COVID SHIELD

Return to work testing and symptom monitoring in the age of CoVID-19

Brought to you by Synergy Wellness

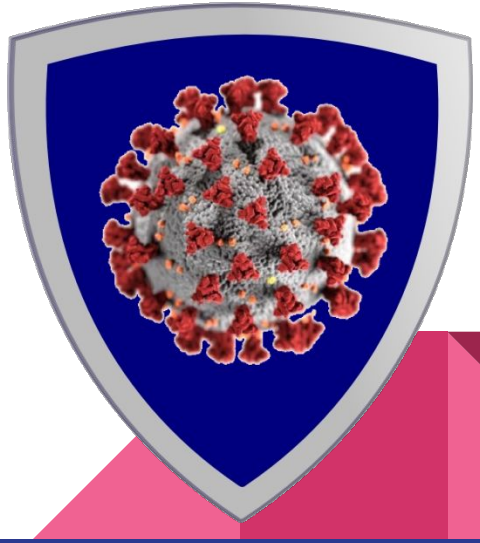
Testing, Monitoring, and Safest Return to Work Possible

PCR +/- Serology (antigen once available)

Surveillance of employee symptoms and Random Testing

Create safest environment possible for employees and their families

Prompt but safe return to work protocol



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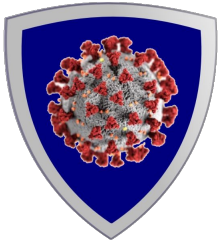
The Problem Defined



COVID-19 is an insidious illness that may present with mild symptoms or severe respiratory illness killing more Americans than the entire Vietnam war in 2 months

Testing is inadequate to find all cases

An unknown number of afflicted will show no symptoms at all allowing asymptomatic transmission of disease

How does an employer have employees return to work and mitigate any outbreaks in the worksite given these known unknowns??

COVID SHIELD

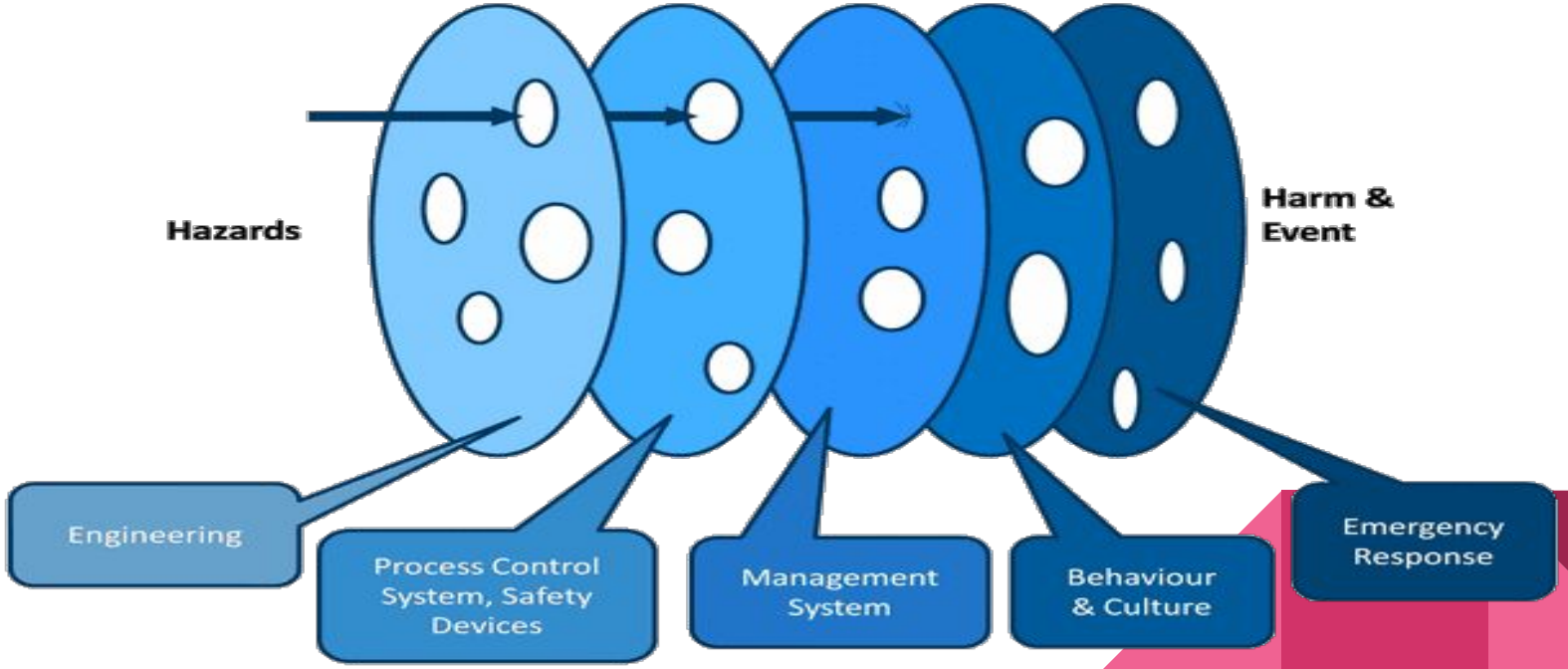
A program to safely return employees back to work minimizing the chance of a COVID-19 outbreak in the workplace by:

1) Induction testing of all employees

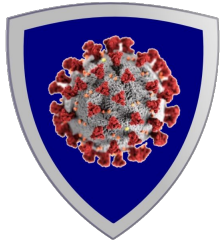
2) Surveying Employees Daily for Symptoms

3) Random testing of asymptomatic employees to assess for contagious viral shedding

Multiple Modalities of Testing, Less Gets Through



Types of Tests: PCR, Serology and Antigen

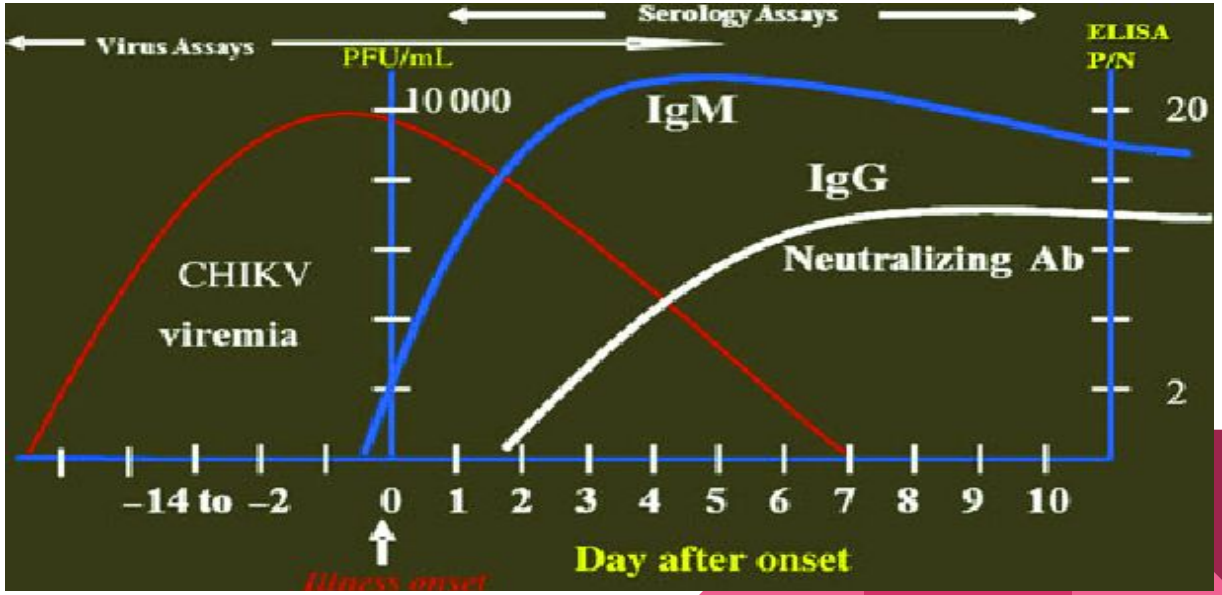


- The optimum testing strategy continues to evolve
- Synergy Wellness, through COVID Shield, will evolve along with the optimum testing strategies
- Currently, both gold-standard PCR and the highest available sensitivity serology antibody testing are available

Induction Testing: Dual Modality

2-sides of a coin: PCR + Serology looks for totality of disease process from viral replication to immune response

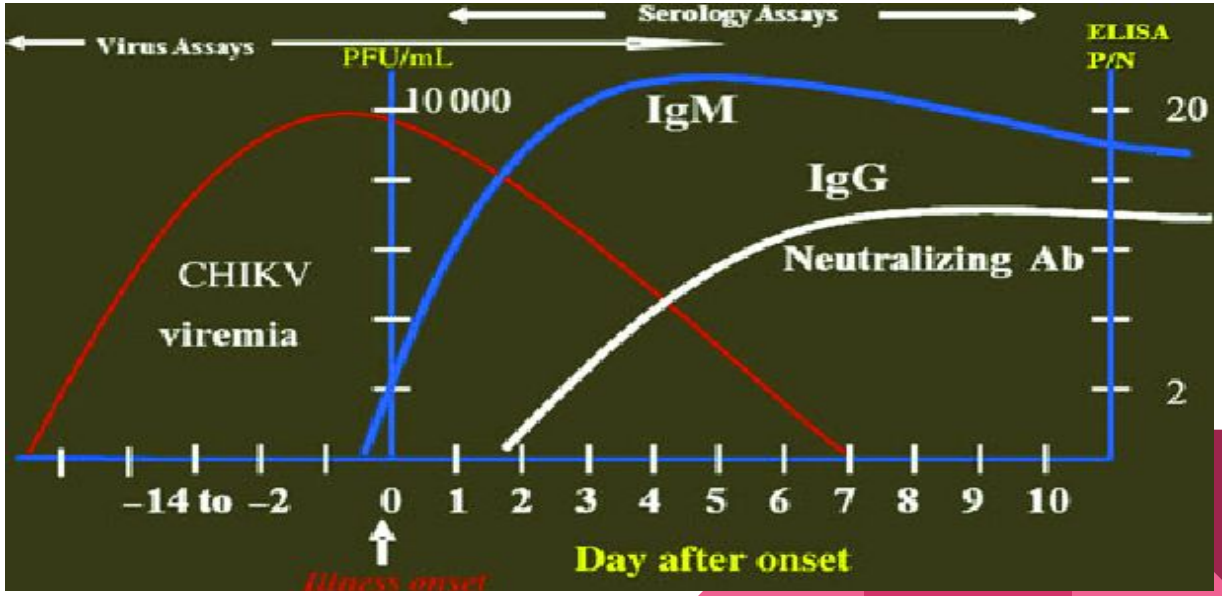
- PCR is testing for the presence of virus until day 7
- Serology for day 7 of symptoms and after



Induction Testing: Dual Modality

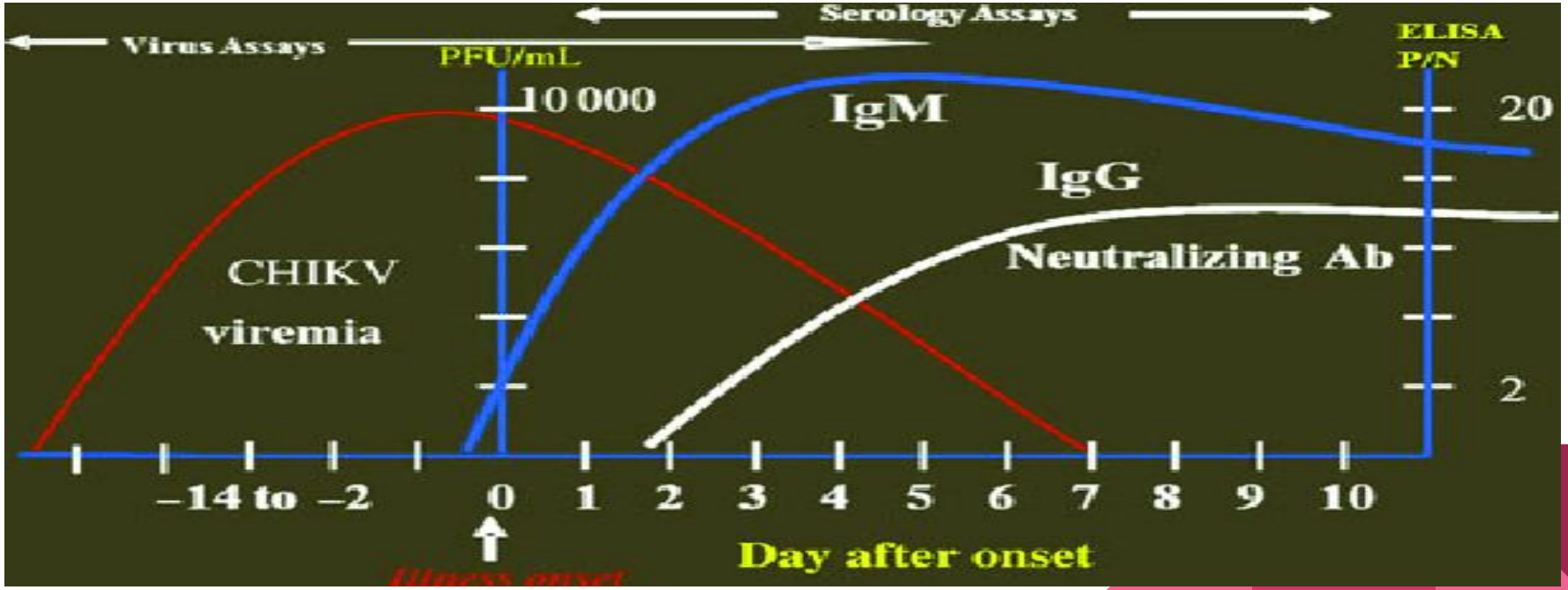
2-sides of a coin: PCR + Serology looks for totality of disease process from viral replication to immune response

- PCR sensitivity falls as the virus is eradicated
- Serology is less sensitive before day 7 of symptoms



STOP and Look

- Notice the 14 days before day 0
- This is the amount of time an asymptomatic patient can potentially spread virus to others



Return to Work

Initial Induction:

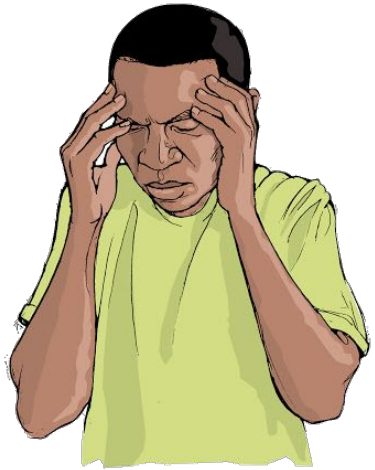
1. PCR
2. Survey questions
    a. Exposure history
    b. Symptoms

If PCR negative/questionnaire negative =

Return to Work

(with option to obtain serology)

Symptomatic?



Use of a protocol to determine who needs to be tested and who automatically needs to temporarily leave workforce

1) Unambiguous simple symptom and exposure checklist

2) No subjective quality, either the symptom is present or not

3) If algorithm is triggered, employee gets tested

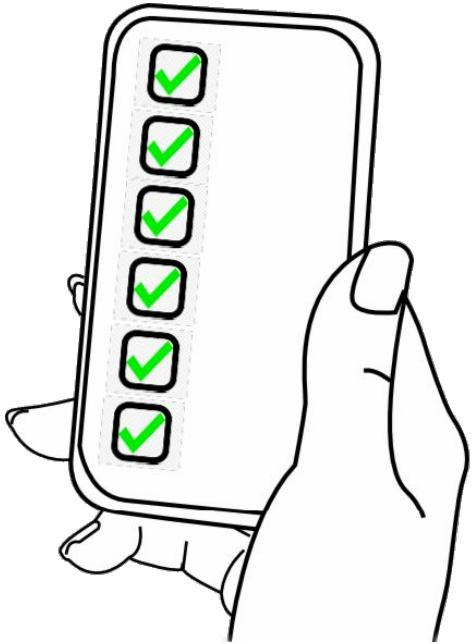
4) Avoid triggering testing for chronic symptoms of isolated nasal congestion, diarrhea, headache

PCR + or Serology+

- Quarantine if either is positive
- Assume infectious until proven otherwise
- Monitoring
- Retest PCR x 2 once asymptomatic for 3 days

- Asymptomatic patients > 7 days testing PCR+/serology +
  - Retest until PCR negative x 2

Ongoing Self-Reporting



Survey question will ask via text:

Fever, cough, shortness of breath, loss of taste or smell, headache, vomiting, diarrhea, myalgias, chills

Employees answer survey questions everyday. Algorithm determines if employee will be referred for testing based on answers

Chronic single symptoms will not trigger daily testing

Employees tested will not be flagged again for testing for seven days

Return to Work: Confirmed COVID

- >72 hours symptom free (fever, cough, shortness of breath, sore throat, etc)
- >7 days since start of symptoms
- Negative PCR x 2 collected at least 24 hours apart

Covid-19 Screening Questionnaire

Section: COVID-19 Screening Questionnaire

Q1: Have you had contact with anyone diagnosed or suspected to have COVID-19?

Options:

- (●) No
- ( ) Yes

Q2: Do you have or had fever more than 100.0F?

Options:

- ( ) No
- (●) Yes

Q3: Do you have a cough?

Options:

- ( ) No
- (●) Yes

Q4: Do you have shortness of breath or difficulty breathing?

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0 Surgical Patients

15 Non Surgical Patients

15 Total Active Patients

Monthly Summary

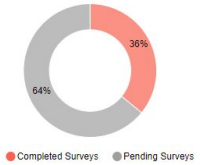
2020 | May

Total Patients	3
Total Request Sent For Health Data	11
No of Responses Received	11
Focus Patients Pending Review	3

Health Index

COVID-19 S

Compliance – Active Patients



Daily Submissions

2020 | May

Patient Name	Encounter Type	Primary Diagnosis	Days since last procedure	Last Survey Response Date	Status	Completed	Pending	Total	% Completed	Action
Brent Johnson	Normal	Normal	N/A	May 13, 2020	●	1	0	1	100 %	View Diagnosis
George Lopez	Normal	PUI - Contact with and (suspected) exposure to other viral communicable diseases	3	May 12, 2020	●	6	0	6	100 %	View Diagnosis
John Smith	Non Surgical	COVID Positive - Other coronavirus as the cause of diseases classified elsewhere	46	May 12, 2020	●	5	0	5	100 %	View Diagnosis

Survey Completed

Date	Survey Name	Focus Patient Flag	Action
05-13-2020 08:18	COVID-19 Screening Questionnaire	+	Discussed with patient

Random Testing of Employees

- COVID can spread asymptomatically through employees resulting in what are known as Super Spreaders.
- We recommend random testing of 1-2% per week to surveil against this silent threat.

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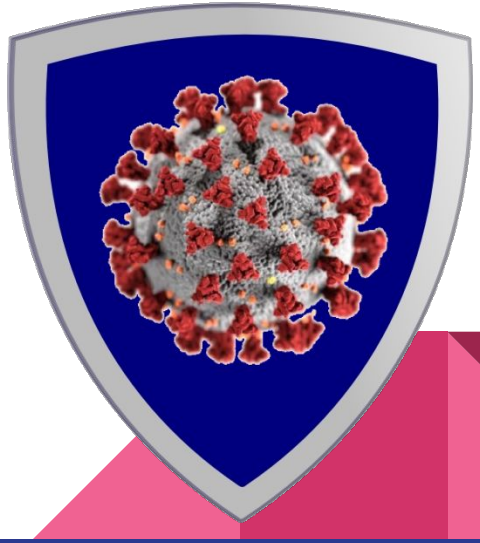

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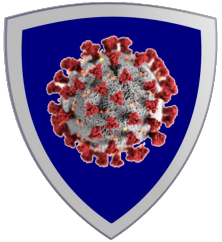
Types of Tests: PCR, Serology & Antigen Terminology explained: PCR

- PCR = rtPCR = “molecular” = “nucleic acid amplification testing”
  - Used to assess **active** infection and **potential virus shedding** at the time of testing
  - Unknown sensitivity, may be as low as 70%, but is considered to be the gold standard currently in COVID testing
  - Looks for presence of viral RNA in
    - Nasal, oral or lung samples
    - Turn-around 1-7 days depending on lab
  - Limited by supply chain for swabs, transport media, reagents
    - Capacity increasing

Terminology: Serology

- Serology = antibody test = total antibody test
  - Looks for body's immune response to COVID-19
    - Antibodies: IgA, IgM, IgG
    - IgG take longest to establish, but confer long-term immunity?
    - Basis for convalescent plasma as a treatment
  - Establish prior exposure to COVID-19
  - IgA tests may be coming soon with possible heightened sensitivity earlier in course of illness and/or viral shedding
  - While FDA says serology should not be used to diagnose active infection, there is a role for serology in a return to work strategy

Terminology: Antigen



- Looks for the proteins of the virus itself
- Simple test similar to the flu swabs
  - Can be done at “point of care”
  - Results in 15 mins
- Just one approved by FDA for emergency use
- BUT, less sensitive than the PCR
- None available until end of May 2020