Georgia Department of Public Health:
Strike & Support Team Office Hours Kick-Off for Skilled Nursing Care Centers, Hospice, ICFs, and Medical Directors
Friday, June 17, 2022 | 11 a.m. ET
Meet the Team:

Panelists:

Melody Brown, MSM
Patient Safety Manager
Alliant Health Solutions

Teresa Fox, BS, MT (ASCP), M.Ed., CIC
Georgia Department of Public Health
Infection Preventionist

Regina Howard, BSN, RN, CIC
Georgia Department of Public Health
Infection Preventionist

Presenter:

Swati Gaur, MD, MBA, CMD, AGSF
Medical Director, Alliant Health Solutions

Christina Meza, MPH
NWSS Epidemiologist II
Georgia Department of Public Health
Thank You to Our Partners

• Georgia Department of Public Health
• University of Georgia
Purpose:

- These sessions will consist of a regularly scheduled monthly webinar for skilled nursing facilities (SNFs) and SNF medical directors. Office hours are your opportunity to come and learn, share, vent and more!

- Each month, we will provide updates on infection prevention, clinical protocols and ideas for new tools and resources. This is your chance to access subject matter experts on infection control and clinical practice in long-term care.

- Come prepared to pose your questions to subject matter experts and learn from your peers about their best practices and barriers.
Trainings

There will be two training sessions per year focused on relevant infection prevention topics, updates and shared best practices.

- July Office Hours (7/15/2022): C. diff Treatment and Prevention and Control Updates
- August Office Hours (8/19/2022): Cleaning and Disinfestation of Shared Medical Equipment
- Training 2: October/Dates TBD
Your Opinion Matters

Share in Chat what is keeping you up at night related to infection prevention.

We want to provide you with information that is relevant to what you are doing everyday.
Hot off the Press

• Fast increasing new subvariants – BA4 and BA 5
• Definition of up-to-date vaccination has changed to the second booster if eligible

2 You are also considered up to date if

• You have completed your primary series – but are not yet eligible for a booster
• You have received 1 booster but are not recommended to get a 2nd booster
• You have received 1 booster but are not yet eligible for a 2nd booster

Free Osha Trainings for Long Term Healthcare Facilities
Infectious Diseases (COVID-19) Training
1 Hour Awareness and 6 Hour Detailed Courses

Georgia Tech is providing FREE training, funded by a Susan Harwood Grant, on Infectious Diseases (COVID-19) and OSHA’s Emergency Temporary Standard for Long-term Healthcare facilities. These free courses will highlight OSHA key’s standards applicable to infectious diseases, and will provide employees with further resources to protect their employees.

Click here for more information.
National Wastewater Surveillance System (NWSS)

An Introduction to Wastewater Surveillance in Georgia
Overview of Topics Covered

• Why Wastewater?
• National Wastewater Surveillance System (NWSS)
• Georgia Wastewater Surveillance Network/GA NWSS
• Using & Interpreting Wastewater Data
• Big Picture: Wastewater-Based Epidemiology

Source: 2021 ELC Kick-off Presentation, August 2021
Why Wastewater?

The History of Wastewater

- 1854 Cholera outbreak and the beginning of epidemiology
- Use of sewage samples to surveille and eradicate polio in the United States
- NWSS established as a result of the COVID-19 pandemic

O’Reilly et al.
How Wastewater Surveillance Works

24-Hour Composite Sampling

qPCR/dPCR

- Presence/Absence
- Viral Load Concentrations

Source: https://gray-wdbj-prod.cdn.arcpublishing.com/resizer/xLHaV27AiYni3AIQbrEcOdkUS8=/1200x675/smartequality(85)/cloudfront-us-east-1.images.arcpublishing.com/gray/HZOM6EVNYFC37PGT8OFG03DYII.jpg; Images from Microsoft PowerPoint 2022
Why Wastewater?

**Using wastewater for COVID-19 surveillance allows us to...**

1. Detect RNA regardless of symptoms status
2. Detect RNA regardless of testing availability or behaviors
3. Utilize data sooner than other surveillance or case-based data

**Overall Goal**

To complement existing COVID-19 surveillance and act as a sentinel surveillance system in times of low prevalence

Wastewater, or sewage, is collected prior to entering treatment facility for testing of SARS-CoV-2 RNA
National Wastewater Surveillance System

Georgia Wastewater Surveillance Network

https://www.tpmag.com/online_exclusives/2019/01/wastewater-treatment-plants-could-become-sustainable-biorefineries
Wastewater Surveillance Activities in GA

1. Academic Partners (Emory & UGA)
2. CDC Commercial Contract Data & short-term projects
3. Health Department-led Wastewater Surveillance through CDC NWSS

Source: 2021 ELC Kick-off Presentation, August 2021
UGA Wastewater Surveillance

Sewer map of Athens-Clarke County

Building Interdisciplinary Partnerships

- Epidemiologists (Environmental Health, One Health, Infectious Disease)
- GIS & Geocoding Subject Matter Experts
- Wastewater Treatment Facility Owners & Operators
- Laboratory Scientists and Molecular Biologists
- Agriculture Industry Partners
- Environmental Health & Public Health Academics
- Hospital, SNF and LTCF Staff
- State & Local Government Leaders
Using & Interpreting Wastewater Data

CDC COVID Data Tracker
CDC COVID Data Tracker

Sewershed: 476

Sampling Location: Treatment plant
Sewershed Jurisdiction: Georgia
Counties: Richmond
Sewershed Population: 200,000
First sampling date: 2022-01-11

SARS-CoV-2 Concentrations in Wastewater Over Time

What Do These Data Show Us?

1. **Current virus levels in wastewater:**
   a. Shows us whether SARS-CoV-2 levels at this site are currently higher or lower than past levels at this site.
      i. **Interpretation:** SARS-CoV-2 levels are 80-100% higher than the lowest levels of SARS-CoV-2 concentrations at this site, dating back to January 1, 2022.

2. **Percent change in the last 15 days:**
   a. Shows us how much normalized SARS-CoV-2 viral levels in wastewater at the site increased or decreased in the current 15-day period.
      i. **Interpretation:** In the last 15 days, the normalized SARS-CoV-2 viral levels in the WWTF decreased to a level that is between 10%-99% of the previous sampling data.

3. **Percent of wastewater samples with detectable virus in the last 15 days:**
   a. Shows the percent of wastewater samples at each site that were positive for SARS-CoV-2 RNA over the last 15 days.
      i. **Interpretation:** 80-100% of samples collected within the last 15-day period, May 15 to May 30, 2022, were positive for SARS-CoV-2 genetic material.

Through Wastewater, Public Health Can...

1. Determine if SARS-CoV-2 concentrations are increasing or decreasing in a sewershed/WWTF. A sustained increase may indicate infections are also increasing.

1. Use wastewater surveillance as an early indicator that the number of people with COVID-19 may be increasing or decreasing.

1. Use wastewater surveillance independent of healthcare seeking behavior/access within a community.

1. Implement surveillance across a large geographic range (~80% of U.S. households are served by municipal wastewater collection systems).
Wastewater-Based Epidemiology

Wastewater-Based Epidemiology

Wastewater-Based Epidemiology for Community-Wide Infectious Disease Monitoring

Exposure
Pathogens
Resistant genes
Pharmaceuticals
Lifestyle Choices

Population contributes to one WWTP
- Pooled sample

Sample collection
24 hr composite Flow proportional

Wastewater Sample

Sample analysis for infectious disease markers

Complementary to...
- Sentinel and lab surveillance
- Hospital admission data
- Prescription data
- Human biomonitoring
- Mortality and morbidity rates

Population size and flowrates accounted, correction factors applied
- Daily mass loads calculated

Estimation of community-wide infectious disease spread and resistance

The Future of Wastewater-based Epidemiology

Wastewater surveillance is now being used for...

- Opioid Metabolite Detection
- Flu and RSV
- Multi-Drug Resistant Organism (MDRO) Detection

And more...
Goals of Georgia NWSS

- Build infrastructure for wastewater testing in GA long-term
- Develop the groundwork for utilizing wastewater surveillance for other pathogens of interest (e.g., MDROs, opioids, Flu/RSV)
- Continue to collaborate and build capacity for wastewater surveillance
Acknowledgements

• Local and District Public Health
• DPH Data Analysis Team
• Georgia Association of Water Professionals
• University of Georgia, Lipp Lab
• Emory Rollins School of Public Health, Center for Global Safe WASH
• Other NWSS states
• Georgia Public Health Laboratory
• WWTF owners and operators
• And many more...
Questions?

GA DPH NWSS Contact Information

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Amanda Feldpausch DVM, MPH
One Health Medical Epidemiologist
Amanda.feldpausch@dph.ga.gov

Melissa Tobin D'Angelo and Hope Dishman
What is circulating in the community?

CDC Data tracker
Proportion of Variants by Region


Regional proportions from specimens collected the week ending 6/4/2022.
US Territories not shown are included in HHS regions:
PR, VI - Region 2
AS, FM, GU, MH, MP, PW - Region 9

Updated June 7, 2022
BA4, BA5

- Antibodies produced through vaccine are more effective than from natural infection alone
- Likelihood of repeat infection
- Faster increase in proportions (probably more infectious)
- Disease severity – too early to comment
How To Be Ready? The Three Pillars:

1. Up-to-date vaccinate (booster for all eligible)
2. PPE and Infection Control
3. Testing
Neutralization of the SARS-CoV-2 BA.1 and BA.2 Variants

Pfizer Vaccine Recommendations

Pfizer-BioNTech

**Primary Series:**
2 doses of Pfizer-BioNTech given 3–8 weeks apart \(^1\)

- **Fully Vaccinated:** 2 weeks after final dose in primary series

**Boosters:**
1 booster, preferably of either Pfizer-BioNTech or Moderna COVID-19 vaccine

- For most people at least 5 months after the final dose in the primary series

2nd booster of either Pfizer-BioNTech or Moderna COVID-19 vaccine

- For adults ages 50 years and older at least 4 months after the 1st booster

**Up to Date:** Immediately after getting all boosters recommended for you \(^2\)
# Moderna Vaccine Recommendations

<table>
<thead>
<tr>
<th>Moderna</th>
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<tbody>
<tr>
<td><strong>Primary Series:</strong></td>
</tr>
<tr>
<td>2 doses of Moderna given 4–8 weeks apart [1]</td>
</tr>
<tr>
<td><strong>Fully Vaccinated:</strong> 2 weeks after final dose in primary series</td>
</tr>
<tr>
<td><strong>Boosters:</strong></td>
</tr>
<tr>
<td>1 booster, preferably of either Pfizer-BioNTech or Moderna COVID-19 vaccine</td>
</tr>
<tr>
<td>• For most people at least 5 months after the final dose in the primary series</td>
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<tr>
<td>2nd booster of either Pfizer-BioNTech or Moderna COVID-19 vaccine</td>
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<tr>
<td>• For adults ages 50 years and older at least 4 months after the 1st booster</td>
</tr>
<tr>
<td><strong>Up to Date:</strong> Immediately after getting all boosters recommended for you [2]</td>
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# J&J Vaccine Recommendations

## Johnson & Johnson’s Janssen

### Primary Series:
1 dose of Johnson & Johnson’s Janssen

**Fully Vaccinated:** 2 weeks after vaccination

### Boosters:
1 booster, preferably of either Pfizer-BioNTech or Moderna COVID-19 vaccine
- For most people at least 2 months after a J&J/Janssen COVID-19 vaccine

2nd booster of either Pfizer-BioNTech or Moderna COVID-19 vaccine
- For adults ages 50 years and older at least 4 months after the 1st booster

**Up to Date:** Immediately after getting all boosters recommended for you[^2]
# Vaccine Administration Questions

<table>
<thead>
<tr>
<th>Intervals</th>
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<tbody>
<tr>
<td>• An mRNA primary series dose administered prior to the recommended interval(^6)</td>
<td>• Repeat dose after the dose given in error by at least the minimum interval (i.e., no sooner than 21 days if Pfizer-BioNTech or 28 days of Moderna).(^5)</td>
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<tr>
<td>• Booster dose administered prior to the recommended interval</td>
<td>• Do not repeat dose.</td>
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</tr>
<tr>
<td>• Any COVID-19 vaccine dose administered at any interval after the recommended interval</td>
<td>• Do not repeat dose. There is no maximum interval. This deviation from CDC guidance does not require VAERS reporting.</td>
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<tr>
<td>• Tixagevimab/cilgavimab (EVUSHELD)(^m) administered less than 14 days after COVID-19 vaccination</td>
<td>• In general, do not repeat dose. However, based on clinical judgment, a repeat dose of vaccine may be administered at an interval of at least 28 days after the dose of vaccine.</td>
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Take 5 COVID Education Series
https://quality.allianthealth.org/topic/give-the-boost-a-shot/

• Take 5: Introduction – How to Use Take 5
• Take 5: Vaccine Eligibility Part 1
• Take 5: Vaccine Eligibility Part 2
• Take 5: Overcoming Refusals
• Take 5: Video 7 – Additional Precautions for Unvaccinated Health Care Personnel
• Take 5: Video 8 – Walkthrough Care Compare – Finding Public Data
• Take 5: Video 9 – How to Stay Up-to-Date with Trusted Sources
Questions?
# Georgia Department of Public Health HAI Team Contacts

<table>
<thead>
<tr>
<th>State Region/Districts</th>
<th>Contact Information</th>
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</thead>
<tbody>
<tr>
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<td></td>
<td><a href="mailto:Joanna.Wagner@dph.ga.gov">Joanna.Wagner@dph.ga.gov</a> (404-430-6316)</td>
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Save the Date

Next Office Hours:
July 15, 2022
11a.m.
SAVE THE DATE!

TUESDAY, JUNE 28, 2022 | 11 A.M. - 3 P.M. ET

How to Participate in Alliant’s Readmissions Twitter Chat
Thanks Again…

- Georgia Department of Public Health
- University of Georgia