






# COVID-19 Updates: Testing Food Industry Personnel & Environmental Monitoring

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## COVID-19 Updates: Testing Food Industry Personnel and Environmental Monitoring

May 21, 2020

# Presentation Topics

- Recent Scientific Developments
- IEH Experience with Testing Clinical and Environmental Samples
- Best Practices for Testing Employees for SARS-CoV-2
- Best Practices for Environmental Testing for SARS-CoV-2
- Obtaining Health Professional Services for Employee Testing

# Recent Developments: COVID Immunity

- Immunity After Infection
  - Infection with the virus likely confers immunity to reinfection for at least a short period of time in most individuals, based on recent animal studies and experience with other Coronaviruses. It is not known how long this immunity will last, perhaps one to two years.
  - The question of whether one can become re-infected with the virus not long after recovery remains under debate. Recent evidence suggests that the virus may persist in other tissues long after the respiratory illness has passed.
  - In some patients, the virus can persist in the central nervous system, eyes, heart and the gut.

# Recent Developments: Face Masks

- Wearing a surgical face mask may be even more effective than previously thought – in a recent University of Hong Kong study, a surgical mask reduced the spread of the virus by as much as 75% when used to cover the cages of infected hamsters. N95 and KN95 masks are likely even more effective.
- A separate study by UK researchers, using a computer model, showed that if 80% of people wore masks, it would be more effective at reducing the spread of the virus than maintaining a strict lockdown. However, 50% masking is not sufficient to prevent continued spread of the virus.
- The findings from these studies are supported by earlier peer-reviewed research with influenza and other coronaviruses<sup>1</sup>

<sup>1</sup>Nature Medicine 03 April 2020; 26:676-680 <https://doi.org/10.1038/s41591-020-0843-2>

# Recent Developments – CDC Statements

- CDC Statement on how COVID-19 spreads:
  - Mainly person-to-person (primary mode)
  - Spreads easily among people, more easily than influenza, but not as easily as measles
  - The virus DOES NOT spread easily from touching contaminated surfaces or objects
  - The virus DOES NOT spread easily between animals and people
- Best practices for preventing infection:
  - Maintain social distancing – avoid close contact
  - Cover your mouth and nose with a mask or cloth face cover
  - Wash hands often
  - Regularly disinfect surfaces that are frequently touched although surfaces are not the primary mode of transmission

# Recent Developments: Testing in the US

- **Testing in the U.S.<sup>1</sup>**

- As of May 19, 2020, there have been 11,834,508 tests for COVID-19 for an average of 3.6% of the US population
- Some states are significantly above the average: RI – 10.9%, ND – 7.4%, NY – 7.4%, , MA – 6.7 %, NM – 6.4%, NJ – 5.9%, LA – 5.8%, UT – 5.4%
- Some states are lagging: WI – 0.3%, SD – 0.3%, ME – 1.8%, ID – 2.1%, OH – 2.3%, VA – 2.3%, NC – 2.4%, TX – 2.5%,
- Currently, approximately 350,000 new tests are being performed each day
- **Monitor testing in your community. At this time, leading communities should be testing > 5% of the population and seeing a downward trend in the percentage of positive results**

<sup>1</sup>Source: The COVID Tracking Project. <https://covidtracking.com/data/us-daily>

# Susceptible population

- Anyone can be infected by SARS-CoV-2, but only 5% of the population are susceptible to severe/life threatening infection. We need to afford these persons greater protection from exposure to the virus:
  - Persons 85 years of age or older
  - Persons with specific comorbid medical conditions or illnesses
    - Pre-existing respiratory or cardiac disease
    - Immunocompromised persons
    - Morbid obesity (Body Mass Index  $\geq 40$ )
    - Diabetes
    - Impaired kidney (requiring dialysis) or liver function



# COVID-19 Control, Phase I: Flattening the Curve

- The aim here has been to buy time for hospitals to deal with the severe cases:
  - encouraging good hygiene practices
  - social distancing
  - orders to shelter in place
  - quarantine of high-risk individuals
  - and isolation of infected individuals
  - PPE for HealthCare workers and first responders
  - Face masks and face shields for essential workers

# Phase II: Operational Co-Existence with COVID-19

- The goal is to maintain operations in the absence of a vaccine, or effective treatment, when all businesses are opening, and rigid COVID controls are relaxed
- For the food industry it is of paramount importance to:
  - Identify the personnel at risk: This is a collaborative process, employees need to participate
  - Identify the personnel whose behavior may put others at risk: educate, train, etc.
  - Design programs to accommodate the at-risk population
  - Educate all employees
  - Many elements of Phase I should be continued and strengthened:
    - encouraging good hygiene practices
    - workplace distancing: maintain an effective distance between employees
    - Lower the density of workers, particularly at bottle necks
    - Face masks and face shields, or both (at higher density locations)
    - Increase sanitation of welfare areas
    - Monitoring of high touch points

# CDC Guidance for Re-Opening (May 2020)

- **Guidance for Employers with Workers at High Risk**
  - Encourage workers at high risk to self-identify
  - Comply with regulations for persons with disabilities and age discrimination
  - Consult with local and state health authorities on the current need for mitigation
  - Support and encourage telework
  - Assign high risk workers to duties that minimize contact with customers and other employees, if agreed to by the worker
  - Encourage others working near high risk employees to respect social distancing and policies related to wearing masks, hand washing, etc.
  - Limit the sharing of foods, tools, and supplies
  - Re-think/lower the density of close communal break rooms or stagger their use
  - Install physical barriers to support social distancing

# IEH Experience With Testing: Environmental Monitoring for COVID-19

- **Everywhere:** Door handles, turnstiles
- **Bathroom:** door latches, hand air dryers, toilets, sinks
- **Kitchen/Break areas:** microwaves, vending machines, condiment stands, coffee stations
- **Other:** lockers, sanitizer dispenser, computer mouse, time clock stations, etc.
- Environmental testing is an indicator of the population of virus shedders in the workforce
- It informs you about the effectiveness of surface disinfection

# Best Practices for Testing Employees for COVID-19

- Impact of COVID-19 on a food production facility is a function of the number of employees, density, rate of infection in the surrounding communities, hygienic/sanitation practices, and age distribution of employees
- The younger the age group the higher rate of asymptomatic infections
- Testing is another tool in the toolbox to manage the risk
- Approaches to testing:
  - Test all employees, identify the asymptomatic and the pre-symptomatic, isolate, bring back to work when they stop shedding the virus
  - Test selectively the employees that have been exposed
- Access to testing can bring employees back to work sooner

# Best Practices for Testing Employees for COVID-19

- Involve your attorneys in ensuring that the proper steps are taken
- Decide on your approach
- Work with an occupational health physician or an equivalent to order the test, make sure that you have a written contractual agreement
- Have all employees that have volunteered to take the test sign an informed consent agreement
- Work with the test service provider on sample submission forms, make sure all the data fields required by your state health dept. are included in the forms, and that the data is accurate
- Arrange for a health care professional group to take the samples and submit
- Make sure that the flow of the data is clear
- Work with your state health officials – keep them informed

# Conclusion

# Reading List

- CDC Activities and Initiatives Supporting the COVID-19 Response and the President's Plan for Opening America UP Again.  
<https://www.cdc.gov/coronavirus/2019-ncov/downloads/php/CDC-Activities-Initiatives-for-COVID-19-Response.pdf>
- CDC Guidance for Meat and Poultry Processing Workers and Employers –  
<https://www.cdc.gov/coronavirus/2019-ncov/community/organizations/meat-poultry-processing-workers-employers.html>
- Proper way to wear personal protective equipment -  
<https://www.nejm.org/doi/10.1056/NEJMvcm2014809>
- CDC Statement on "How COVID-19 Spreads" -  
<https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/how-covid-spreads.html>





# Important Web Links

- [IEH Website for SARS-CoV2 Updates](#)
- [Food Industry Recommended Protocols When Employee/Customer Tests Positive for COVID-19](#)
- FEMA - National Business Emergency Operations Center (NBEOC) Dashboard - <https://fema.connectsolutions.com/nbeoc>  
Email – [NBEOC@fema.dhs.gov](mailto:NBEOC@fema.dhs.gov)
- [OSHA – Preparing Workplaces for COVID-19](#)



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# Thank You

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