



**VIRGINIA'S
HEALTH
IS IN YOUR
HANDS.**

Do your part,
stop the spread.

Covid-19 Testing Update

Weekly Covid-19 Partners Call

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February 5, 2021

COVID-19 in Virginia: Summary

Dashboard Updated: 2/4/2021

Data entered by 5:00 PM the prior day.

Cases, Hospitalizations and Deaths

Total Cases*
516,398

(New Cases: 3,059)^

Confirmed†
412,548

Probable†
103,850

**Total
Hospitalizations****
21,749

Confirmed†
20,775

Probable†
974

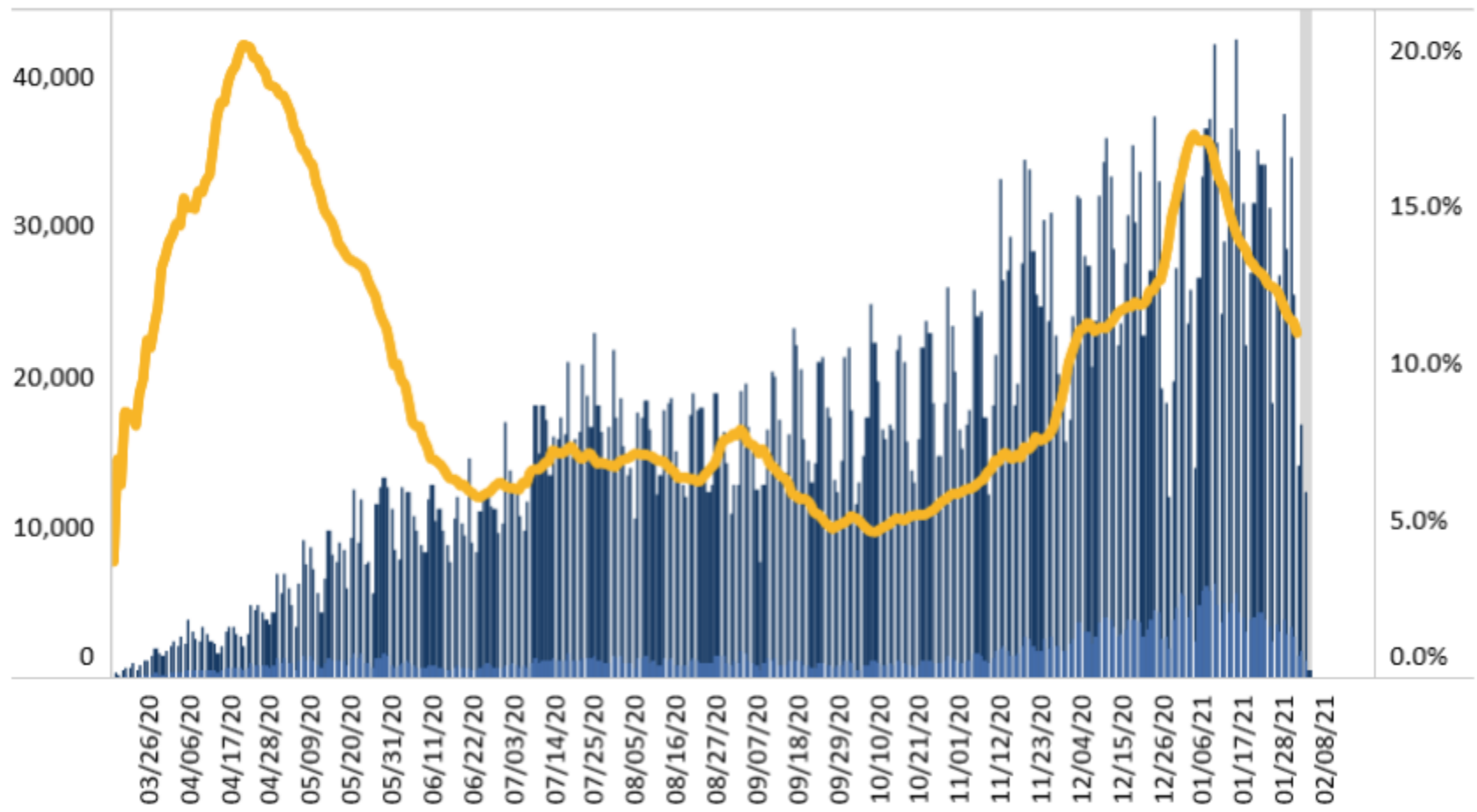
**Total
Deaths**
6,650

Confirmed†
5,755

Probable†
895

Number of Testing Encounters, Number of Positive Testing Encounters, and Percent Positivity by Lab Report Date - All Health Districts, PCR Only**

- Percent Positivity, 7-Day Moving Average
- Positive Testing Encounters
- Number of Testing Encounters



PCR Testing Only – All Health Districts

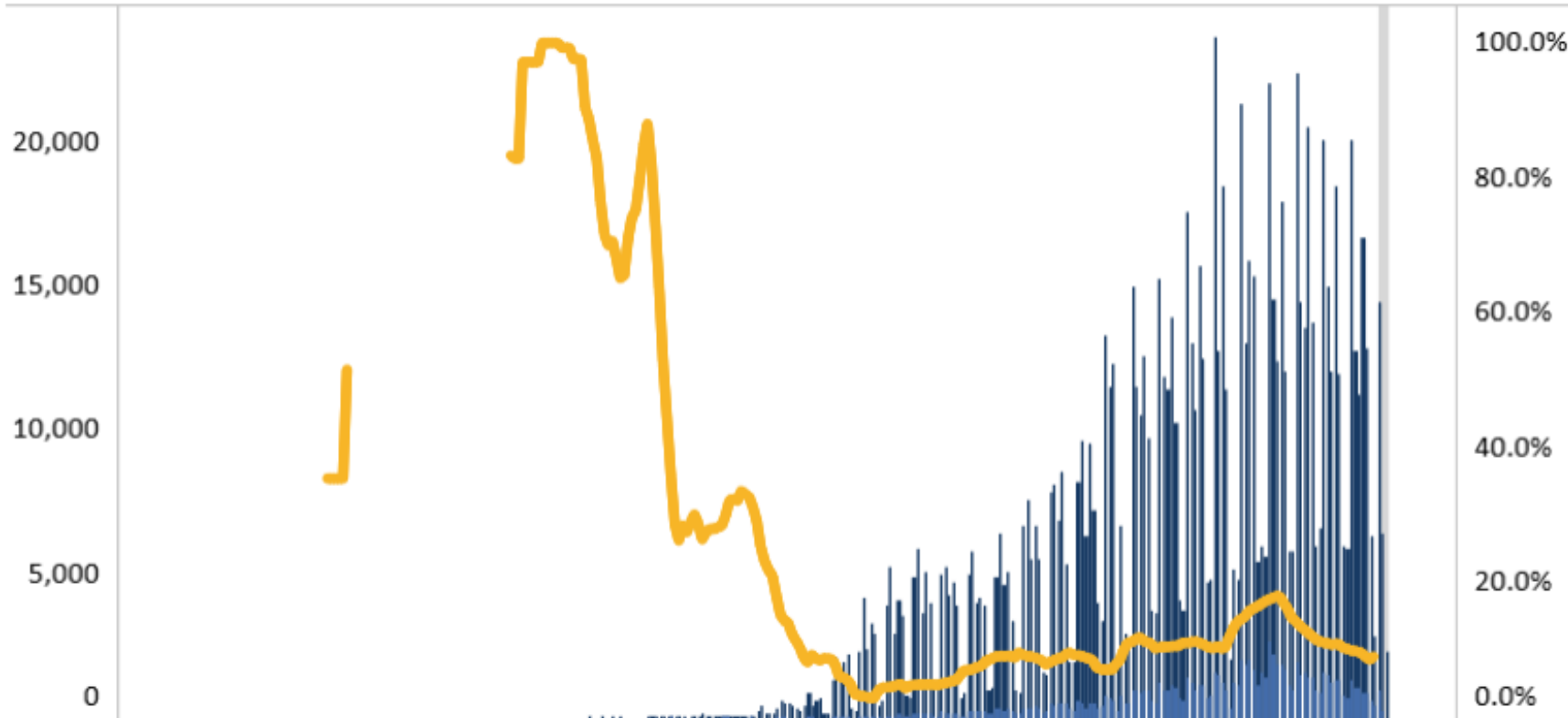
Current 7-day percent positivity rate = 11%

Data as of 2/4/2021

www.vdh.virginia.gov/coronavirus/coronavirus/covid-19-in-virginia-testing/

Number of Testing Encounters, Number of Positive Testing Encounters, and Percent Positivity** by Lab Report Date - All Health Districts, Antigen Only

- Percent Positivity, 7-Day Moving Average
- Positive Testing Encounters
- Number of Testing Encounters



Antigen Testing Only – All Health Districts

Current 7-day percent positivity rate = 9.2%

Data as of 2/4/2020

www.vdh.virginia.gov/coronavirus/coronavirus/covid-19-in-virginia-testing/

Terms and abbreviations in epidemiology

Sensitivity = among people with illness, what % of them have a positive test (want high %)

Specificity = among people without illness, what % of them have a negative test (want high %)

Sx = symptomatic = people with symptoms

Asx = asymptomatic = people without symptoms

Antigen Testing

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U.S.

U.S. Reaches Deal for At-Home Covid-19 Tests

The \$230 million deal with Australian company Ellume will cover 8.5 million over-the-counter tests



WSJ 2/1/2021

- Ellume Covid-19 Home Test received FDA EUA on 12/15/2020
- An antigen test
- Sample collected and tested at home
- The only non-prescription Covid-19 viral test available
- Potential use for homebound patients
- About \$30/test

Antigen Testing - 2

Pollock NR, Jacobs JR et al. In preprint. Accessed at <https://doi.org/10.1101/2021.01.09.21249499>. Posted 1/12/2021.

-Community testing in Massachusetts, both adults and children, both sx and asx, used BinaxNOW Covid-19 Ag Card, PCR used as reference standard, anterior nasal swabs used for antigen and PCR testing, N=2308

-Results:

All (sx and asx, N=2308):	sensitivity 77.4%	specificity 99.4%
Adults (sx, N=355):	sensitivity 96.5%	specificity 100%
Adults (asx, N=974):	sensitivity 70.2%	specificity 99.6%

Antigen Testing - 3

Pray IW, Ford L et al. MMWR 2021;69:1642-1647. Accessed at <http://dx.doi.org/10.15585/mmwr.mm695152a3>. January 1, 2021.

-Testing at two university campuses in Wisconsin, 90% college-aged participants, both sx and asx, used Quidel Sofia POC antigen test, PCR used as reference standard, mid-turbinate nasal swabs used for antigen and PCR testing, N=1098

-Results:

Adults (sx, n=227):	sensitivity 80%	specificity 98.9%
Adults (asx, n=871):	sensitivity 41.2%	specificity 98.4%

Antigen Testing - 4

Prince-Guerra JL, Almendares O et al. MMWR 2021;70:100-105. Accessed at <http://dx.doi.org/10.15585/mmwr.mm7003e3>. January 19, 2021.

-Community testing in Pima County, Arizona over two weeks, 93% adults and 7% children, both sx and asx, used BinaxNOW Covid-19 Ag Card, PCR used as reference standard, anterior nares swab for Ag test; NP swab for PCR, N=3419

-Results:

All (sx and asx, n=3419):	sensitivity 52.5%	specificity 99.9%
Sx people (n=827):	sensitivity 64.2%	specificity 100%
Asx people (n=2592):	sensitivity 35.8%	specificity 99.8%

Antigen Testing - 5

In general:

- Sensitivity better in symptomatic patients (~ 60-80%)
- Sensitivity better in adults compared to children
- Sensitivity not as good with asymptomatic people - (~ 40-60%)
- Confirmatory PCR recommended when antigen test result and clinical picture do not match
- Limited amount of study data available; different antigen tests; need more data