

Epidemiological and Environmental Investigations by the Centre for Disease Control Indicates there is Probable Evidence of Fecal Source Transmission of COVID-19

By: Gary Majesky, WSIB Consultant & Executive Board Member & Chris Paul, Business Representative

n September 8, 2020, the Office of the Chief Medical Officer of the Centers for Disease Control and Prevention (CDC) published a COVID-19 Science Update regarding Fecal Source Transmission.

The first peer-reviewed study involved a meta-analysis of SARS-CoV-2 stool testing and the potential for fecal-oral transmission. The second study investigated probable evidence of fecal aerosol transmission of SARS-CoV-2 in a high-rise building, published in the Annals of Internal Medicine (September 2020).

Fecal Aerosol Transmission

The fecal aerosol study has particular relevance for construction workers who frequently use shared washroom porta-toilets with other workers. This has been a frequent source of frustration, and health and safety complaints for years due to overflowing and unsanitary conditions.

The primary mitigation strategy against COVID spread has been frequent hand washing, PPE (masks), safe distancing, and other measures to prevent surface transmission of COVID and aerosol transmission through tiny droplets that stay airborne and inhaled by other persons. The prevention focus has been to disrupt virus transmission where Worker A, contracts the virus from Worker B.

Waste Water & Toilet Reservoirs for COVID

However, the implications of both studies (*van Doorn et al. and Kang et al.*), according to the CDC indicates that some COVID-19 patients shed SARS-CoV-2 RNA in stool for weeks after symptom onset, and inhalation of bioaerosols containing the virus might play a role in COVID transmission. An editorial note to the *Kang et al.* study adds to the growing evidence that wastewater plumbing systems might be reservoirs for SARS-CoV-2 and other pathogens. While hand hygiene is critical in preventing fecal-oral transmission (via contact with respiratory mucosa), improving bathroom ventilation, and periodically running faucets to ensure u-trap water are not dried out, particularly in high-rise buildings, might also help prevent transmission.

There is little disagreement regarding ramped up COVID protocols on job sites, and the presence of hand washing stations. In fact, several contractors tasked injured workers to build wash basins to be used on jobsites. However, there remains one large elephant in the room in terms of fecal aerosol transmission — the Johnny on the Spot or portable toilet. Not only are they often unsightly, unsanitary, and overflowing, we can add to that list a potential source of COVID transmission.

COVID Transfer Rate Greater, In Spite of Social Distancing

In 2020, the Journal of Infection published a letter from the British Infection Association regarding "The role of the environment and pollution in the prevalence of COVID-19." It recognized many efforts have been made to reduce direct contacts (person to person) and personal hygiene, unfortunately, we are still seeing the prevalence of this disease worldwide. Now this question arises, why still in some regions is the COVID-19 transfer speed greater despite the implementation of a social distance plan?

It notes the environment around us is fraught with contaminants and surfaces that can unintentionally expose the human to the virus. Therefore, to investigate the prevalence of coronavirus, it should be more attentive to environmental pollution. Environmental pollutants may play a significant role in the COVID-19 spread include air pollutants, sewage, polluted water, and waste, which their role in indirect expansion of the virus should be considered.

Researchers demonstrated that chances of contracting the coronavirus increases in air containing particular matter concentrations due to their very small size, easily penetrate to the lower respiratory tract and as a result, they can carry the coronavirus directly into the alveo and tracheobronchial region.

COVID Can Survive 9-days In Fecal Sewer Reservoirs

Another important way for virus transmission is sewer systems. The urine and stool of a patient can enter the virus into the sewer network and cause it to release. A study by *Weber et al.* 2016 explained that the Severe Acute Respiratory Syndrome-CoV could stay viable for about 4 hours in the stool. *Tang et al.* 2020 reported that the coronavirus could survive 9 days in the fecal and sewer systems. Thus, with knowledge of this issue, during the toilet flushing, urinary and fecal aerosols can carry the virus and infect the ambient air. If personal hygiene is not good, the situation will get worse. Persons who have tested positive for COVID-19 should use a separate toilet.

From the beginning of the COVID-19 outbreak scientists at CDC and around the world have been working to identify sources of transmission and started to examine fecal aerosols which were implicated in a very large SARS outbreaks in Hong Kong.

Let's Err on the Side of Clean Washrooms

With health scientists and infectious disease specialists sounding the alarm that the third COVID wave is here, we must be guided by the Precautionary Principle that Justice Archie Campbell espoused when he investigated Ontario's SARS outbreak in the hospital health care



sector. One of his chief findings was "we cannot wait for scientific certainty before we take reasonable steps to reduce risk." And when dealing with "serious infectious disease outbreaks, we must follow the precautionary principle and err on the side of caution."

As we move towards mass vaccination and herd immunity, please remain vigilant, get tested and wear PPE. All employers and every union representative MUST pay attention to unsanitary washroom and toilet facilities because the medical science suggests fecal aerosol transmission is a probable factor in spreading COVID-19.

Clean washrooms are not just sound policy for the health, safety, and dignity of all construction workers, it's absolutely necessary during a pandemic.

In Solidarity,

Chris Paul

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Brother Tom Leduc

It is with sadness that we inform our membership of the sudden passing of Brother Thomas Edward "Tom" Leduc.

Brother Leduc passed away suddenly at his home in Waubaushene on Friday, March 26, 2021 at the age of 72.

Brother Leduc was unapologetically IBEW through and through. He took his job seriously and always had the best interest of his local members at heart.

Tom worked all over Canada and the U.S. so much so that he earned the nickname "Suitcase". He always had one packed over the thirty years he was on the tools and was welcome in any local he visited.

Tom dedicated fifty years of his life in active service to the IBEW, serving as President, Trustee, and for nearly a decade before his retirement as Business Manager of Local 1739.

Whether behind the desk or visiting members on job sites, Tom was proud of his home Local 1739 and encouraged brotherhood and family values.

Brother Tom has taken his last dispatch and in so doing leaves behind loved ones to remember him and a lasting impression in the minds of members that he touched along the way.

Derrick Smith

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PENSION & BENEFITS VOTE SPECIAL CALLED MEETING APRIL 18, 2021

At this years Special Called Meeting the recommended benefit and pension plan changes (outlined inside this newsletter) are, for the most part, items that members were unable to vote on in 2020. Have your say on them by participating in this years virtual Special Called Meeting. This will be the first time in IBEW Local 353's history that benefit plan recommendations will be voted on electronically!

The Special Called Meeting will take place by Zoom on Sunday April 18, 2021 starting at 8:00 a.m.

Eligible members can participate by registering with the union no later than Friday, April 16th at 4:30 p.m.

There are two steps in the registration process:

- Visit the IBEW Local 353 website at ibew353.org and click on the MEMBER LOGIN on the top right hand corner of the page.
- Complete the electronic form and input your credentials to verify your eligibility.

Members are being asked to submit their questions ahead of time so that they can be answered at the meeting. There is a place right on the registration form to do this.

After registering, all eligible voters will receive an email containing a secure code and password to vote on the recommendations through Simply Voting.

Spread the word!

A copy of the presentations from Eckler and Canada Life are available on the secure side of our website at www.ibew353.org

HAVE YOUR VOTE COUNT - YOUR FUTURE DEPENDS ON IT