

NOVEMBER NEWSLETTER

MONTCLAIR HEALTH DEPARTMENT



The Silent Guardian: Unveiling the Power of Wastewater Surveillance in Public Health

In the intricate web of public health, where unseen threats may lurk beneath the surface, wastewater surveillance offers valuable insights into community well-being. The process involves the systematic analysis of sewage for traces of pathogens, contaminants, and biomarkers, creating a comprehensive snapshot of a community's health. This technique has been around since 1954 when epidemiologists discovered that a nearby reservoir was contaminated with wastewater containing illness-inducing parasites. Since then, the application of wastewater surveillance has evolved into an innovative tool for monitoring infectious diseases, and even substances like drugs and environmental pollutants. Let's explore how we can use wastewater surveillance to understand our community's health!

- **Monitor COVID-19** - Wastewater surveillance monitors the prevalence of COVID-19 in a community by analyzing sewage samples to detect the genetic material (RNA) of the SARS-CoV-2 virus, providing an early warning system for potential outbreaks. It can also help with tracking trends, identifying potential hotspots, and guiding public health responses.
- **Monitor Drug Use** - By analyzing sewage for traces of specific drugs or their metabolites, public health officials can gain insights into the prevalence and types of drugs being consumed in a given area. It provides an understanding of local drug use patterns, helping authorities tailor prevention and treatment programs accordingly.
- **Track Antibiotic Resistance** - The presence of antibiotic-resistant genes in sewage can help researchers and health authorities understand the spread of antibiotic resistance and inform strategies for combating it. Understanding antibiotic resistance patterns can guide healthcare providers in prescribing antibiotics more judiciously and inform public health strategies to mitigate resistance.
- **Implement Public Health Interventions** - Wastewater surveillance data can be used to inform targeted public health interventions. For instance, if a spike in certain pathogens is detected, health authorities can implement specific measures, such as increased public awareness campaigns, vaccination drives, or water treatment enhancements. This approach allows for a more proactive and targeted response to potential health threats.
- **Monitor the Environment** - By assessing sewage for pollutants and contaminants, authorities can gain insights into the impact of human activities on local ecosystems. It can aid in identifying sources of pollution, guiding environmental policies, and ensuring the health of water bodies and ecosystems.

Wastewater surveillance stands as a testament to the evolving landscape of public health, where science meets sewage to protect communities from unseen threats. As we continue to navigate the complexities of our world, embracing and refining this innovative approach promises to be a crucial step towards safeguarding the health and well-being of our global community. The silent guardian beneath our streets may hold the key to a healthier and more resilient future.

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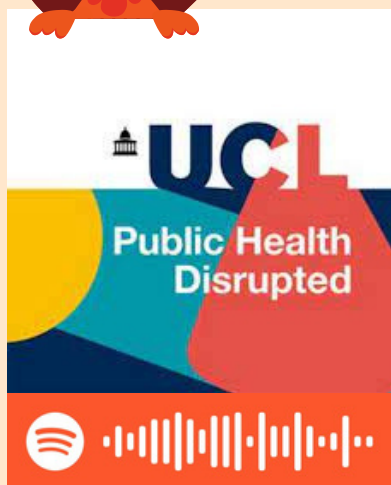
Wastewater Monitoring: How does it work?



SCAN HERE

References: https://yourlocalepidemiologist.substack.com/p/wastewater-taking-surveillance-to-https://www.cdc.gov/nwss/how-wss-works.html?CDC_AA_refVal=https%3A%2F%2Fwww.cdc.gov%2Fhealthywater%2Fsurveillance%2Fwastewater-surveillance%2Fresources%2Fhow-wss-works.html; <https://www.health.ny.gov/environmental/wastewater.htm>

Listen & Learn



Public Health Disrupted

University College London (UCL) Health of the Public

Episode 5 - Unraveling Health Disparities: The Racial Divide

"It's the indirect act of racism that is leading to poorer outcomes for racialised groups."

How does racism impact people's health? And how big is this problem? We're three years on from George Floyd's murder, which launched a wave of global protests under the banner never again. This, of course, has not been the case. We're also three years since the COVID pandemic began, which really highlighted the long-standing racial health inequalities in the UK and beyond.

In this month's episode, Dr Halima Begum (CEO of ActionAid UK) and Delan Devakumar (Professor of Global Child Health) discuss the systemic challenges faced by people of colour, and the complex relationship between racism, health equity, and efforts for social justice.



TED Health

How Targeted Ads Might Just Save Your Life - Sandersan Onie

Could the tech industry's complex algorithms support people during their darkest times, rather than just deliver targeted ads? Drawing from his own experience with depression, global mental health researcher Sandersan Onie shows how internet search behaviors can provide valuable insights into suicide risk and potentially help save lives by reaching people in a deeply personal way, at a crucial moment.

HOW CAN I LISTEN?

To listen to any of the podcasts listed above, search the name of the podcast in the Spotify app or website.

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Open the Spotify app and scan the "Spotify Code" on the images above



National Diabetes Month 2023: Take Charge of Tomorrow


Each November, we recognize National Diabetes Awareness Month. Communities across the nation bring awareness to the health challenges that managing diabetes can pose. Diabetes is a chronic condition that occurs when blood sugar levels are too high; it can cause problems with the kidneys, eyes, heart, and other organs. Luckily, knowing how to properly manage the condition can reduce your chances of developing these diabetes related health problems!

Managing blood glucose, blood pressure, and cholesterol levels is key to preventing diabetes health problems. Diabetes ABCs (A1C test, blood pressure, cholesterol) should be managed as soon as possible after diagnosis. Consult with a healthcare professional to set goals for managing these levels.



Start by taking small steps and gradually adopting healthier habits. Healthy meal prepping, being more active, getting enough sleep, and avoiding smoking can go a long way in managing diabetes.

Remember to take your medicine on time, even if you feel fine. Consult with your pharmacist or physician if you face challenges in taking your medication at the correct dose or time.



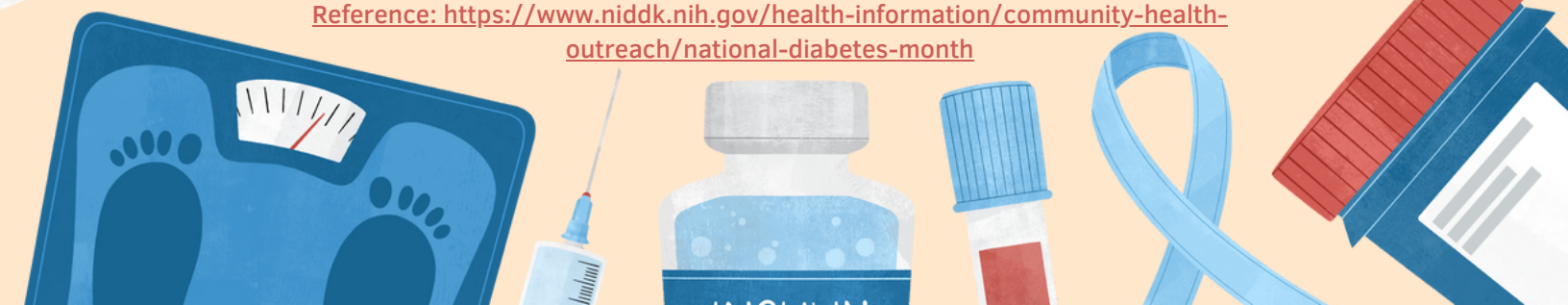
Diabetes management is a team effort. Consult your primary care provider to determine if you should speak with other healthcare professionals, such as a diabetes specialist or registered dietician, about your diabetes. A social worker or another healthcare team member may be able to assist you in locating community resources or financial assistance to help with diabetes care.

If overweight or obese, **talk to your primary care provider about managing your weight** through healthy eating, physical activity, or other weight-loss treatments.

Maintaining good mental health when dealing with diabetes can be a challenging journey, and feelings of sadness or overwhelm are common.

Explore stress management techniques and seek assistance from a mental health counselor or support group to promote emotional well-being.

Reference: <https://www.niddk.nih.gov/health-information/community-health-outreach/national-diabetes-month>



Ensuring Food Safety for Your Festive Feasts

To prevent the growth of bacteria, **keep food out of the danger zone (between 40°F and 140°F)**. After preparing food, keep hot food hot and cold food cold, refrigerate or freeze perishable food within 2 hours, and make sure your refrigerator is set at 40°F or below and the freezer at 0°F or below.

Store different types of food separately. Keep meats like chicken, turkey, seafood, and eggs separate from other food items in your fridge. Be sure to prevent any drips by securely sealing them in containers or plastic bags. Store in their original carton, placing them in a snug spot in the fridge's main compartment.

To avoid harmful germs such as **Salmonella**, **use pasteurized eggs** in dishes containing raw eggs, including holiday favorites such as eggnog, tiramisu, hollandaise sauce, and salad dressings.

Cook food completely and check with a thermometer to ensure that the internal temperature of meat, chicken, turkey, seafood, and eggs is safe to eat. Allow roasts, chops, steaks, and fresh ham to rest for 3 minutes after cooking.

Safely thawing your turkey prevents harmful bacterial growth. You should thaw it in the refrigerator, in cold water that is changed every 30 minutes, or in the microwave. Avoid thawing your turkey or other meats on the counter.

Be aware that raw flour and eggs can contain germs, including *E. coli* and *Salmonella*. It can be found in uncooked doughs or batters for baked goods. Edible cookie dough made with heat-treated flour and pasteurized eggs or no eggs is a safer option. Always read the label to ensure it is meant to be eaten raw.



Reference: <https://www.cdc.gov/foodsafety/communication/holidays.html>

Montclair Health Department Immunization Clinics



Public Health
Prevent. Promote. Protect.

Montclair Health & Human Services

Montclair Health Department offers immunization clinics on the first and third Tuesdays of every month.

To make an appointment, please call 973-509-4970 or email mginter@montclairnjusa.org.

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