

# COVID-19 SCREENING TESTING TO SAFELY REOPEN IN 2021

## WHAT IS SHIELD ILLINOIS?

- SHIELD Illinois utilizes the covidSHIELD saliva-based RT-PCR test that is easy to administer, highly accurate and available at a low cost, with results in 24 hours or less.
- covidSHIELD received emergency use authorization from the FDA, allowing it to expand broadly through a statewide network of CLIA laboratories.
- Developed by scientists at the University of Illinois Urbana-Champaign, the covidSHIELD process helped the university operate safely in person during the 2020-21 academic year.

## WHY IS SCREENING TESTING FOR COVID-19 IMPORTANT?

- covidSHIELD takes a proactive approach to quickly isolate individuals who test positive in order to reduce virus spread.
- Frequent, widespread testing allows SHIELD Illinois to identify infected people before they show symptoms or are able to transmit the virus to others.

### How a virus with a reproduction number ( $R_0$ ) of 2 spreads



## WHAT TESTS ARE AVAILABLE?

### MOLECULAR TESTS

Identify RNA sequences within the nucleus of the COVID-19 virus



- Molecular tests have a more reliable rate of true positive results than antigen tests
- Molecular PCR tests like SHIELD can detect the virus within 2 days of infection

VS

### ANTIGEN TESTS

Identify surface proteins on the COVID-19 virus



- Antigen tests have a high accuracy for people with COVID-19 symptoms
- Antigen tests typically provide faster results than molecular tests

## WHAT TYPES OF MOLECULAR TESTS ARE AVAILABLE?

### CLIA APPROVED PCR TESTING

- Accuracy has made it the gold standard of COVID-19 tests
- Individuals who test positive don't need to seek out a second confirmatory test
- Accurately detect asymptomatic cases and cases with low viral loads
- Test undergoes a thorough validation protocol and is performed by highly trained and qualified personnel
- Fluorescent probe-based detection technology makes the assay highly specific and sensitive

### SURVEILLANCE-BASED RT-LAMP TESTING

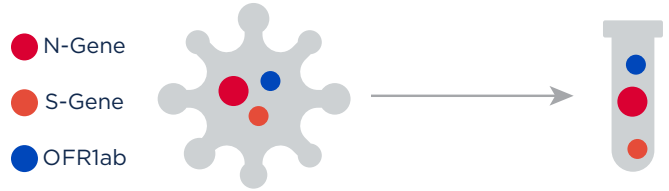
- Faster results and less expensive than PCR tests
- Requires a second test when utilized as a surveillance test
- Not as sensitive as PCR tests to patients with low viral loads
- After a positive test, individuals are recommended to get a CLIA-approved test
- No quality control or proficiency testing program

# WHY USE SALIVA SAMPLES?

- Easier to administer than nasopharyngeal swabs
- Doesn't require medically trained personnel to collect samples
- Catches asymptomatic individuals sooner than nasal swab tests
- Non-invasive sample collection

# WHY IS THE SHIELD TEST SUPERIOR?

- covidSHIELD tests for 3 genes in SARS-CoV-2 virus instead of 1 like some other tests
- This increases covidSHIELD's accuracy and increases its ability to detect variants
- SHIELD uses reagent from Thermo Fisher, which is 1 of only 3 on market that CDC recommends to identify virus variants








- ● ● 3 genes identified by SHIELD Test
- 1 gene identified by other saliva tests

# WHY TEST NOW THAT VACCINES ARE AVAILABLE?

- Herd immunity isn't likely to happen in 2021
- Even though vaccines are recommended, no vaccine is 100% effective
- Children under the age of 12 aren't able to be vaccinated

# WHY CHOOSE SHIELD?

	<b>FREE FOR SCHOOLS</b>	The SHIELD Illinois test is free for students in Illinois public schools outside the city of Chicago
	<b>FAST RESULTS</b>	Results will be sent to the individual, organization, and IDPH within 24 hours after samples reach the lab
	<b>HIGH ACCURACY</b>	In a recent clinical trial, SHIELD Illinois' test had a 97% sensitivity and 99% specificity
	<b>EASY TO USE</b>	SHIELD Illinois' test is easy to use and doesn't require medical personnel to collect samples
	<b>FDA AUTHORIZATION</b>	SHIELD Illinois' test received emergency use authorization from the FDA and is processed in CLIA-certified labs

# RECOMMENDED MITIGATION STEPS



# WANT TO LEARN MORE?

- ✓ Antigen vs. Molecular PCR testing
- ✓ Saliva testing SHIELD Illinois
- ✓ K-12 Playbook covidSHIELD FDA EUA
- ✓ SHIELD testimonials How to collect samples