



HOW COVID-19 TESTING CAN SUPPORT **SAFER@STUDENTS** and **SAFER@ATHLETES**



Sean Murray and David Morgan
Eurofins Scientific **SAFER@WORK™** program

Eurofins – Who We Are



BS (University of Pittsburgh)
MS (Central Michigan)

Retired Marine Colonel
Over 20 years global lab professional
SVP, LabCorp
CEO, Vantage Point, Inc.
CEO & Chair, Beacon Bay
Advisor, Bill and Melinda Gates Foundation
Board, African Laboratory Network (iLEAD)
Co-Founder of Marine Special Operations Command (MARSOC) Foundation

**PRESIDENT OF EUROFINS
TRANSPLANT DIAGNOSTICS AND
BIOPHARMA SERVICES**



Mechanical Engineering
BS (U of New Mexico)
Valedictorian
D1 Baseball
Truman Scholar
Runner Up-Rhodes
Scholarship

MBA (Harvard Business School)
Baker Scholar

Stryker surgical device engineer, McKinsey Consulting, Worthington Industries – GM / Managing Director

**PRESIDENT, EUROFINS
SAFER@WORK**



A good COVID-19 risk reduction program will include physical separation, creative work arrangements, and appropriate testing



Separate

- Highly specific employee segregation: WFH, dedicated work spaces
- Athletes practicing in sub-groups. If spread, limits
- Encourage student recreation amongst team
- Physical barriers (Plexiglas, visqueen from DIY store)
- Require mask usage wherever feasible



Work differently

- Shifts – e.g. 2x 8 hr shifts w/o overlap, ¼ of team in locker room for 30 min and switch
- Working quarantine – Gray area athletes more testing or individual work if casual contact with a positive
- Have generous sick pay / miss practice policies

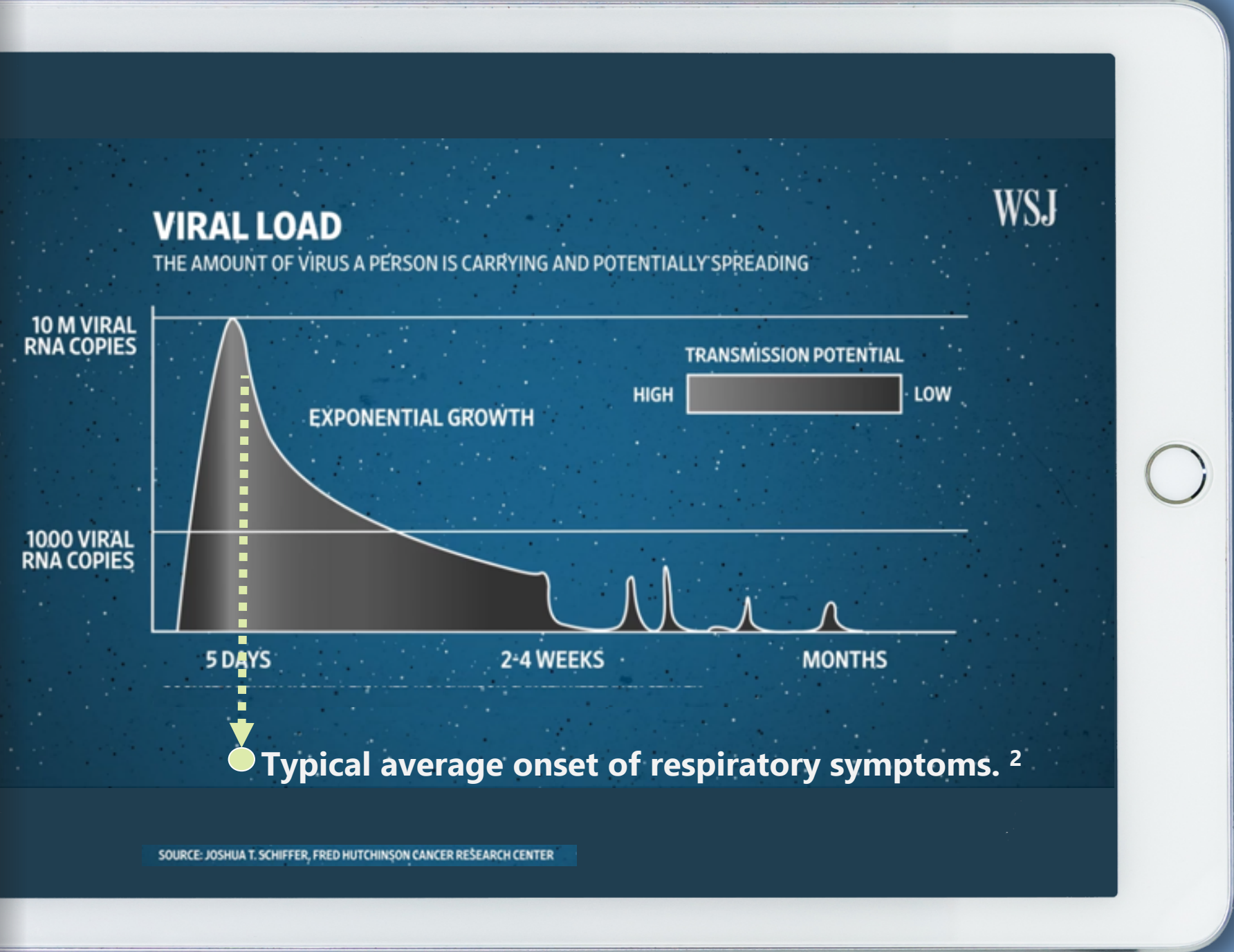


Test

- For those who cannot social distance, enable regular surveillance testing program
- Easy! Testing for anyone with symptoms (must work to create “demand”)
- Testing only really helps if you quarantine and contact trace -> it’s an enabler for selective distancing

TESTING IS A KEYSTONE BECAUSE OF THE 'INVISIBLE' NATURE OF SARS-COV-2

“We’ve made it clear that there’s asymptomatic spread...people are spreading the virus unknowingly -Dr. Birx”



¹ <https://www.wsj.com/articles/coronavirus-vaccine-frontrunners-emerge-rollouts-weighed-11589707803>

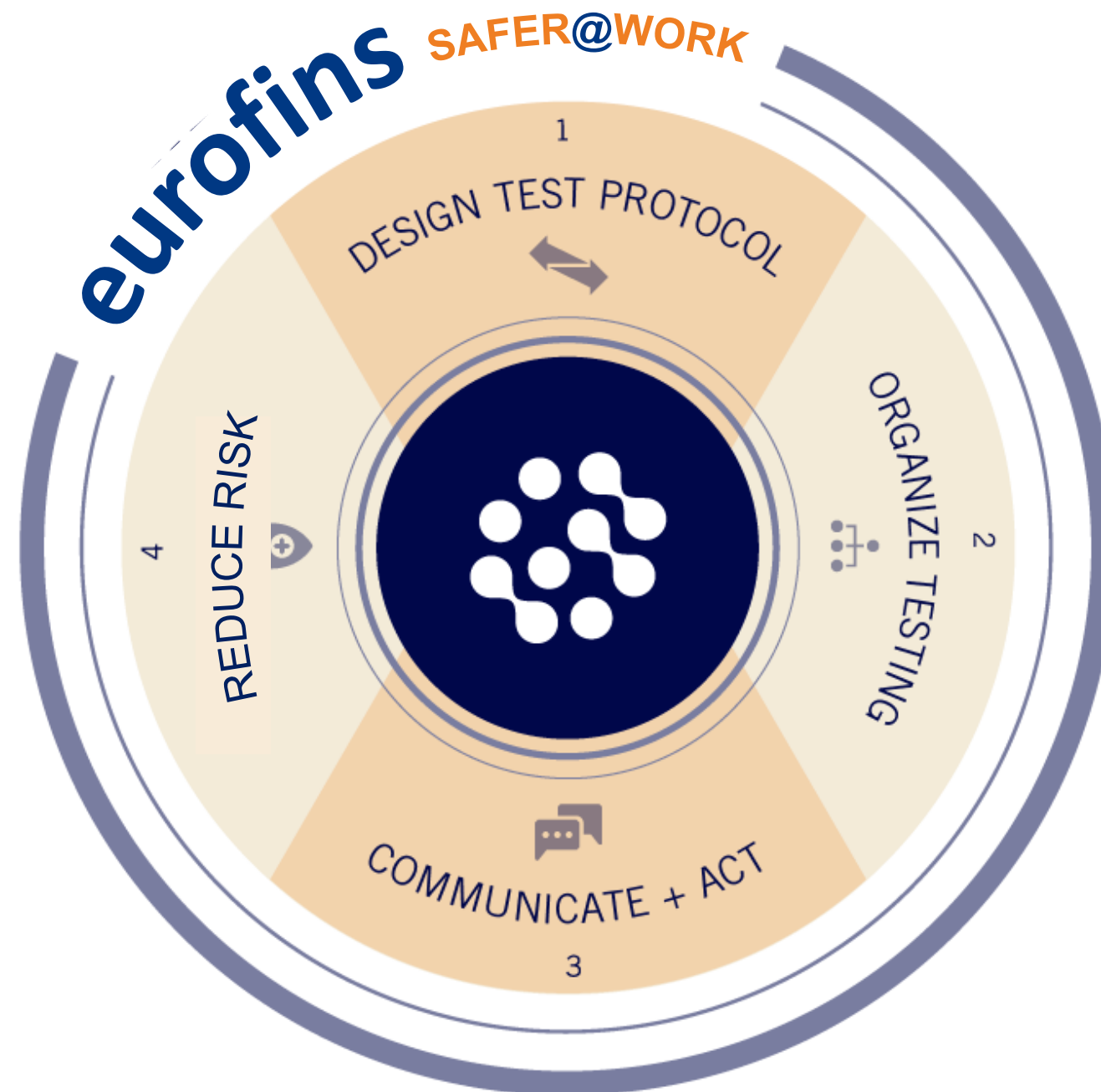
² <https://health.ucsd.edu/coronavirus/Pages/FAQ.aspx>

The majority of Sars-CoV-2's spread occurs silently, but testing can enable suppression

4 major categories of SARS-CoV-2 transmission exist...	...and many believe most viral transmission... ¹	...comes from silent sources that are hidden from view.	Today, testing is focused on POC, not these silent sources
Symptomatic (not silent)	<ul style="list-style-type: none"> • 38% of transmission • Sars-CoV-2 Ro ~ 2.0¹ • Ro ~ 1.2 w/o symptomatic spread 	Cough, sneeze, talk around family, healthcare staff, etc.	Incredible scale at hospital, doctor's offices, drive ups, etc.
Pre-symptomatic (silent)	<ul style="list-style-type: none"> • 46%¹ 	Close talking with unknown high viral load just before illness	CURRENT GAP: -62% of viral transmission -Small % of testing done outside POC -If you can quarantine ½ of symp + pre-symp can suppress virus!
Asymptomatic (silent)	<ul style="list-style-type: none"> • 10%¹ 	Never express a symptom. Many shed little, but some do	
Environmental (silent)	<ul style="list-style-type: none"> • 6%¹ 	Fomite transmission via surfaces	

1. Science, Ferretti et al <https://dx.doi.org/10.1126/science.abb6936>

Through partnerships within and outside your university, you can execute the 4 elements of a COVID testing program, effectively AND economically



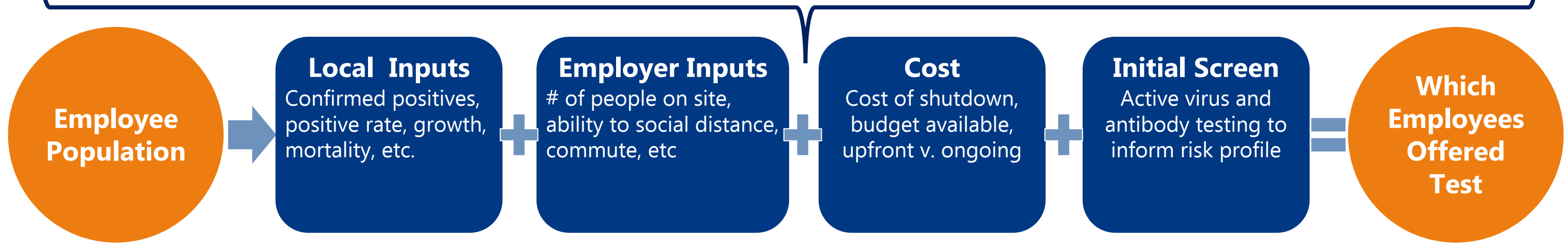
See next for
TIPS to fit
COVID-19
testing in
your budget

Design Test Protocol: who to test, how often



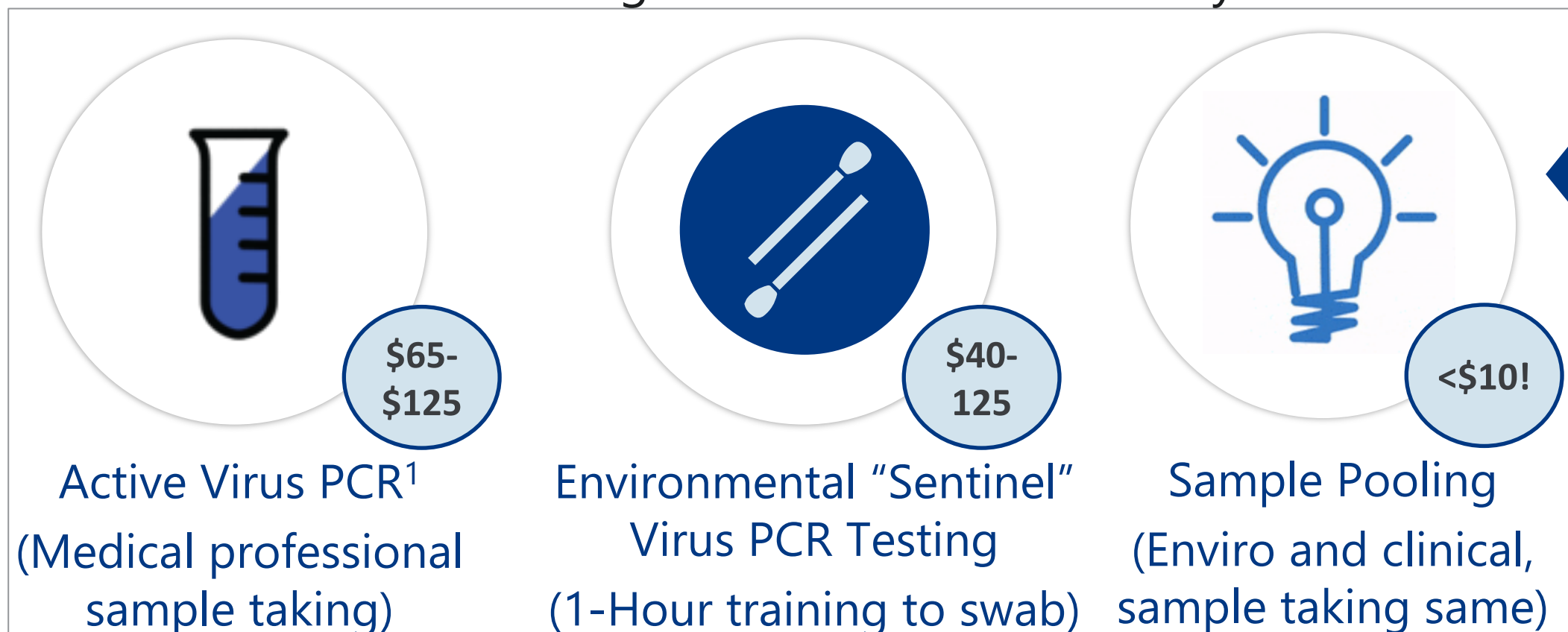
Budget tips:

- Use team/school MD to mass order tests
- Team with epidemiologist to determine local risk
- Free symptom survey
- Use program like SAFER@WORK that includes these elements



Organize testing: waivers, sample taking, test execution, logistics

Waiver are need to collect samples and share data, kits can be mailed or dropped off to any location. New technology will enable massive increases in testing and reductions in cost by this fall.



Budget tips:

- Use environmental "sentinel" testing where very high negative rate is expected
- Use pooling where high negative rate expected (FDA guidance as of June 16³)
- Train cleaning staff for enviro swabs, school nurse for clinical & waivers

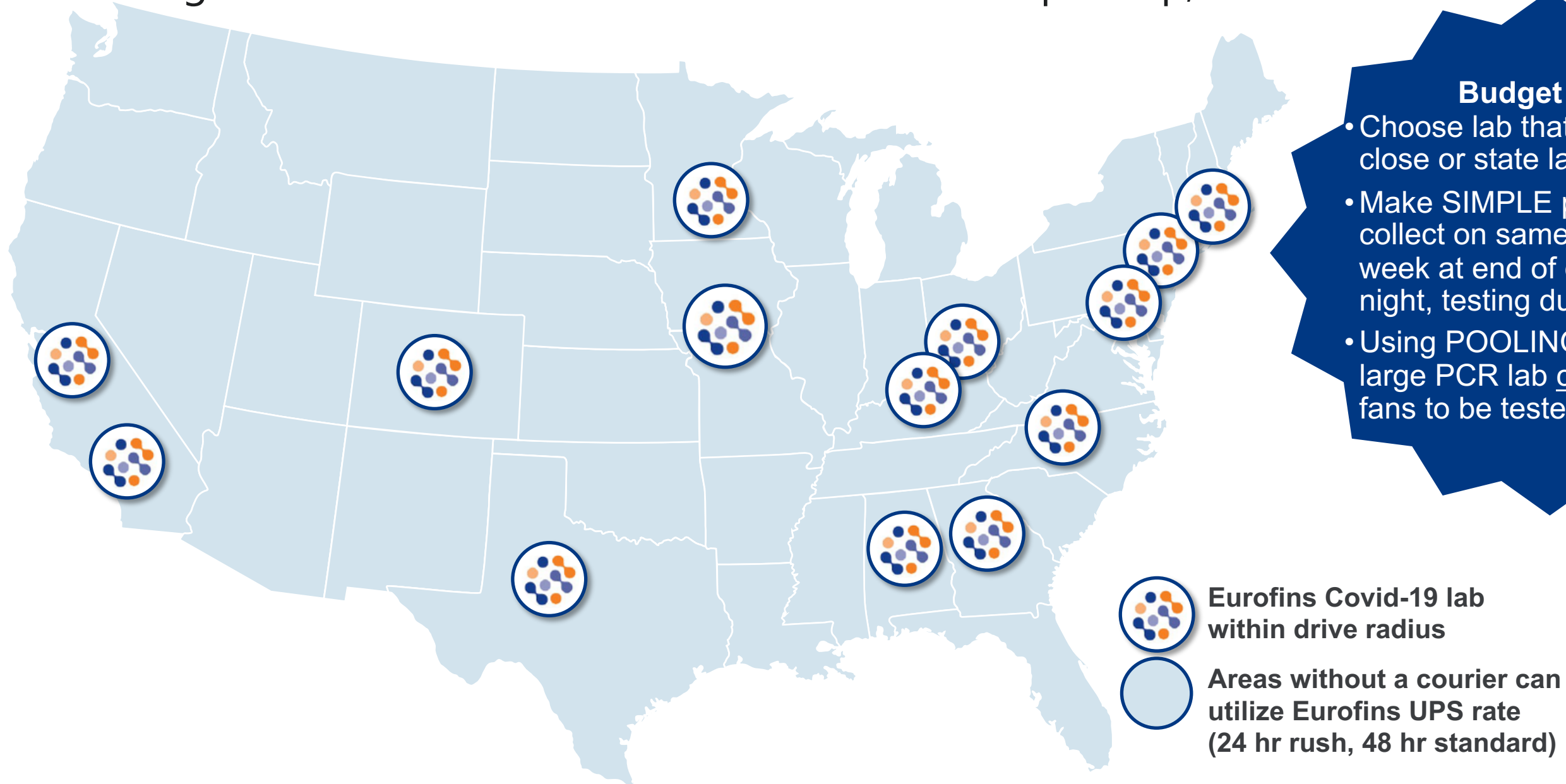
1. This test has not been FDA cleared or approved. This test has been authorized by FDA under an EUA for use by authorized labs. This test has been authorized only for the detection of nucleic acid from SARS-CoV-2, not for any other viruses or pathogens. This test is only authorized for the duration of the declaration that circumstances exist justifying the authorization of emergency use of in vitro diagnostic tests for detection and/or diagnosis of COVID-19 under section 564(b)(1) of the Act, 21 U.S.C. §360bbb-3(b)(1), unless the authorization is terminated or revoked sooner

2. Negative results do not rule out SARS-CoV-2 infection, particularly in those who have been in contact with the virus. Follow-up testing with a molecular diagnostic assay should be considered to rule out infection in these individuals. Results from antibody testing should not be used as the sole basis to diagnose or exclude SARS-CoV-2 infection or to inform infection status.

3. <https://www.fda.gov/news-events/press-announcements/coronavirus-covid-19-update-facilitating-diagnostic-test-availability-asymptomatic-testing-and>

For regular surveillance testing, a good logistics plan enables effective risk reduction AND can save significant cost

Choosing a lab within a 4 hour drive enables courier pick-up, 24 hour turns



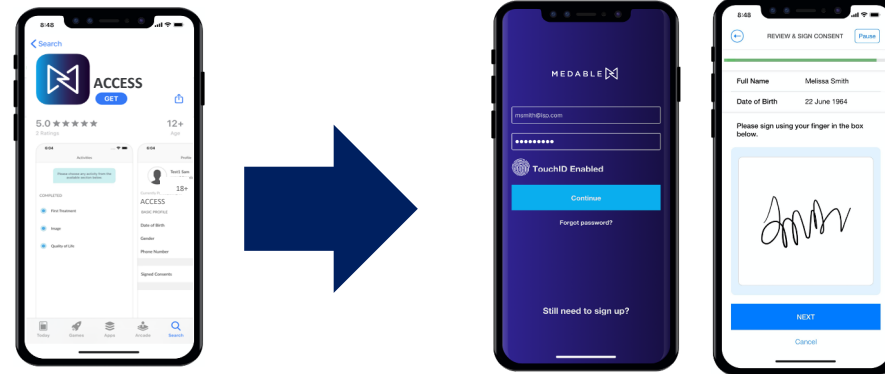
Budget tips:

- Choose lab that is physically close or state lab if feasible
- Make SIMPLE protocol: collect on same day(s) or the week at end of day (drive at night, testing during day)
- Using POOLING + nearby large PCR lab could enable fans to be tested

Real time data for employees/employers to monitor test results, environmental monitoring results, and contacts in case of a positive

A Communicate Clinical test results¹

Smart phone accessible results available free from most labs. For individual & university



B Contact trace and map environment

Interviews, apps and custom hardware to show who was close (6' > 10 min), etc.



C Quarantine positives and close contacts

CDC and state have clear guidance, but varies (use testing and enhanced distancing to manage gray area)



Budget tips:

- Have admin staff take free contact tracing course (Johns Hopkins)
- Use free templates for daily contact recording (e.g. Eurofins SAFER@WORK)
- Use increased testing and “working quarantine” for casual contact w/ positive

1. Covid positive employees should be referred to their healthcare provider

2. GuardHat is not an agent of Eurofins or part of Eurofins

Reduce risk



Test and quarantine more often



Invigorate cleaning and sanitation programs. Reinforce hygiene practices



Modify social distancing, creative shifting and employee segregation programs



Stay UTD with the latest available industry resources for guidance, regulations.



Network with peers and professionals for best practices, learning's

Budget tips:

- Plexiglas & masks!
- Meet with leaders from essential industries who are winning the fight

Eurofins investing in top-notch resources to compile a compendia based on industry with real-world risk factors and case studies

Eurofins Scientific – How to Contact Us

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<https://www.eurofins.com/covid-19-response/safer-work/>