



**Wisconsin State
Laboratory of Hygiene**
UNIVERSITY OF WISCONSIN-MADISON



Update on COVID-19 Diagnostic Testing 05-13-20

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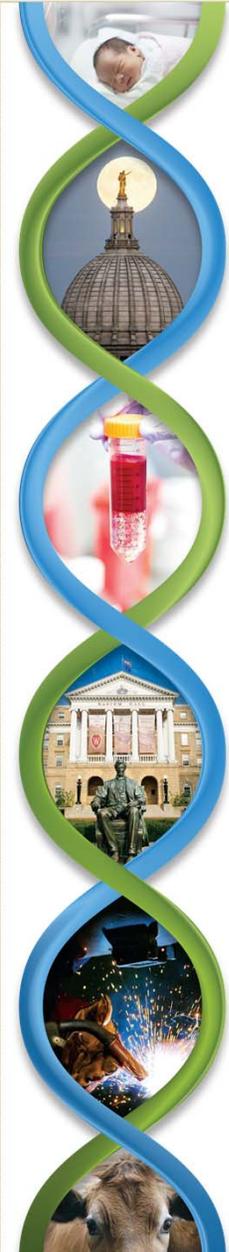
Communicable Disease Division

Wisconsin State Laboratory of Hygiene



Contents

- Situation Update
- Badger Bounce Back Plan
- New HANs
- Testing updates
- Data reporting
- Q and A





Notice

This information is subject to rapid change.

Please refer to our webpage for the most up to date guidance

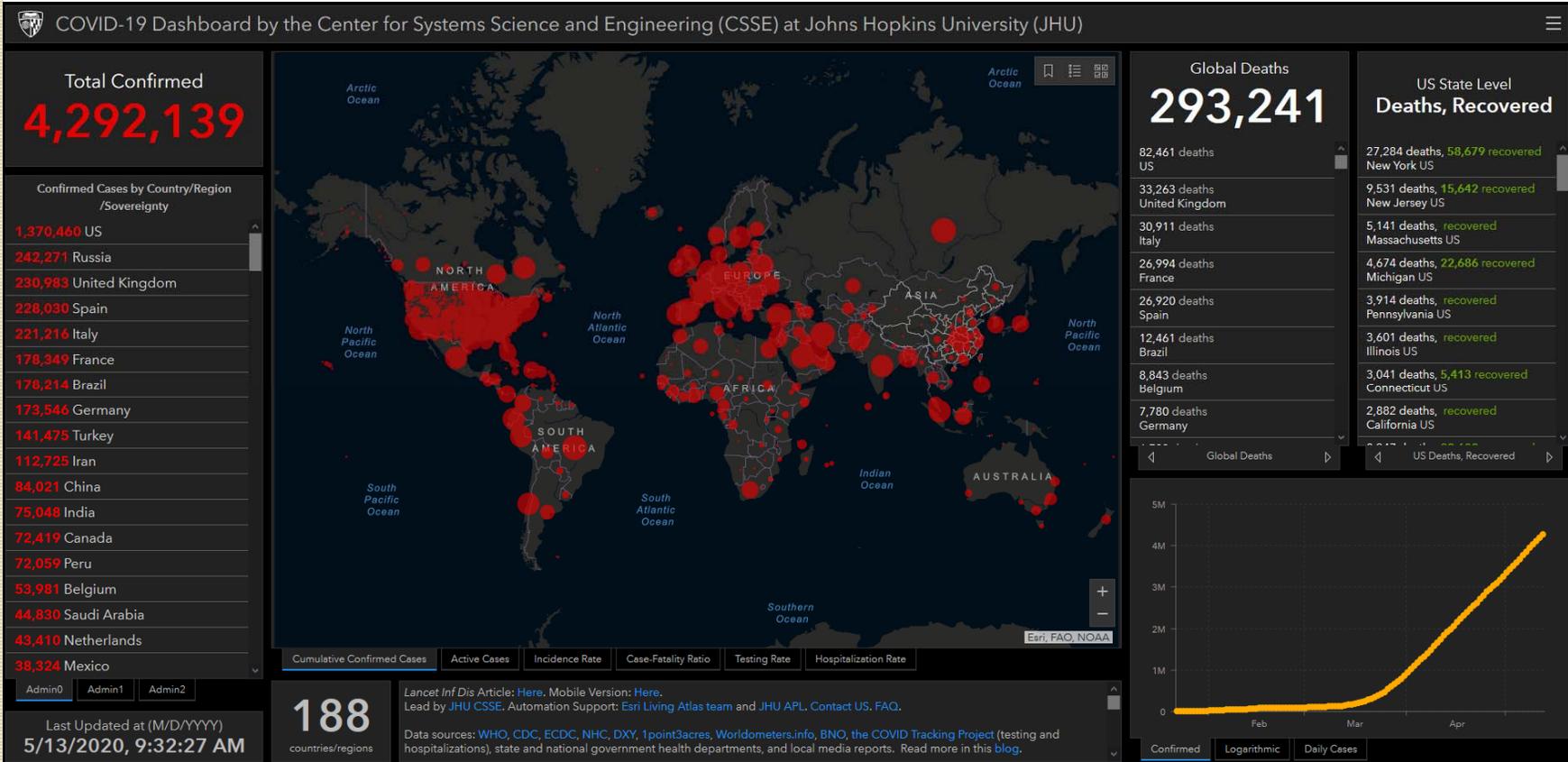
<http://www.slh.wisc.edu/clinical/diseases/covid-19/>

The WSLH does not endorse products of any kind





Global Impact

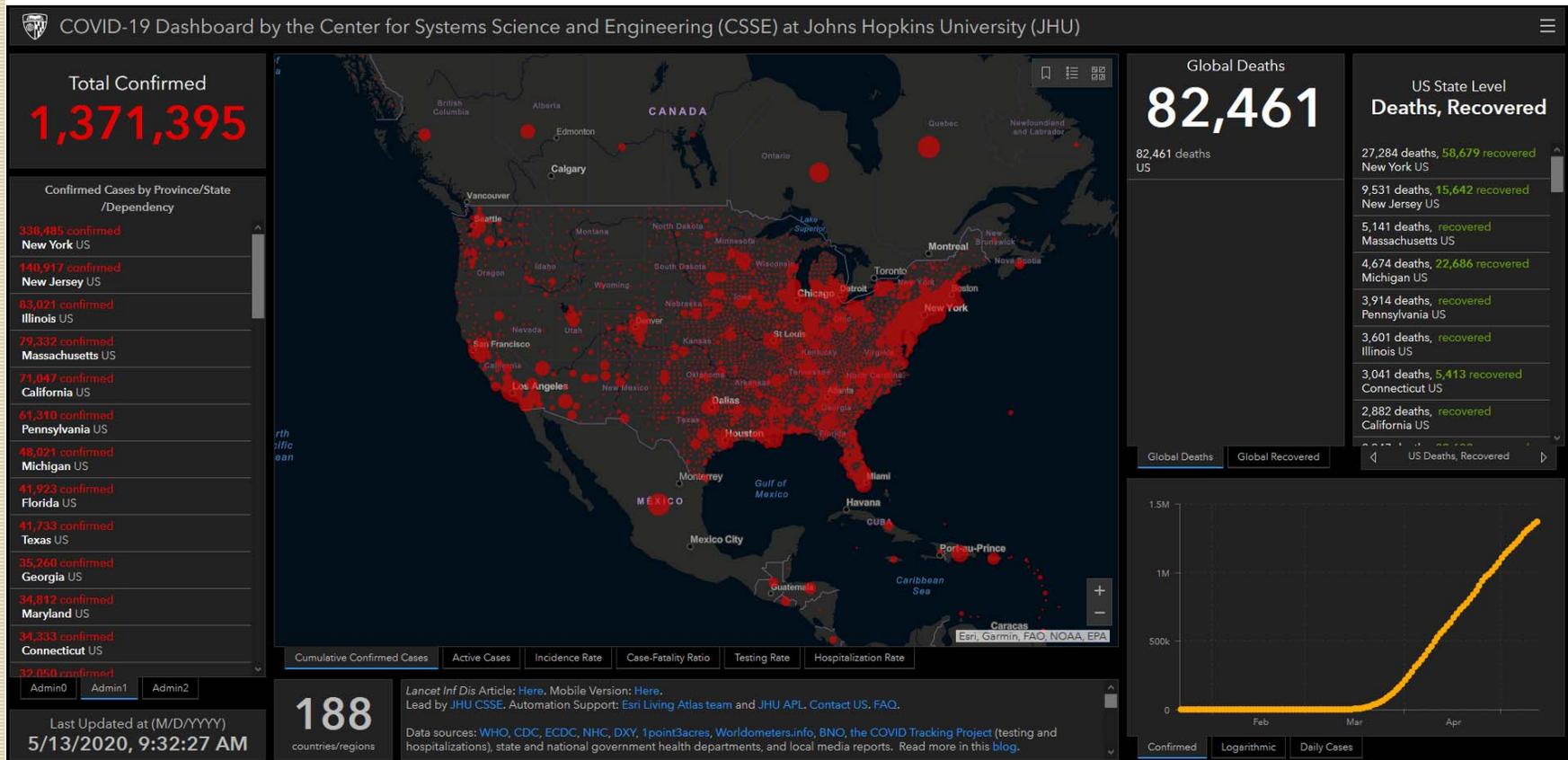


Johns Hopkins University Global Coronavirus Tracking:

<https://gisanddata.maps.arcgis.com/apps/opsdashboard/index.html#/bda7594740fd40299423467b48e9ecf6>



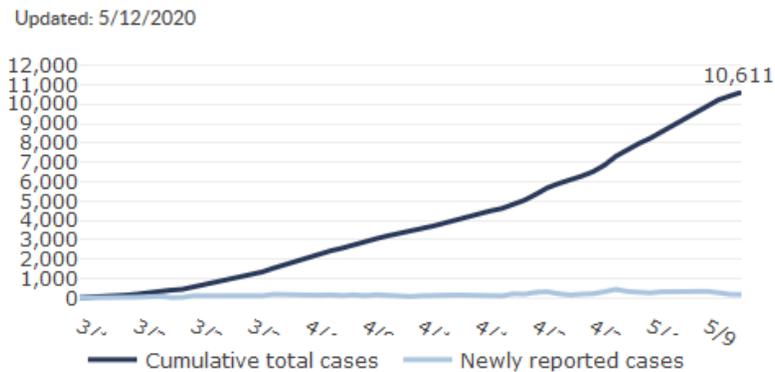
COVID-19 in the US



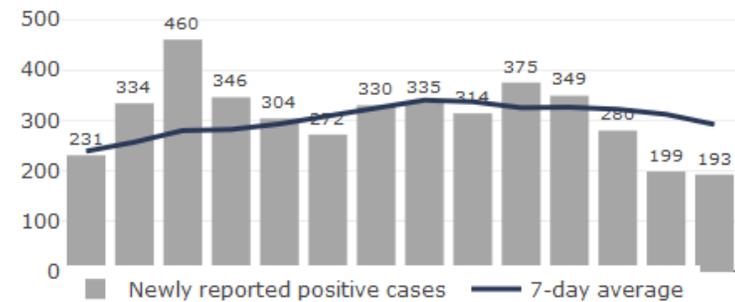


Wisconsin

Status	Number (%) of People as of 5/12/2020
Negative Test Results	112,748
Positive Test Results	10,611
Hospitalizations	1,877 (18%)
Deaths	418



Updated: 5/12/2020

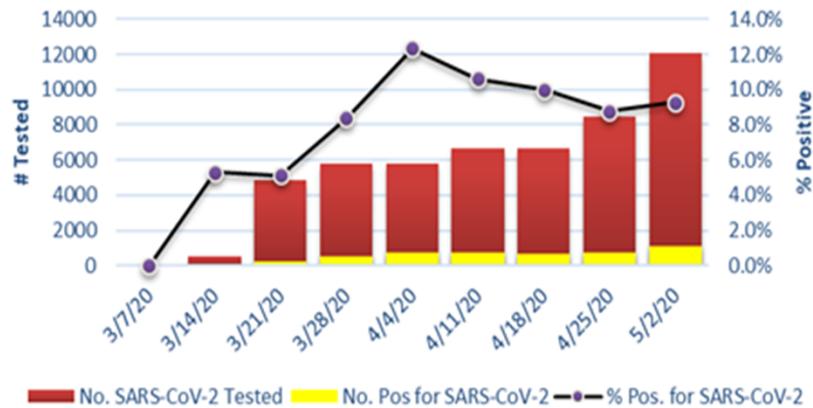


<https://www.dhs.wisconsin.gov/outbreaks/index.htm>



COVID-19 Testing

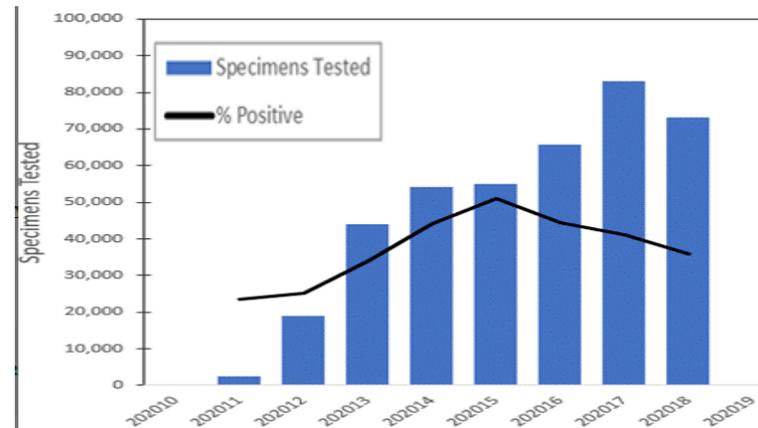
% Positive SARS-CoV-2 by PCR (Wisconsin), Week Ending May 2, 2020



<http://www.surveymoz.com/s3/389222/Wisconsin-Laboratory-Surveillance-Reporting>

*Not all labs reporting

U.S. Clinical Laboratories Reporting to the National Respiratory and Enteric Virus Surveillance System:
Number of Specimens Tested and Percent Positive for SARS-CoV-2
March 8, 2020 - May 2, 2020

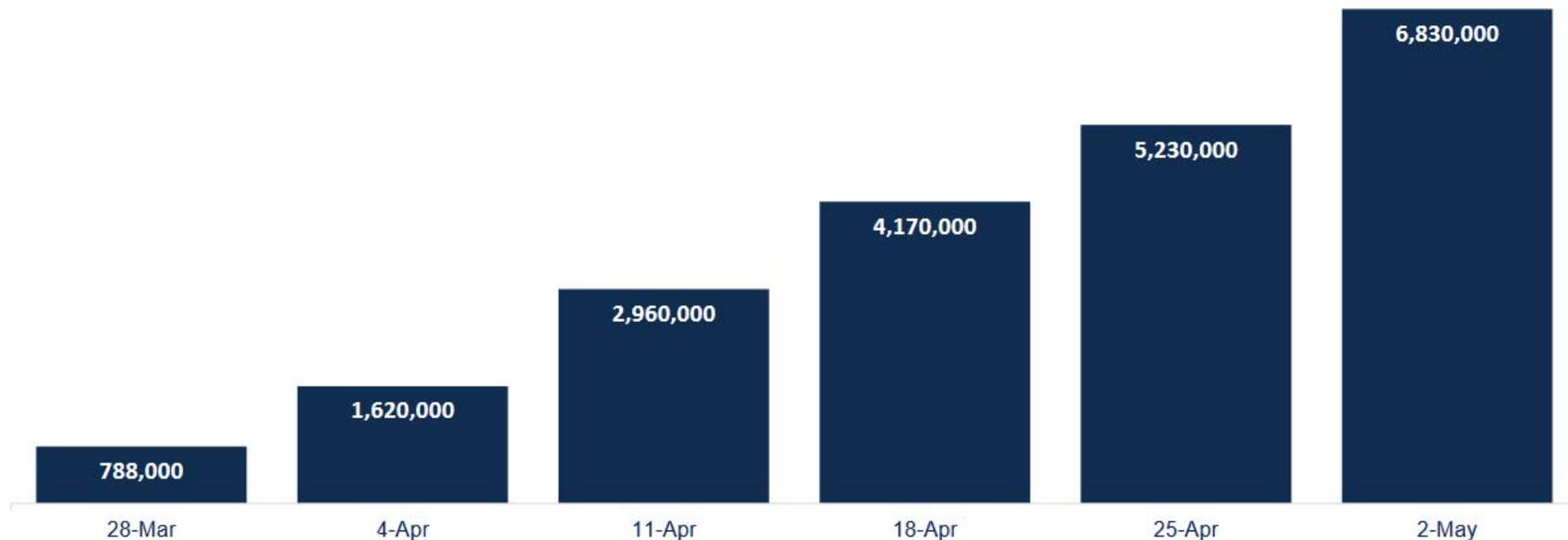


<https://www.cdc.gov/coronavirus/2019-ncov/covid-data/covidview/index.html>



Testing is on the Rise- US

Testing Progress To Date

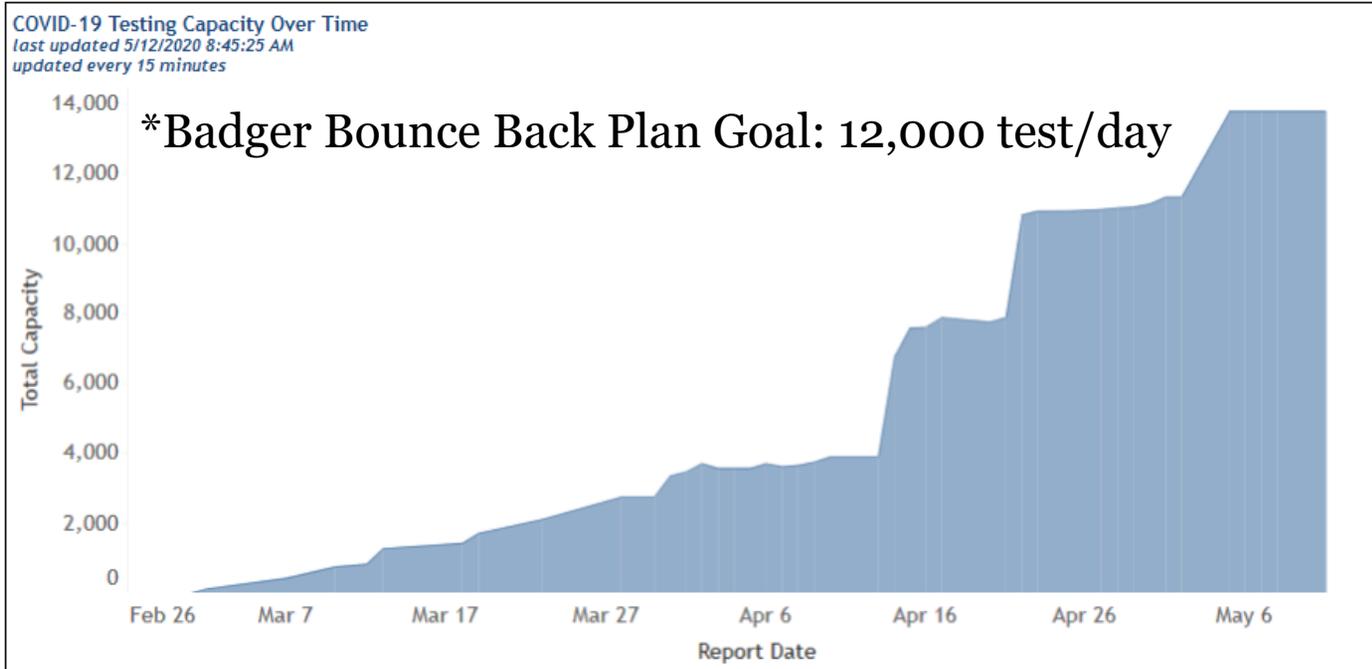




Survey Results

Wisconsin COVID-19 Molecular Testing Capacity

Laboratories actively testing 51	Laboratories planning to test 36	Current state capacity (tests/day) <i>Last Updated: 5/12/2020 6:00:54 PM</i> 13,795
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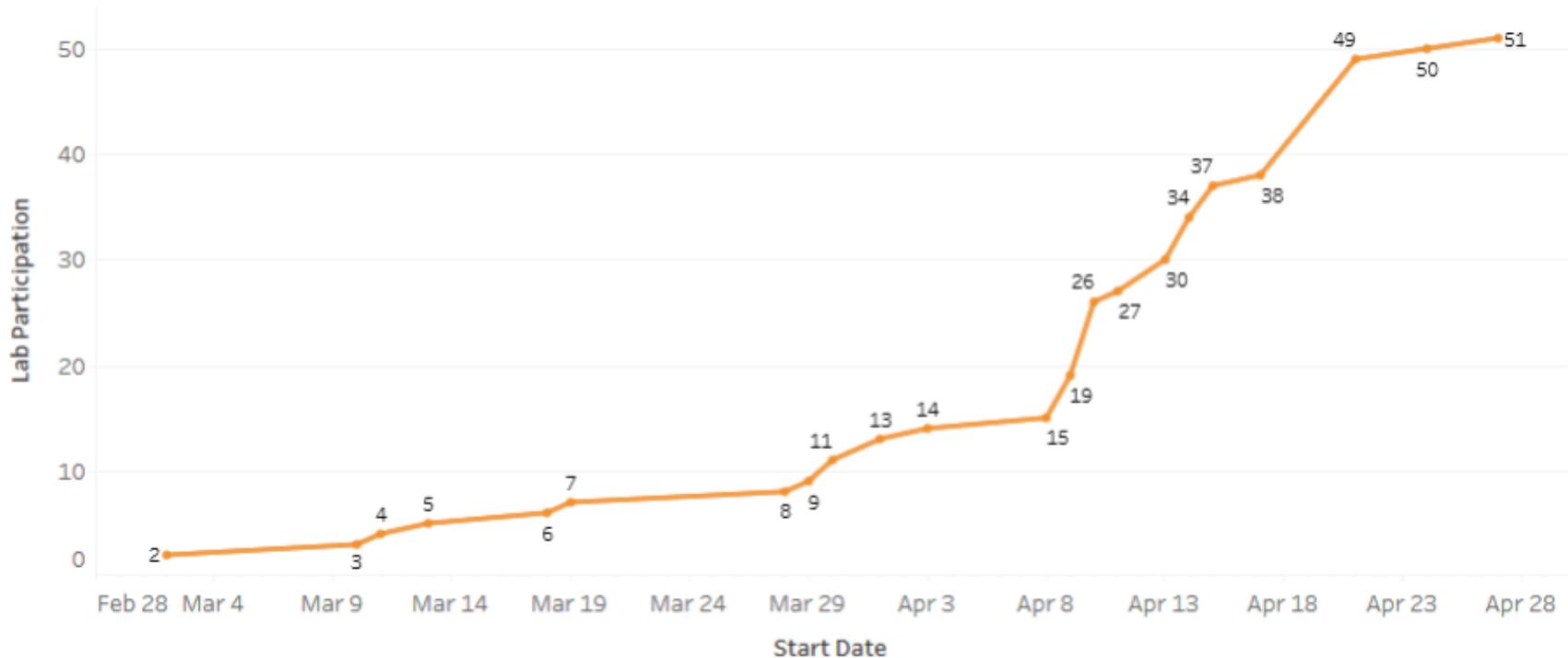
Data collected by voluntary reporting from public, private, and commercial laboratories in Wisconsin. All data are estimates and do not reflect actual number of tests performed in the state. Capacity is dependent on availability of test supplies and adequate staffing

https://bi.wisconsin.gov/t/COVID19_Analytics/views/LabDashboards/PublicDashboard?:origin=card_share_link&:embed=y&:isGuestRedirectFromVizportal=y



Labs Across Wisconsin Rising to the Challenge

COVID-19 Lab Participation Rate Over Time
last updated 5/12/2020 8:45:25 AM
updated every 15 minutes



https://bi.wisconsin.gov/t/COVID19_Analytics/views/LabDashboards/PublicDashboardLabs?isGuestRedirectFromVizportal=y&embed=y



Badger Bounce Back Plan

“Everyone in the state that needs a test should be tested, and through the Badger Bounce Back Plan, we’re taking a comprehensive approach to make sure that’s the case,”- Governor Evers

Four key goals for testing:

- Respond to every employer, corrections, and congregate care outbreak
- Test every nursing home resident and staff member
- Establish community testing programs for symptomatic individuals in target communities
- Ensure everyone who is experiencing COVID-19 symptoms gets a test



Outbreak Testing

- Should always be coordinated with local public health officials
<https://www.dhs.wisconsin.gov/lh-depts/counties.htm>
- Collection supplies are available from the SEOC distribution center
- Collection assistance is available from the National Guard
- Fee-exempt testing is available at WSLH, MHDL, and Exact Sciences



Testing Long Term Care Facilities

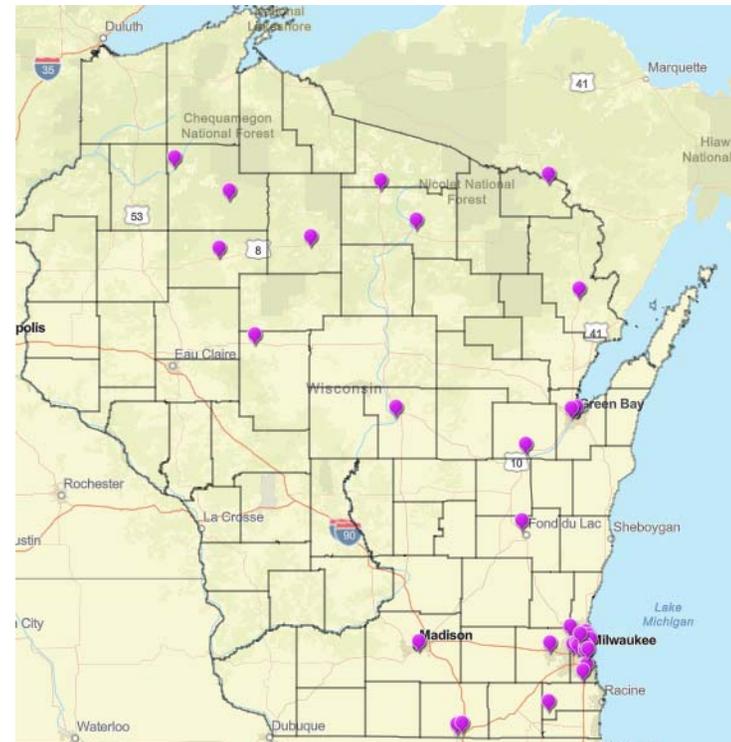
- 373 Facilities in Wisconsin
- Free testing for all residents and staff offered by the State
- In coordination with local public health officials
- Collected by the National Guard
- Tested at Exact Sciences





Community Test Sites

- Often led by the National Guard
- Also from health systems
- Often fee-exempt
- Most Drive up, some walk-up
- Most with and some without appointment
- Most with and some without symptoms
- Testing mostly done by Exact Sciences but also other Clin. labs



<https://www.dhs.wisconsin.gov/covid-19/testing.htm>

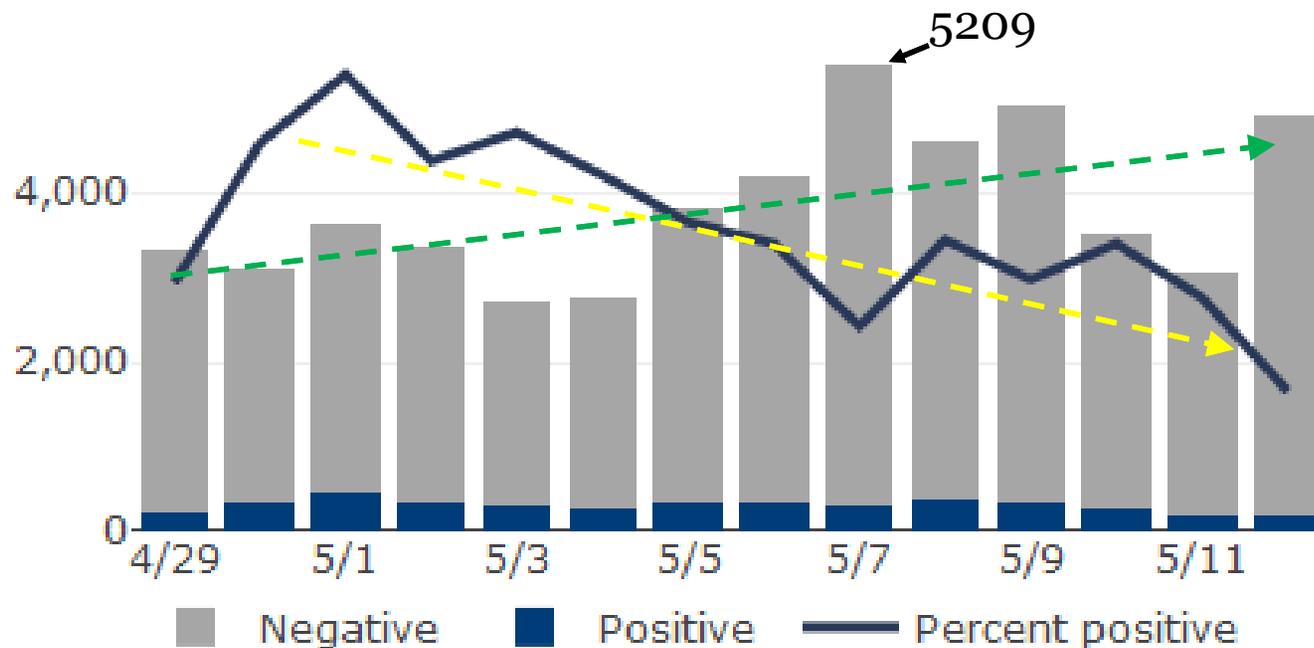
*If your healthcare system would like to be on the map go to the website, short survey



Testing is on the Rise- WI

*Badger Bounce Back Plan Goal: 12,000 test/day

Updated: 5/12/2020



*Testing and Contact Tracing can stop the spread!



Survey updates

Molecular testing only

Wisconsin State Laboratory of Hygiene

Facility Testing Status: Facility Testing Start Date:

Do you have a backlog of tests?: Are you experiencing reagent/supply shortages that will lead to an imminent stop in testing?:

If you are experiencing a shortage, what are you missing?

Current Maximum Capacity (tests per day for up to a week):

Optimal Future Maximum Capacity (tests per day):

Current molecular test methods (choose all that apply) - Double click to add

Available	Chosen
Accula	EMAG
Aries	EZ1
BDMMax	KingFisher
BioFire	MagnaPure LC
Cobas	Manual Extraction
Diasorin	Qiacube
easyMAG	
ePlex	
GeneXpert	

Other testing methods?

Future molecular test methods (choose all that apply)

Available	Chosen
Accula	GeneXpert
Aries	Panther Fusion
BDMMax	
BioFire	
Cobas	
Diasorin	
easyMAG	
EMAG	
ePlex	

Current capacity means max you can test in a day for up to a week (WI patients only)

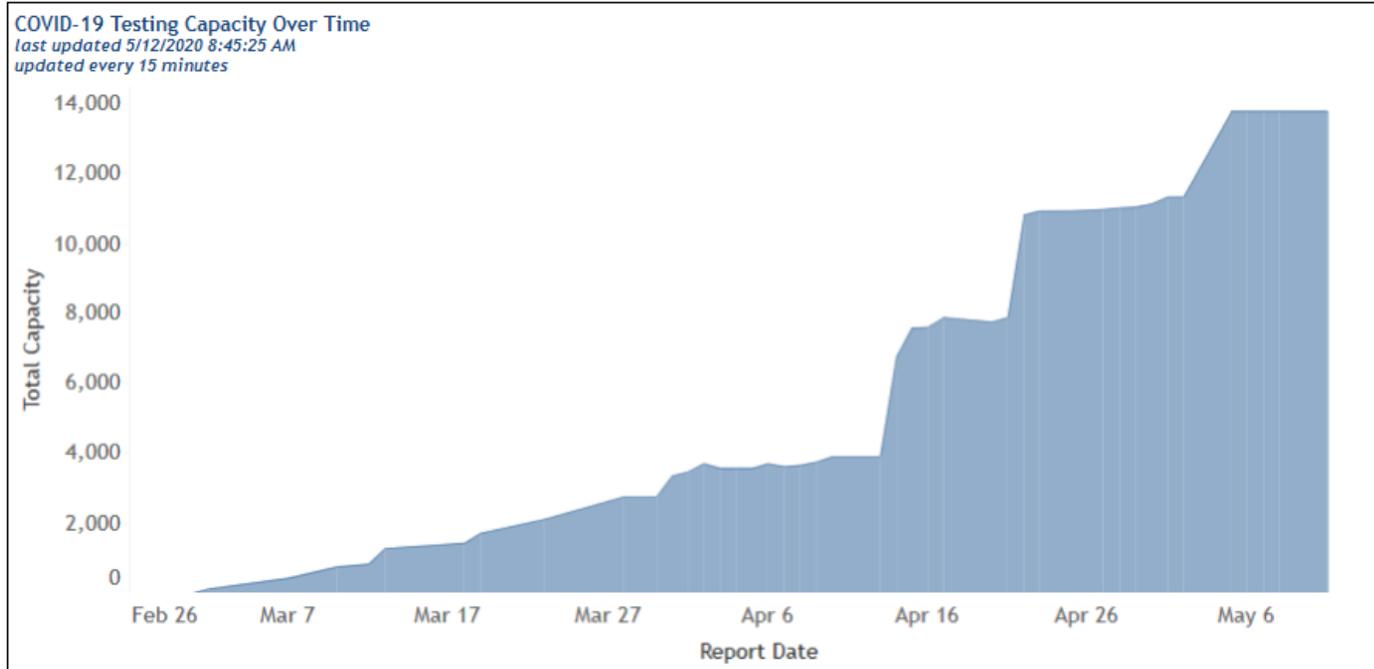
Max optimal capacity



Survey Results

Wisconsin COVID-19 Molecular Testing Capacity

Laboratories actively testing	Laboratories planning to test	Current state capacity (tests/day) <i>Last Updated: 5/12/2020 6:00:54 PM</i>
51	36	13,795*



Data collected by voluntary reporting from public, private, and commercial laboratories in Wisconsin. All data are estimates and do not reflect actual number of tests performed in the state. Capacity is dependent on availability of test supplies and adequate staffing

https://bi.wisconsin.gov/t/COVID19_Analytics/views/LabDashboards/PublicDashboard?:origin=card_share_link&:embed=y&:isGuestRedirectFromVizportal=y



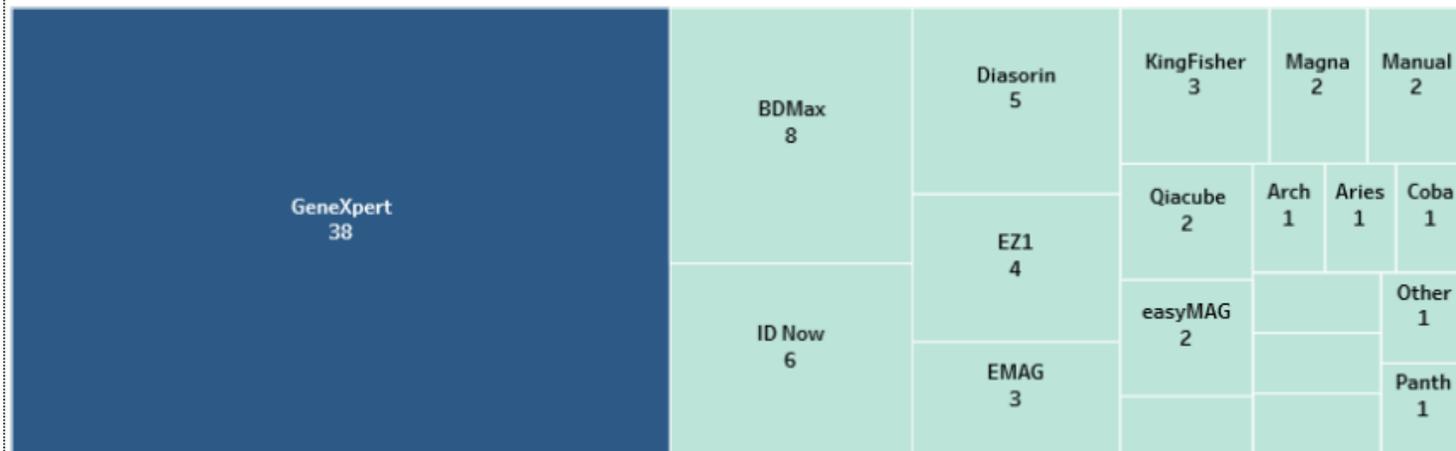
What If I Can't Meet the Demand for Testing?

- Consider different testing options
 - Diversify testing/diversify supply streams
- Contract with a reference lab
 - 4 local reference labs
- Send approved specimen to a public health lab
 - The State Lab or the Milwaukee city lab



What Tests are Being Used?

Active Test Methods Statewide



Current and Planned Methods



https://bi.wisconsin.gov/t/COVID19_Analytics/views/LabDashboards/TestingMethods?:origin=card_share_link&:embed=y&:isGuestRedirectFromVizportal=y



What are the Challenges?

Current state capacity (tests/day)
Last Updated: 5/12/2020 6:00:54 PM

13,795

Optimal Capacity with All Labs

20,929

Growth Potential

52%

Lab Supply Shortage Reasons

GeneXpert cartridges
Number of Labs: 48

Abbott ID Now cartridges
Number of Labs: 14

BD Max
supplies
Number of
Labs: 6

BioFire
supplies
Number of
Labs: 6

Collections Kits (NP swab and/or VTM)
Number of Labs: 21

ID Now
Instrument

Other
Number of

*Please continue to submit these updates!



Allocation Decisions

MAYBE

- ThermoFisher KingFisher/TaqPath supplies
- Abbott ID NOW test kits
- Hologic Panther TMA test kits

***Survey responses are driving these
conversations***



Local Collection Kits

- WSLH partnered with the Wisconsin Veterinary Diagnostic Lab (WVDL) and Gentueri, Inc.
- Locally Produced- does not compete
- Uses the CDC Protocol and an FDA approved NP swab
- Requires refrigerated storage (up to 12 months)
- NEW room temp stability studies show **stable at room temp for 5 weeks** and counting!



Collection Supplies from SEOC

The following supplies and services to facilitate laboratory COVID-19 testing are available at no charge to qualifying Wisconsin clinicians, local and tribal health centers, clinical laboratories, skilled nursing facilities, and other approved entities collecting specimens in response to COVID-19. The supplies and laboratory services are intended for the purpose of expanding Wisconsin's existing COVID-19 testing capacity. Please do not use these supplies and services for the purpose of replacing your own existing testing resources. You may not bill third-party payors for these supplies and services (for more information about billing, click [here](#)).

Room Temperature Collection Kits: Specimen collection materials including viral transport media (VTM) and a nasopharyngeal (NP) swab. Room temperature storage. [Collection Instructions](#)

Refrigerated Collection Kits: Specimen collection materials including VTM and NP swab. *NOTE:* May be shipped and stored for up to 5 weeks at room temperature, or stored refrigerated (2- 8° C) for up to 12 months. [Package Insert Collection Instructions](#)

Exact Sciences Collection Supplies and Laboratory Services: Specimen collection materials including saline and a nasal swab. Room temperature storage. *NOTE:* Supplies intended for testing performed by Exact Sciences at no charge. For collection instructions and additional information go to: [Exact Sciences](#)

Swab Only: NP swab alone, FDA approved.

VTM Only: CDC protocol VTM. *NOTE:* May be shipped and stored for up to 5 weeks at room temperature, or stored refrigerated (2- 8° C) for up to 12 months. [Package Insert](#)

Small Category B Return Shipping Materials: Insulated cooler with category B UN3373 label, 2 cool pack. Can hold up to 40 collected specimens.

Large Category B Return Shipping Materials: Insulated cooler with category B UN3373 label, 4 cool packs. Can hold up to approximately 200 collected specimens.

The supplies and laboratory services are intended for the purpose of expanding Wisconsin's existing COVID-19 testing capacity. The supplies and laboratory services are available for testing symptomatic and asymptomatic individuals based on clinical guidelines established by the organization requesting the materials.

<https://covid19supplies.wi.gov/Testing>

HAN #7



Serology testing

- A growing number of serologic tests for detection of IgG and/or IgM antibodies against SARS-CoV-2 have received FDA approval under an Emergency Use Authorization and are now commercially available. The **sensitivity and specificity of these tests are variable**, and the results should be interpreted with caution.
- While SARS-CoV-2 antibody tests can provide evidence of past COVID-19 infection, DHS recommends against using these tests for diagnosis of active infection. **Diagnosis of acute infection should be based on molecular detection methods such as PCR.**
- If antibody testing is obtained for the purpose of documenting past infection, **all positive anti-SARS-CoV-2 IgM, IgG or total antibody test results should be reported to public health via the Wisconsin Electronic Disease Surveillance System (WEDSS).** Negative antibody test results should not be reported to public health.
- It is not currently known whether or to what degree the presence of SARS-CoV-2 antibodies confers protection from future infection. As such, **it is inappropriate to use the results of antibody testing for the basis of any decisions related to returning to work or infection control practices** within health care or other workplace settings.

<https://content.govdelivery.com/accounts/WIDHS/bulletins/2897e5f>



FDA cracks down on Serology tests

- The “Wild West” of antibody testing
- FDA reports 250 developers bringing products to the market
- FDA now requiring EUA and gave manufacturers 10 days to submit data or take their tests off the market.
 - “stop illicit tests from entering the U.S.”,
- Be on high alert and to make informed purchasing decisions regarding these tests.
- Report unauthorized tests to FDA

<https://www.fda.gov/news-events/fda-voices/insight-fdas-revised-policy-antibody-tests-prioritizing-access-and-accuracy>

HAN #8



Testing of Asymptomatic People

In congregate living settings and workplaces where physical distancing is difficult to maintain, symptom-based screening alone is unlikely to detect all cases and testing a broader group of asymptomatic individuals may be necessary to control transmission.

On May 3, the CDC revised its [guidance related to testing priorities](#)

- **Persons without symptoms** who are **prioritized by health departments** or clinicians, for any reason, including but not limited to: public health monitoring, sentinel surveillance, or screening of other asymptomatic individuals according to state and local plans.
- In Wisconsin, DHS recommends COVID-19 testing for asymptomatic individuals in the following situations:
 - As part of public health investigations, such an **outbreak** involving multiple cases in a workplace.
 - For individuals in **congregate living** situations such as nursing homes or assisted living facilities
 - In health care settings, when needed to inform **infection control** interventions, such as before aerosol-generating procedures.
 - In community settings, when testing of **close contacts of confirmed cases** would inform local public health interventions, such as contact tracing investigations, or decisions about location of quarantine or isolation.

<https://content.govdelivery.com/accounts/WIDHS/bulletins/28aaf76>

HAN #8



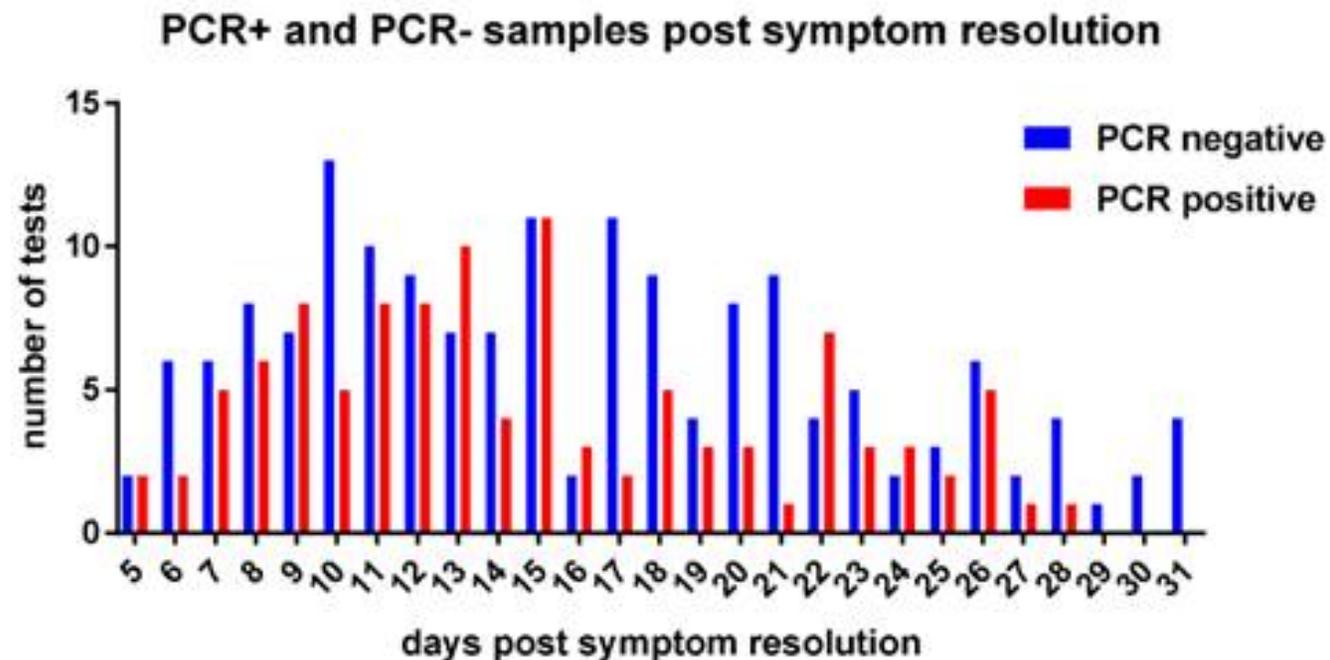
Discontinuation of Isolation

- **Symptomatic** individuals with suspected or confirmed COVID-19 should remain in isolation until:
 - At least 10 days have passed since symptoms first appeared, **AND**
 - At least 3 days (72 hours) have passed since recovery. Recovery is defined as resolution of fever without the use of fever-reducing medications **and** improvement in respiratory symptoms (e.g., cough, shortness of breath)
- **Asymptomatic** individuals with lab-confirmed COVID-19 should remain in isolation until:
 - At least 10 days have passed since the collection date of their first positive COVID-19 diagnostic test, assuming they have not subsequently developed symptoms.
NOTE: patients who develop COVID-19 symptoms during this period should extend isolation precautions for at least 10 days from the date of symptom onset (see above).
- Optional test-based strategy: DHS recommends the above strategies for discontinuation of isolation for most individuals; however CDC also provides guidance for a “[test-based strategy](#)” that may be considered in some circumstances, including immunocompromised persons. **The decision to use a test-based strategy should take into consideration the availability of sufficient testing supplies and laboratory capacity, and is likely to result in longer time-periods for isolation.**

<https://content.govdelivery.com/accounts/WIDHS/bulletins/28aaf76>



Some People Remain PCR Positive for a Long Time



- PCR Positive does not mean infective
- Most people have negative viral cultures by 9 days from symptom onset (CDC unpublished)
- Viral culture not recommended for test of cure (BSL3)



TaqPath and New Comments

To further increase our COVID-19 testing capacity and diversify our testing methods, the WSLH has validated and is now using the ThermoFisher TaqPath COVID-19 assay

Test comments you may receive when we run the TaqPath assay:

- Positive** - Test result is positive for SARS-CoV-2.
- Negative** - Negative results do not preclude SARS-CoV-2 infection and should not be used as the sole basis for patient management decisions. Negative results must be combined with clinical observations, patient history, and epidemiologic information.
- Inconclusive** - This test result is inconclusive. It did not meet the full criteria for the presence of SARS-CoV-2. If clinically warranted, repeat testing is suggested.
- Invalid** - This specimen exhibited inhibition in the PCR assay. If clinically warranted, repeat testing is suggested.
- On every test** - This test is a real-time PCR assay intended for the qualitative detection of SARS-CoV-2, the virus that causes COVID-19 disease. This assay has Emergency Use Authorization (EUA) from the U.S. Food and Drug Administration for specimens collected from individuals suspected of COVID-19 by their healthcare provider. Test parameters have not been validated for screening in asymptomatic patients.

Fact Sheet for Healthcare Providers: <https://www.fda.gov/media/136111/download>.

Fact Sheet for Patients: <https://www.fda.gov/media/136114/download>



Recent Publications Comparing different assays

Comparison of Commercially Available and Laboratory Developed Assays
for in vitro Detection of SARS-CoV-2 in Clinical Laboratories

<https://jcm.asm.org/content/jcm/early/2020/04/27/JCM.00821-20.full.pdf>

Comparison of Four Molecular In Vitro Diagnostic Assays for the Detection
of SARS-CoV-2 in Nasopharyngeal Specimens

<https://jcm.asm.org/content/jcm/early/2020/04/24/JCM.00743-20.full.pdf>

Table 4. Same-sample comparison of five testing platforms for SARS-CoV-2

Panel ID	UW LDT		UW DiaSorin		UW Cobas 6800		Xpert Xpress Sars-CoV2		LabCorp Seattle Panther Fusion SARS-CoV-2
	N1 Ct	N2 Ct	S-gene	ORF1ab	ORF1ab	E-gene	E-gene	N2 Ct	Orf1ab/2ab
Neg 01	NDET	NDET	N.D.	N.D.	NDET	NDET	NDET	NDET	N.D.
Neg 02	NDET	NDET	N.D.	N.D.	NDET	NDET	NDET	NDET	N.D.
Neg 03	NDET	NDET	N.D.	N.D.	NDET	NDET	NDET	NDET	N.D.
Neg 04	NDET	NDET	N.D.	N.D.	NDET	NDET	NDET	NDET	N.D.
Neg 05	NDET	NDET	N.D.	N.D.	NDET	NDET	NDET	NDET	N.D.
Neg 06	NDET	NDET	N.D.	N.D.	NDET	NDET	NDET	NDET	N.D.
Neg 07	NDET	NDET	N.D.	N.D.	NDET	NDET	NDET	NDET	N.D.
Neg 08	NDET	NDET	N.D.	N.D.	NDET	NDET	NDET	NDET	N.D.
Neg 09	NDET	NDET	N.D.	N.D.	NDET	NDET	NDET	NDET	N.D.
Neg 10	NDET	NDET	N.D.	N.D.	NDET	NDET	NDET	NDET	N.D.
Neg 11	NDET	NDET	N.D.	N.D.	NDET	NDET	NDET	NDET	N.D.
Neg 12	NDET	NDET	N.D.	N.D.	NDET	NDET	NDET	NDET	N.D.
Neg 13	NDET	NDET	N.D.	N.D.	NDET	NDET	NDET	NDET	N.D.
Pos 01	30.7	30.2	29.2	30	30.5	31.1	31.7	33.8	31
Pos 02	28.5	28.7	27.2	28	29.6	30.5	29.2	31.6	29.7
Pos 03	28.6	28.8	27.3	28.4	30.4	32.2	28.7	31.4	31.2
Pos 04	25.2	24.4	22.4	23.8	26.1	26.2	25.4	25.9	25.2
Pos 05*	35.4	35.6	NDET/NDET	NDET/34.5	33.6	36.2	37.6	37.5	35
Pos 06	27.2	26.7	25	26.9	26.4	27.3	26.8	29.5	26.3
Pos 07	26.3	25.5	22.2	23.3	25.9	26.1	26	28.1	24.7
Pos 08	35.8	34.4	33.6	33	31.7	34.1	35.9	38.5	36.3
Pos 09	18	17.6	15.3	16.4	19.4	19.5	18	19.3	18.6
Pos 10	31.9	32.1	31.1	31.1	31.9	33.6	31.7	34.2	32.2
Pos 11	31.3	31.3	28.1	29.2	30.5	32	31.2	34.6	N.D.
Pos 12*	37.4	NDET	NDET	NDET	NDET	NDET	NDET/42.6	42.7/NDET	NDET
Pos 13	32.6	33.9	32.5	32.5	NDET	35.7	38.1	40	37.1

*Known positive patients in process of clearing virus

NDET, Not Detected

N.D., Not Done





Alinity M

- Sample to answer
- CLIA High complexity
- LOD 100 copies/mL
- Nasal swabs, NP, and OP, BAL



Table 4. Clinical Evaluation of the Alinity m SARS-CoV-2 Assay

		Abbott RealTime SARS-CoV-2	
		Positive	Negative
Alinity m SARS-CoV-2	Positive	47	2 ^a
	Negative	0	55

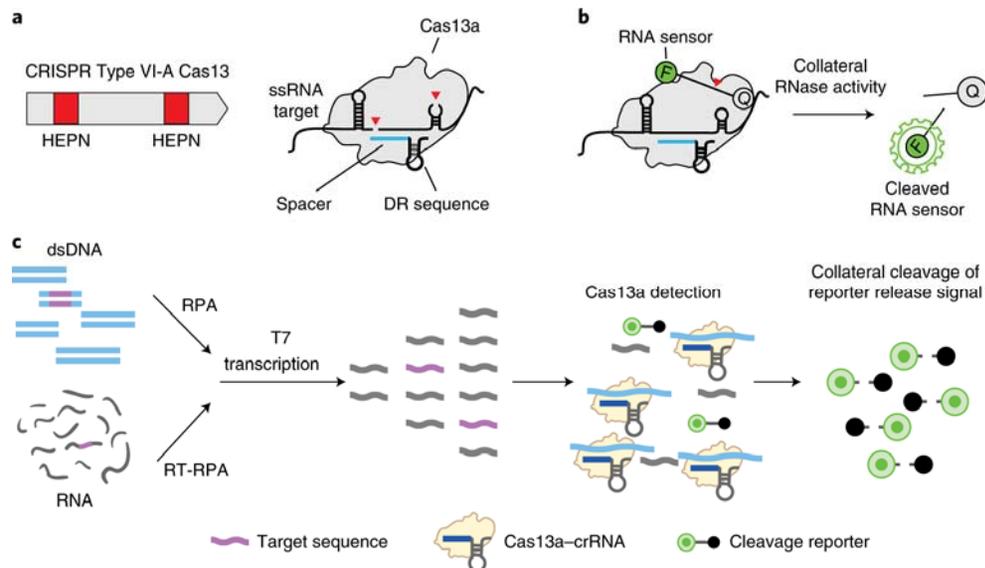
^a These samples had an Alinity m SARS-CoV-2 CN at 40.99.

	N	Agreement	Exact 95% CI
PPA	47	100%	(92.5, 100.0)
NPA	57	96.5%	(87.9, 99.6)



CRISPR in Diagnostics

- Sherlock CRISPR SARS-CoV-2 Kit (Sherlock BioSciences, Inc.)
- 3 steps: Extraction, RT-LAMP, transcription and targeted cleavage of reporter by CRISPR



SHERLOCK
Specific High-sensitivity
Enzymatic Reporter
unLOCKing



First Antigen Test

- Quidel Sofia2 SARS Antigen FIA
- NP and nasal swabs
- No VTM or <1 mL VTM
- **80% sensitive**, 100% spec
- Negative results should be treated as **presumptive** and confirmed with a molecular assay
- Identification of SARS-CoV-2 nucleocapsid protein antigen
- Lateral flow Ab sandwich assay for use in the Sofia 2 instrument
- CLIA labs: high, moderate, or waived complexity
- Authorized for use at the Point of Care (POC)

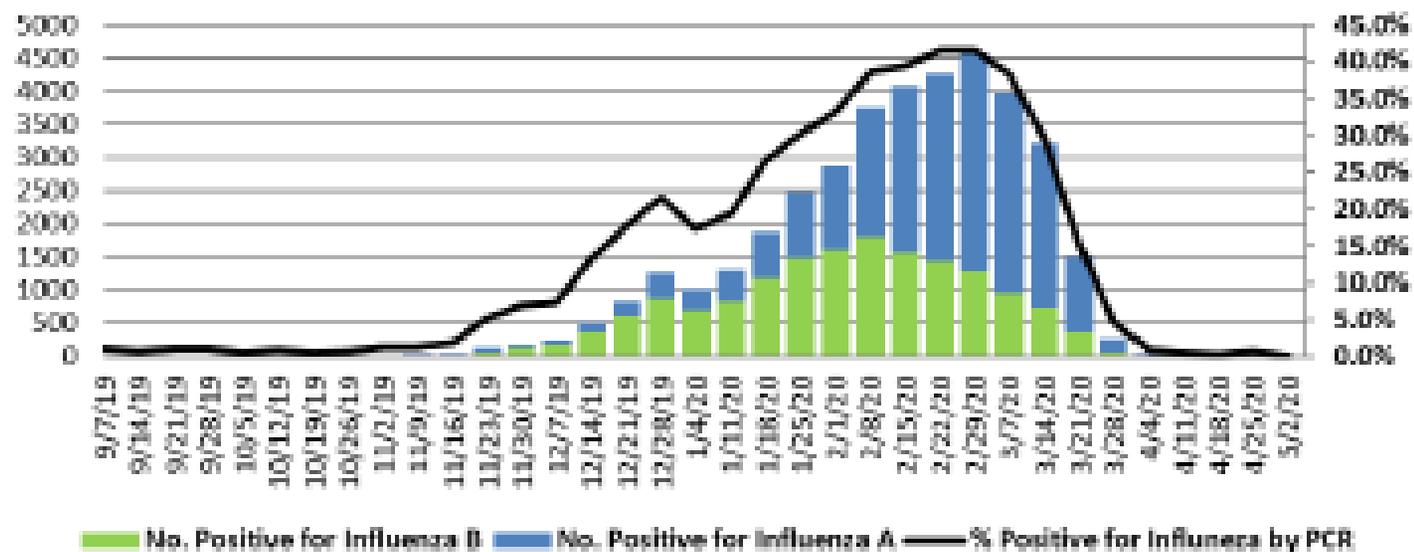


<https://www.fda.gov/media/137885/download>



What's to Come?

% Positive for Influenza by PCR (Wisconsin), Week Ending May 2, 2020





Change in hours

The Wisconsin State Laboratory of Hygiene (WSLH) Communicable Disease Division (CDD) is committed to providing COVID-19 testing 7 days a week for the foreseeable future. We have experienced a decline in weekend afternoon deliveries and customer service calls that necessitate some changes to our weekend specimen receiving and customer service hours of operation. Testing (including published turnaround time for COVID-19 testing) will not be affected by this change.

NEW - WSLH CDD Specimen Receiving and Customer Service Weekend Hours:

Department	Saturday Hours of Operation	Sunday Hours of Operation
Specimen Receiving	6:30 AM – 12:30 PM	9:00 AM – 12:30 PM
Customer Service	7:45 AM – 12:30 PM	Emergency Pager for emergencies



Memorial Day Hours

Please note the following changes in our hours of operation for WSLH CDD Specimen Receipt and Customer Service due to the observance of Memorial Day.

DATE	WSLH CDD 2601 Agriculture Drive Specimen Receiving	WSLH CDD 2601 Agriculture Drive Customer Service	Gold Cross Transport
Friday, May 22, 2020	6:00 AM – 4:30 PM	7:45 AM – 4:30 PM	Schedule Friday by noon for Friday pick-up with Saturday delivery
Saturday, May 23, 2020	6:30 AM – 12:30 PM	7:45 AM – 12:30 PM	Schedule Saturday by noon for Saturday pick-up with Sunday delivery
Sunday, May 24, 2020	9:00 AM – 12:30 PM	CLOSED	Schedule Sunday by noon for Sunday pick-up with Tuesday delivery
Monday, May 25, 2020	CLOSED	CLOSED	Schedule Monday by noon for Monday pick-up with Tuesday delivery



HHS Reporting

- On March 29th, hospital systems received a letter signed by Vice President Pence requesting reporting of COVID-19 testing data to the U.S. Department of Health and Human Services (HHS).
- CDC is working with the State Health Departments to provide aggregate data rather than having clinical labs report
- WSLH is working with WDHS to discern if required data can be pulled from WEDSS and reported to CDC
- WSLH has now expanded their reporting to the CDC to include the requested COVID-19 test results using data submitted to WEDSS.
- **If your laboratory reports your COVID-19 test results to WEDSS either by ELR or WLR, your laboratory no longer needs to report daily to HHS**



To see the full CDC guidance, go to:

<https://www.cdc.gov/coronavirus/2019-ncov/lab/reporting-lab-data.html>



HHS Reporting

On March 29th, Vice President Pence sent a letter to hospital systems across the country requesting reporting of COVID-19 testing data to the U.S. Department of Health and Human Services (HHS).

The WSLH has now expanded their reporting to the Centers for Disease Control and Prevention (CDC) to include COVID-19 test results needed to fulfill this requirement using data submitted to the Wisconsin Electronic Disease Surveillance System (WEDSS). **If your health care system reports COVID-19 test results to WEDSS via Electronic Laboratory Reporting (ELR) or Web-based Laboratory Reporting (WLR), you no longer need to report daily to HHS.**

An excerpt from CDC Coronavirus Disease reporting for laboratories follows:

Any U.S. hospital laboratory that is reporting to their state or local health department will not need to also report to the HHS Protect System. However, U.S. hospital laboratories that opt to report directly to the HHS Protect System are requested to report aggregate test information in accordance with the instructions provided by HHS Secretary Azar in an April 10, 2020:

<https://www.fema.gov/news-release/2020/04/10/coronavirus-covid-19-pandemic-hhs-letter-hospital-administrators>.

To see the full CDC guidance, go to: <https://www.cdc.gov/coronavirus/2019-ncov/lab/reporting-lab-data.html>

<https://www.cdc.gov/coronavirus/2019-ncov/lab/reporting-lab-data.html>



WCLN Webinars Return

Chemical Response Capabilities in Wisconsin

Wednesday 5/20/20 at noon to 1:00 PM

Description of Session:

- This session will highlight the chemical response side of the WI Laboratory Response Network (LRN) and provide insight on how the WSLH Chemical Response Division leads the response in Wisconsin. The speaker will explain the WSLH response to chemical threat agents, including chemical weapons exposure testing and discuss their work with responders. Stories of some recent situations involving chemical exposures will be sure to engage the audience
- P.A.C.E. credit available
- Link to training event web page:
<http://www.slh.wisc.edu/event/wcln-webinar-chemical-response-capabilities-in-wisconsin/>



We hope you will join us for our
next *COVID-19 Updates* webinar
on Wednesday 5/27/20
from noon to 1:00 PM



Please Type Your Questions in the
Question Box!

