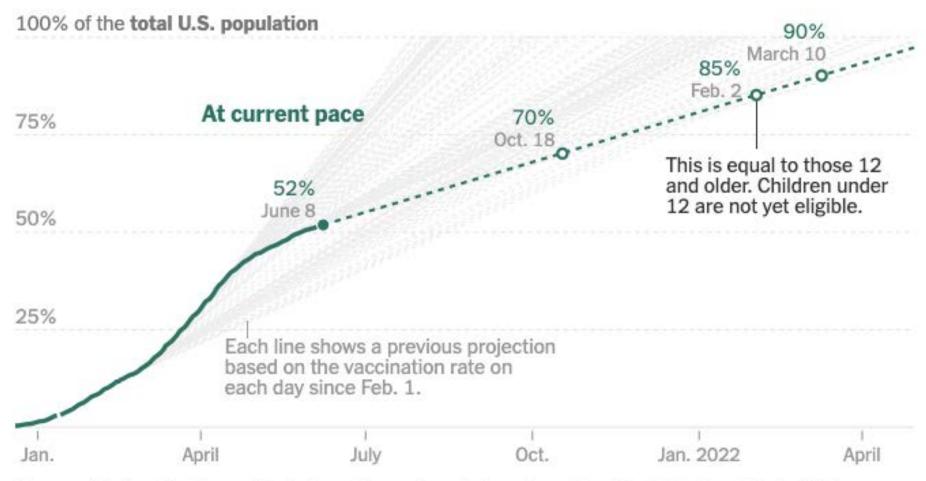
Each line shows the seven-day average.



Source: Centers for Disease Control and Prevention

#### At the current pace of vaccination, most people could get a shot this year. But no vaccine has been authorized for children under 12.

Based on the seven-day average of people receiving a first or single dose each day.



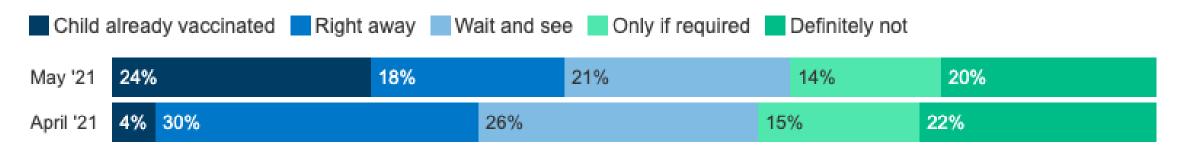
Sources: Centers for Disease Control and Prevention; Andrew Beveridge, SocialExplorer | Note: Total population includes states, territories and three countries with <u>special agreements</u> with the United States: Palau, Micronesia and the Marshall Islands.

Table 1. Emergency Use Authorizations of COVID-19 Vaccines

Sponsor	Regimen	Indicated Population	Date of EUA				
Pfizer	2 doses 3 weeks apart	Individuals ≥16 years of age	December 11, 2020				
Moderna	2 doses 4 weeks apart	Adults ≥18 years of age	December 18, 2020				
Janssen	Single dose	Adults ≥18 years of age	February 27, 2021				
Pfizer (amendment)	2 doses 3 weeks apart	Individuals ≥12 years of age	May 10, 2021				

### Four In Ten Parents Say Their Adolescent Has Already Received A COVID-19 Vaccine Or Will Do So Right Away

As you may know, the FDA recently authorized the use of the Pfizer COVID-19 vaccine for use in children ages 12 and up. Thinking about your child or children between the ages of 12-17, do you think you will...?



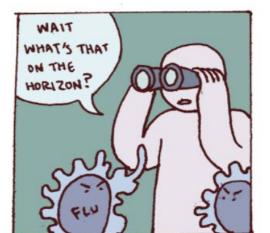
NOTE: Among parents or guardians of children ages 12-17. April 2021 question wording: "Once there is a COVID-19 vaccine authorized and available for your child's age group, do you think you will...?" See topline for full question wording.

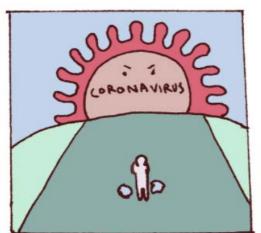
SOURCE: KFF COVID-19 Vaccine Monitor (May 18-25, 2021) • Download PNG

KFF COVID-19 Vaccine Monitor

#### On the horizon....

- Novavax & Sanofi/GSK protein subunit vaccines (spike glycoprotein) progressing – likely EUA submission 3<sup>rd</sup> Q 2021
- Janssen progressing with 12-17yo studies
- Moderna submission for EUA 12-17yo pending (June 2021)
- Pfizer & Moderna currently doing 'dose finding' for 6m-11yo
  - Will be followed by larger safety/immunogenicity trials
  - Anticipate 5-11yo data fall 2021
- Moderna & Pfizer in process of 'rolling submission' for full BLA
  - Seeking 'priority review' by FDA
  - Decision pending (but likely)





### **COVID-19 vaccination of persons with underlying medical conditions**

- Any currently authorized COVID-19 vaccine can be administered to persons with underlying medical conditions who have no contraindications to vaccination, including:
  - Immunocompromised persons
  - People with autoimmune conditions
  - People with history of Guillain-Barré syndrome, Bell's palsy, dermal filler use

 Clinical trials demonstrate similar safety and efficacy profiles in persons with underlying medical conditions, including those that place them at increased risk for severe COVID-19, compared to persons without comorbidities

#### Vaccine Efficacy — Cancer Patients

- Israel 102 cancer patients undergoing therapy, received BNT162b2 mRNA vaccine
  - 90% of cancer patients seropositive after 2<sup>nd</sup> dose (compared to 100% in controls)
  - JAMA ONCOLOGY May 28, 2021 A Massarweh et al
- Israel 167 CLL patients receiving BNT162b2 mRNA vaccine antibodies measured
  - Overall response rate 39.5%
  - 79.2% response rate for patients in remission
  - 16% in patients on treatment, 55.2% in treatment naïve
  - **BLOOD** April 16, 2021 Y Herishanu et al.

#### Vaccine Efficacy — Solid Organ Transplants

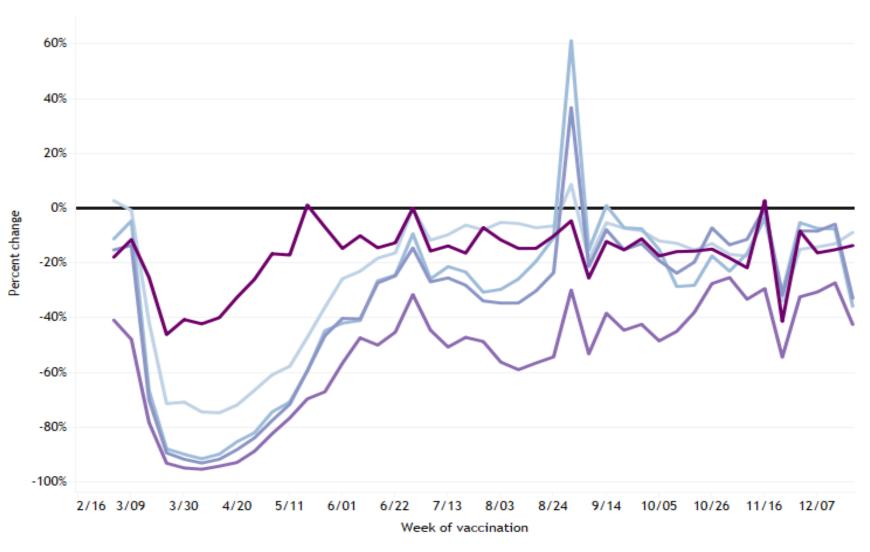
- Received mRNA vaccines (about 50:50 Pfizer:Moderna)
- Only 17% had positive antibody after dose #1
- 54% had positive antibodies after dose #2
- Non-response closely correlated with antimetabolite treatment (mycophenalate or azathioprine)
- JAMA May 5, 2021 B Boyarsky et al.

#### Cautionary Statements

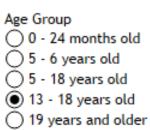
- MOST commercial assays for SARS-CoV2 antibodies detect nucleocapsid antibody (NOT spike glycoprotein)
- Vaccines induce only spike glycoprotein antibodies
- T/B cell memory immunity appears to be important.
- No particular level of antibodies currently correlates with immunity
- Currently NO recommendations for boosters in any populations
- Ultimately boosters may be needed unclear whether vaccines will need to be updated or whether current vaccines are adequate for boosting (preliminary data suggests they are)



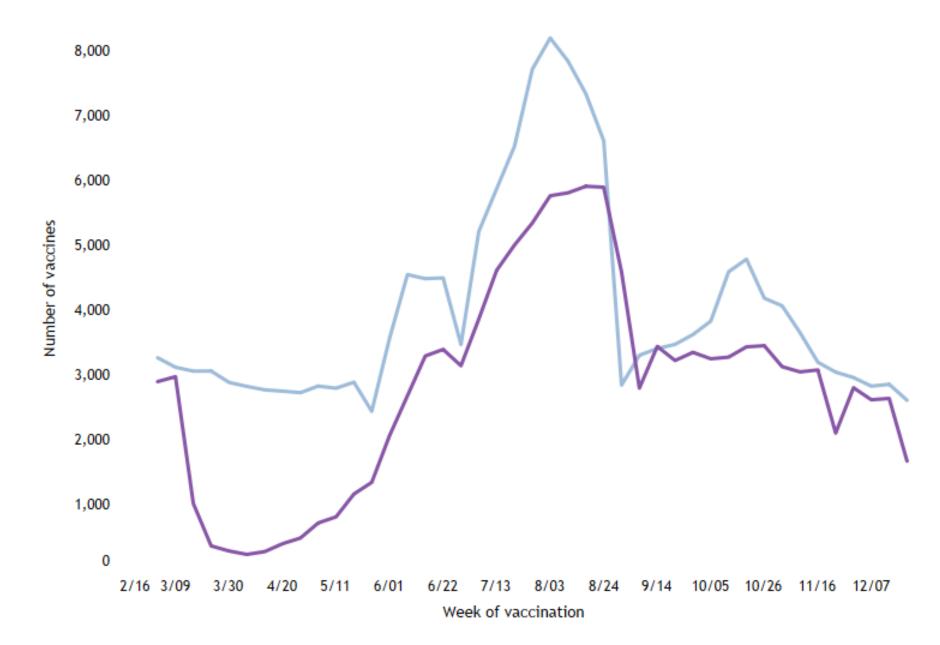
Percent change in non-influenza vaccinations administered across age groups in Wisconsin

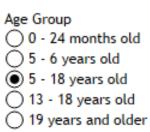


Percent change describes by what percent the number of immunizations administered this year has changed compared to the five-year average (2015-2019.) A negative percent change, means the number of immunizations this year was lower than the five-year average, whereas a positive percent change means the number of immunizations this year was higher.

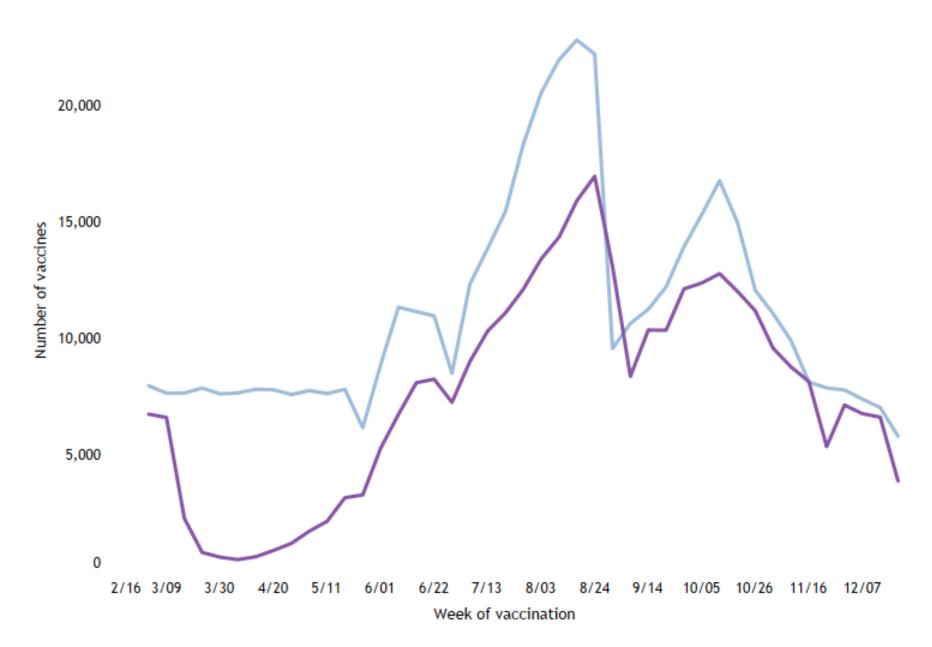


Routinely administered vaccinations in persons aged 13 - 18 years old in 2020 versus the 2015-2019 average.





Routinely administered vaccinations in persons aged 5 - 18 years old in 2020 versus the 2015-2019 average.



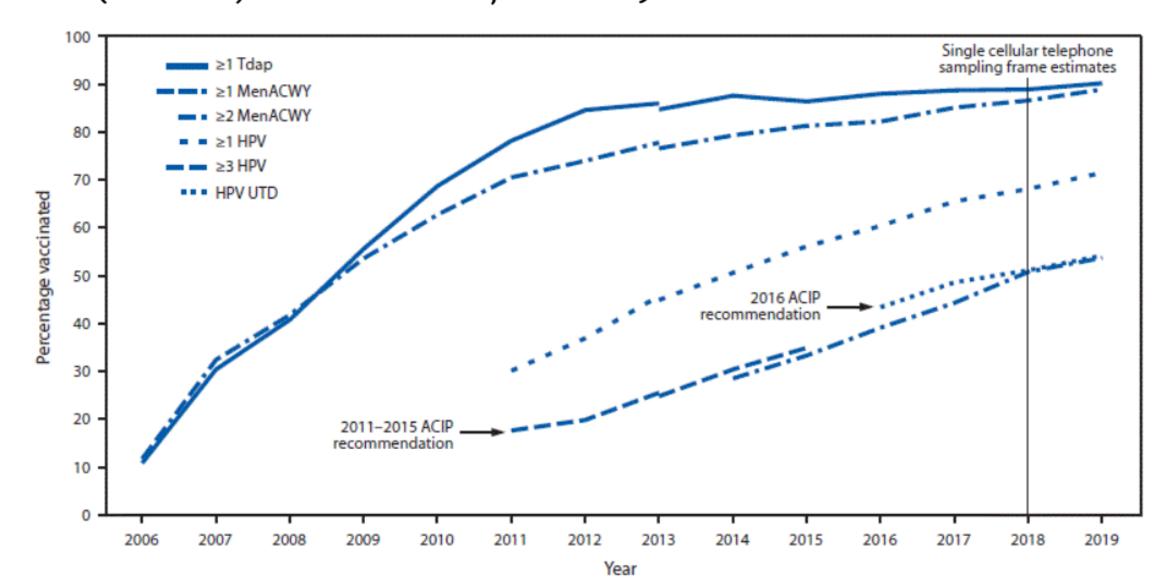
#### Table 1

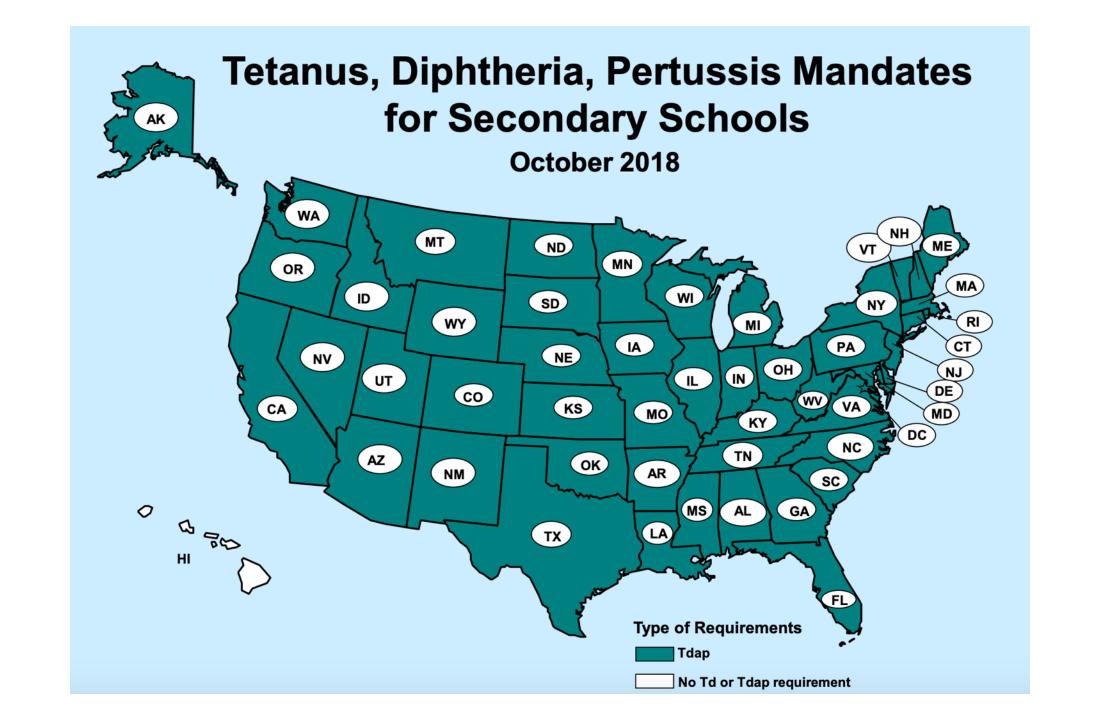
#### Recommended Child and Adolescent Immunization Schedule for ages 18 years or younger. United States, 2021

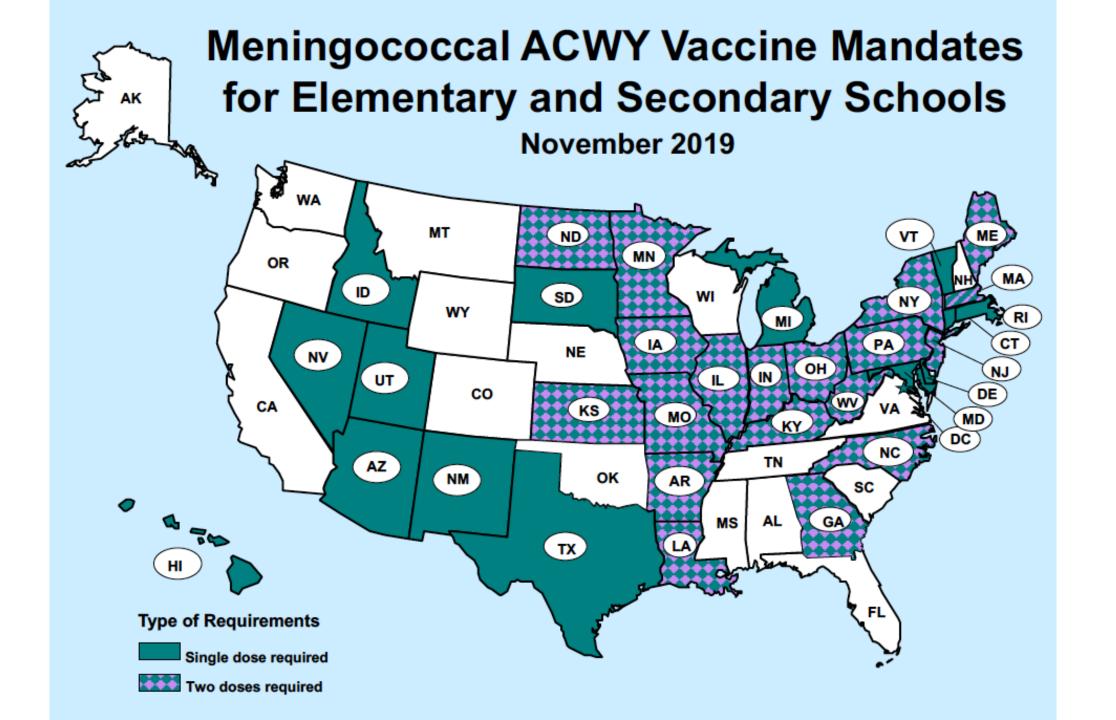
These recommendations must be read with the notes that follow. For those who fall behind or start late, provide catch-up vaccination at the earliest opportunity at dicated by the guaranteed by

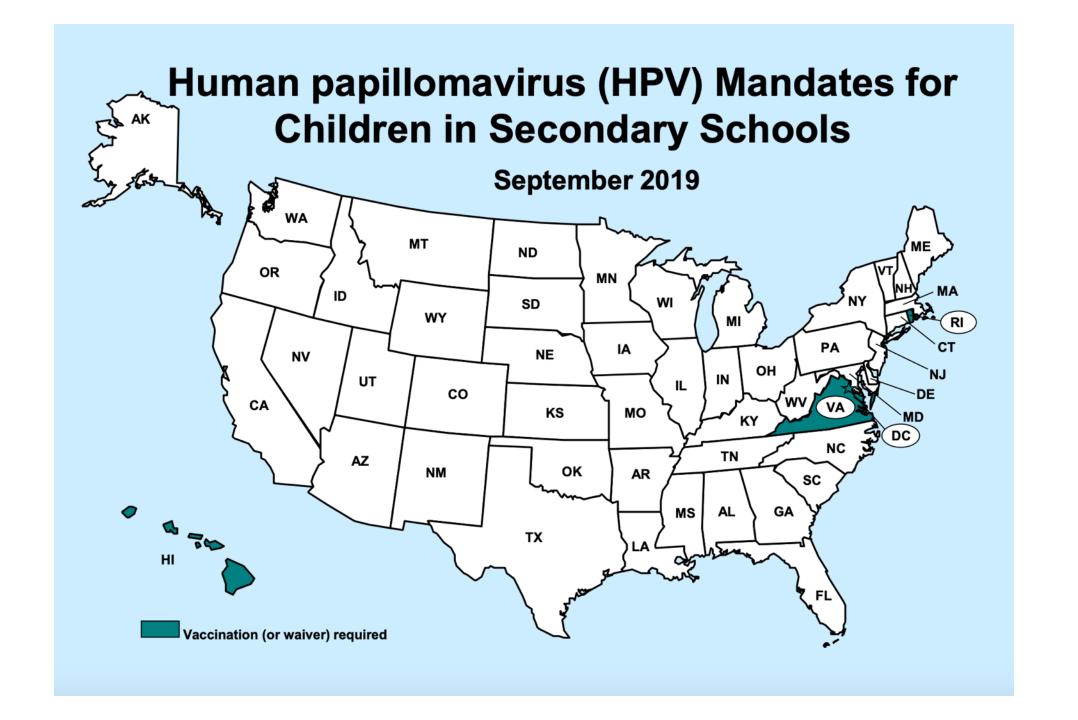
To determine minimum intervals	between	doses, see	the catch	-up scnea	ule (Table	2). School	entry and	adolescei	it vaccine	age group	s are snac	ded in gray	/ <u>.</u>				
Vaccine	Birth	1 mo	2 mos	4 mos	6 mos	9 mos	12 mos	15 mos	18 mos	19–23 mos	2-3 yrs	4–6 yrs	7–10 yrs	11–12 yrs	13–15 yrs	16 yrs	17–18 yrs
Hepatitis B (HepB)	1s dose	<b>∢</b> 2 <sup>nd</sup> (	dose▶		◄		3 <sup>rd</sup> dose										
Rotavirus (RV): RV1 (2-dose series), RV5 (3-dose series)			1¤ dose	2 <sup>nd</sup> dose	See Notes												
Diphtheria, tetanus, acellular pertussis (DTaP <7 yrs)			1s dose	2 <sup>nd</sup> dose	3 <sup>rd</sup> dose			<b>∢</b> 4 <sup>th</sup> d	ose			5 <sup>th</sup> dose					
Haemophilus influenzae type b (Hib)			1s dose	2 <sup>nd</sup> dose	See Notes		43 <sup>d</sup> or 4 See N	odose, Notes									
Pneumococcal conjugate (PCV13)			1º dose	2 <sup>nd</sup> dose	3 <sup>rd</sup> dose		<b>∢</b> 4 <sup>th</sup> 0	iose▶									
Inactivated poliovirus (IPV <18 yrs)			1¤ dose	2 <sup>nd</sup> dose	◄		3 <sup>rd</sup> dose					4 <sup>th</sup> dose					
Influenza (IIV)							A	nnual vacci	nation 1 or	2 doses				Annua	l vaccination	1 dose on	ly
Influenza (LAIV4)												l vaccinatio r 2 doses		Annua	vaccination	1 dose on	ly
Measles, mumps, rubella (MMR)					See 1	Notes	<b>◄</b> 1 <sup>st</sup> d	lose>				2 <sup>nd</sup> dose					
Varicella (VAR)							<b>◄</b> 1 <sup>st</sup> d	lose				2 <sup>nd</sup> dose					
Hepatitis A (HepA)					See f	Notes	2	2-dose serie	s, See Note	s							
Tetanus, diphtheria, acellular pertussis (Tdap ≥7 yrs)														Tdap			
Human papillomavirus (HPV)													*	See Notes			
Meningococcal (MenACWY-D ≥9 mos, MenACWY-CRM≥2 mos, MenACWY-TT≥2years)								See Notes						1 <sup>st</sup> dose		2 <sup>nd</sup> dose	
Meningococcal B															See Not	25	
Pneumococcal polysaccharide (PPSV23)														See Notes			
Range of recommended ages for all children			of recomm ch-up imm		5		of recomm n high-risk o		s for	decisi	on-making	oased on sha or this age gro			No recommonot application		

FIGURE. Estimated vaccination coverage with selected vaccines and doses\*
among adolescents aged 13–17 years, by survey year and Advisory Committee on Immunization Practices (ACIP) recommendations† — National Immunization Survey-Teen (NIS-Teen)<sup>§,¶</sup> — United States, 2006–2019

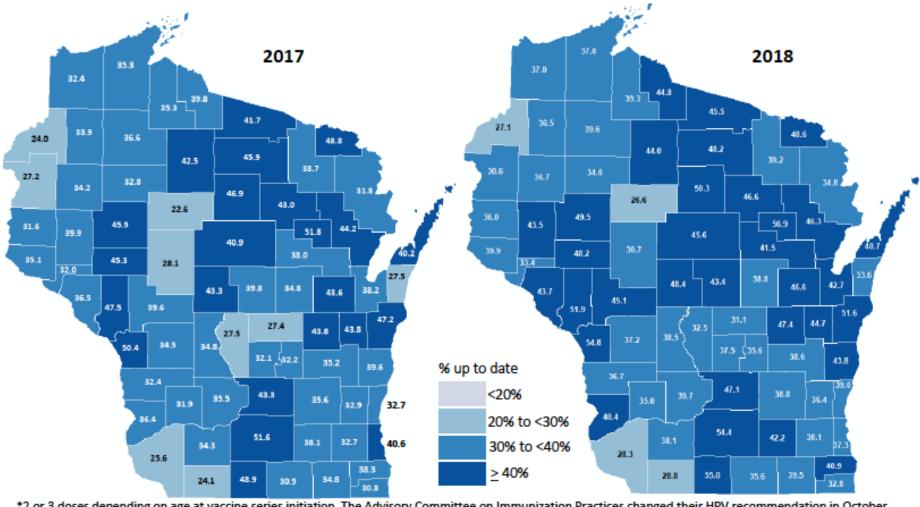








Percent of adolescents aged 13-18 who are up-to-date\* with the human papillomavirus (HPV) vaccine, 2017 and 2018



\*2 or 3 doses depending on age at vaccine series initiation. The Advisory Committee on Immunization Practices changed their HPV recommendation in October 2017 from a 3 dose series to either a 2 or 3 dose series depending on age at vaccine series initiation. Prior to 2017, HPV complete rates reflect a 3 dose series.

Birth range, 2017 assessment: January 1 1999 to December 31 2004 Birth range, 2018 assessment: January 1 2000 to December 31 2005

Prepared by the Wisconsin Immunization Program, Division of Public Health, April 2019

Data source: Wisconsin Immunization Registry



# In the U.S., hospitalizations are rising in areas with low vaccination rates.

Health officials worry that Covid-19 hospitalization rates could increase among the unvaccinated as variants of the virus spread.

- All oncology patients should be vaccinated
- Pre-transplant vaccination for SOT encouraged whenever feasible
- Encourage vaccination of household members & caregivers
- Continue adherence to protective measures including masking & social distancing regardless of vaccine status



ante Thank you Cnacuo = Ale Chacuo Dziękuję Ευχαριστώ Kiitos Tak Dziękzię 有り難う Obrigado 谢谢 Hvala 有り難う 人が Tack nin Merci Danke Terma kasih D 射謝 Grazie Thank you Gracias ขอบคุณ Kiit ありがとう 감사합니다 かぶ 謝謝 Cnacubi nte Multumesc Cnacubi Cnacubo Dankon kon Xbana Bnazodapa Asante Děkuju Obri 割割 شكراك Teşekkür ederim ちり難う Köszönöm Obrig

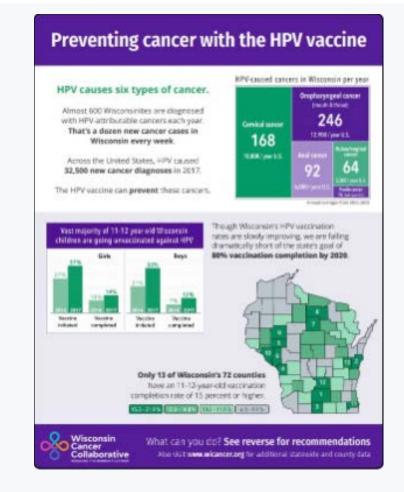
### Questions? Comments?

Please take our poll! Will pop up on your screens shortly.



#### Resources - HPV Vaccine Sheet

Helpful snapshot of HPV in Wisconsin and the action steps you can take to make a difference





https://wicancer.org/resource/hpv-vaccine-fact-sheet/

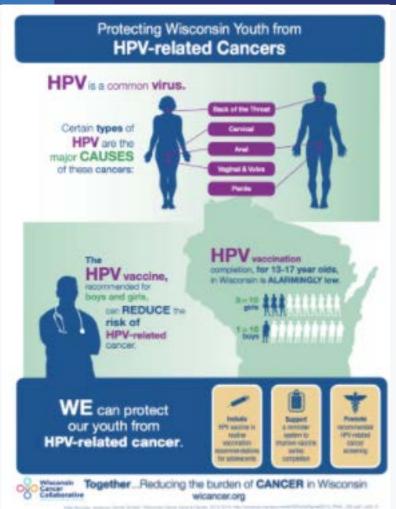
### Resources – HPV Infographic

Use our Infographics Series to illustrate cancer prevention and detection strategies in easy-to-understand ways.

Download and share with partners, community members, and decision makers.

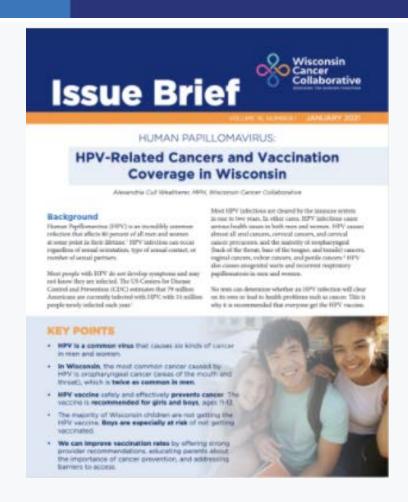


https://wicancer.org/resource/hpv-vaccine-infographic/



#### Resources - HPV Issue Brief

This Issue Brief examines statewide HPV-related cancer trends, offers strategies to prevent cancers by increasing HPV vaccination rates in girls and boys across Wisconsin, and explores how the COVID pandemic has affected HPV vaccine access and uptake.





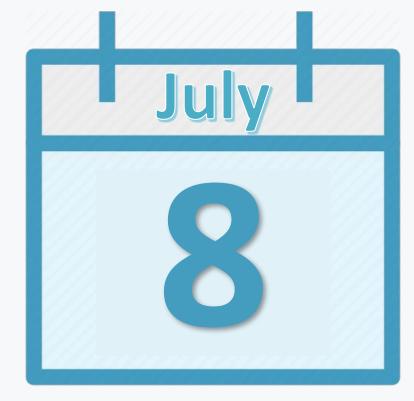
https://wicancer.org/resource/hpv-related-cancers-in-wisconsin-issue-brief/

#### Save the date! - July Networking Webinar

July's webinar will feature Courtney Harris of Covering Wisconsin.

#### Join us to learn more about

- Local marketplace enrollment
- American Rescue Plan changes
- The resources available through Covering Wisconsin and the Wisconsin Cancer Collaborative







Register here: <a href="https://wicancer.org/events/webinars/">https://wicancer.org/events/webinars/</a>

### Thank you!

# Thank you for joining! Stay well!

