



Executive Summary

Overview

Post-COVID hand hygiene is necessary to better equip our communities against the unpredictable nature of the pandemic – a stabilizer for both the body and mind. The lessons and benefits we take away going forward will make navigating our “new normal” easier and help us to build a more resilient future.

Highlights

- The unpredictable nature of the pandemic, defined by changing vaccination needs and variables in human behavior, will require a stabilizing or grounding force especially in moments of high instability. A defense system of sanitization measures can help combat variables like breakthrough infections, variants of concern, misinformation, vaccine hesitancy, and “pandemic fatigue,” and ensure that any episodes of decline or recovery is as swift as it can be.
- Prolonged hand hygiene protocols can help to integrate habitual tasks that are constant and consistent to offset the anxiety and mental fatigue that comes with adjusting to an everchanging pandemic and post-pandemic life.
- Looking to the benefits of current public health measures can help us to exercise caution, and in turn, build a more resilient “new normal.” The decline in non-COVID illnesses like the flu and some respiratory illnesses, and initiatives to better address mental wellness in workspaces and communities alike, point to healthier bodies, healthier minds, and healthier environments conducive to how productive we want to be.

Actions to take

Moving forward, hygiene solutions will need to be built for the long-run and work to instill better hygiene practices overall. Some considerations to take are:

- Reducing or removing single-use plastics and working towards a sustainable post-pandemic world.
- Chemical mindfulness and employing sanitizers conducive to prolonged, everyday use.
- Employing smarter, cost-effective solutions that are conducive to prolonged use (reusable, durable, traceable, high-capacity, self-contained, low maintenance, versatile, options for messaging and offsetting costs).
- Doing more than just sanitization and equipping solutions to be communicators, guiders, anchors, reminders, and impression-makers.
- As organizations leaders, continuing to exercise safety initiatives to safeguard the health of your employees, customers, and work culture, and likely prompting others to join in on the effort.



So, why prolonged sanitization?

COVID is not the first pandemic of its kind to change our social expectations and daily habits in significant ways. The SARS outbreak of 2002-2004 saw the surge of wall-mounted sanitizer dispensers and safety measures such as face masks and hand washing, becoming not only social norms but signs of civic responsibility.¹ When COVID-19 cases began emerging across the globe, retreating to these safety measures came as second nature but advancements and refinements around programming and protocols have helped to ease restrictions and lull the initial panic over time. So, why prolonged sanitization? Because of uncontrollable variables and benefits we can take away going forward to 1. Make navigating our “new normal” easier, and 2. Build a more resilient future.

1. Variables and variations

The need for prolonged sanitization is highlighted by the unpredictable nature of the pandemic and its susceptibility to variations that cannot be controlled or contained. Its variable nature is also lodged by an air of speculation, distrust, and hesitancy. These variables largely fall under two categories: 1. The available epidemiological solutions and data, and 2. Human error.

a) Epidemiological solutions and data

The efficacy of COVID-19 vaccines has been a contested topic since the very beginning. Questions about whether the vaccine can deliver long-lasting effects and whether one brand of vaccine is more reliable than the next have been top of mind. Now, a year and a half into the pandemic, there is a general consensus that, although a good placeholder for the time being, vaccines are not 100% effective and will have to be modified as our vaccination needs change over time.²

Variables like breakthrough infections, variants of concern (VOCs), and adverse events of special interest (AESI) are at the forefront of our changing vaccination needs. There have been several reports of fully vaccinated individuals testing positive for the virus.³ No clear pattern of case demographics or vaccine characteristics have been identified to date, and most cases have been mild or moderate.⁴

The spread of variants like Delta B.1.617.2 is another pressing issue. Research has revealed that the variant may be up to 50 percent more transmissible than Alpha B.1.1.7,⁵ cause more significant illness, and is not as easy to detect with the available equipment.⁶ Post-vaccine infections and VOCs have contributed to the possibility of booster doses of vaccine, although the need and timing for them have not yet been established.⁷ Canada also launched its first national Vaccine Injury Support Program on June 1st, following cases of individuals experiencing severe effects, such as facial paralysis or blood clots, following their vaccine.⁸

The available epidemiological data, similar to vaccines, is not 100% accurate due to delays in reporting and testing, differences in data collection methods, and because not every infected individual gets tested or seek medical care.⁹ Many health officials have made it a point to avoid fixating on data¹⁰ not only to take into account inaccuracies and avoid misinformation,¹¹ but to relieve any fatigue or anxiety that may follow with the pandemic's accompanying “infodemic.”¹²

b) Human error

Human variability and the elusiveness of herd immunity is another factor that drives the need for prolonged sanitization protocols. As the available epidemiological solutions continue to showcase their variability, hesitancy has led certain individuals and communities to avoid vaccinations and testing altogether.¹³ This reluctance is largely defined by factors like complacency, convenience, and confidence,¹⁴ and reasons range from safety concerns, distrust in health organizations, political skepticism,¹⁵ and accessibility to autonomy and personal freedom.¹⁶

There has been a lot of discussion around ways vaccine hesitancy can be best combatted. Some companies have resorted to incentives and even “decentives” to guide the choices of their employees.¹⁷ Government support



programs have also put an emphasis on instilling public confidence to counter vaccine hesitancy.¹⁸ Some believe the best strategy is being attentive to concerns and providing good resources for individuals to make their own informed decisions.¹⁹

“Pandemic fatigue” is another contributing factor and is defined as the exhaustion and loss of motivation following months of spending extra time and energy adjusting to the variable nature of our new pandemic lifestyle.²⁰ As a result, many people are not necessarily reluctant to comply but due to fatigue contribute to a consistent decline in compliance, nonetheless.²¹

It is crucial that efforts be made to withhold current sanitary practices as way of addressing not only safety concerns but as way of integrating habitual tasks that are constant and consistent to offset the anxiety and mental fatigue that comes with adjusting to an everchanging pandemic and post-pandemic life. The variabilities themselves and significant efforts to mitigate them are proof enough.

2. Benefits to take into our “new normal”

At some point, we will reach a “new normal” with fewer restrictions and navigating it will largely be dependent on maintaining caution to ensure that regulations are further eased.²² As there is no way of mediating what groups and what variables will come into contact with each other going forward, employing measures that are controllable and containable will be vital. COVID is not a “one-off” public health crisis, and we will have to look to the benefits of current public health measures to exercise caution and work towards a more resilient future.

One such benefit is the ability to exercise caution against illnesses not related to the coronavirus. As the pandemic struck, influenza cases reported to the World Health Organization (WHO) dropped to miniscule levels, and epidemiologists found that measures such as social distancing, masking, and hand-hygiene protocols taken to prevent the spread of COVID also mitigated an array of non-COVID illnesses.²³ An Alberta study found a steep decline in respiratory illness, followed by an influenza season of zero recorded cases for 2021, and saw an overall boost in hospital space to treat COVID-19 patients.²⁴ As the existing epidemiological solutions and enforced safety measures develop over time, it is likely that recurrences of non-COVID illnesses can be better managed and perhaps contained in the future.

From a business standpoint, bringing health and safety cultures to the forefront can also be seen as a competitive advantage.²⁵ With growing concerns about workplace safety, some companies are re-evaluating the importance of workplace culture and launching employee assistance programs in areas of social, medical, financial, and mental health support alongside efforts to enforce hygiene protocols.²⁶ Initiatives to better integrate mental wellness into the fabric of the workplace is perhaps another accidental yet beneficial and crucial takeaway. Not only will this benefit employees in mitigating stress and anxiety, pandemic-related or not, employers and team leaders can also benefit from the positive correlation between mental wellness and productivity.²⁷

The effect of prolonged safety protocols is then two-fold. Adherence to safety measures will allow for safer work environments and healthier, more mindful employees, and may as a result, reduce absenteeism.²⁸ Likewise, the continued presence of protocols like support programs and hand hygiene will alleviate employee concerns about their wellbeing and everchanging pandemic measures, and may as a result, reduce presenteeism.²⁹ By providing a healthy work environment in both culture and hygiene, employees can be afforded not only a good work ethic but a healthy and happy lifestyle. It will be imperative for employers and team leaders going forward to take the initiative to build workplace culture with these safeguards in mind.³⁰

This framework can easily be applied outside of the workplace, to any individual or community impacted by the pandemic. Strangely, the repercussions of COVID have led us to better address a myriad of ancillary concerns. So, the question remains: why remove these safeguards when they point to a more resilient “new normal”?



3. Considerations for the future

Moving forward, improvements will need to be made to ensure that hygiene solutions are built for the long-run and work to instill better hygiene practices overall. When the pandemic first hit, businesses, institutions, and communities alike rushed to secure as much personal protective equipment (PPE) as possible.³¹ This initial “scramble” to understand and respond to the pandemic saw global shortages, and with growing demand, an influx of substandard solutions.³²

Many of these solutions were, and still are, dependent on single-use plastic items (SUPs). Healthcare and household units alike have generated an enormous amount of plastic waste from everyday use.³³ Plastic waste has always been a concern; however, the current pandemic, the urgency of human health, and our new habits have truly eclipsed this factor of environmental sustainability, as well as its socioeconomic implications.³⁴ A 2020 Nigeria-Canada-Australia study revealed that the amount of plastic waste generated worldwide since the outbreak is estimated at 1.6 million tons per day, and the possibility of marine ecosystems serving as potential vectors of pathogens through improper disposal practices.³⁵ COVID pollution studies stress the need to reevaluate waste management systems and implementing the use of reusable PPE.³⁶

Many hand hygiene solutions for example are dependent on SUPs like hand sanitizer bottles and pumps. With the growing market, improvements have been made to better address these concerns, however, more can be done to act upon a sustainable post-pandemic world.³⁷ Reusable solutions will have to be more durable and conducive to prolonged use, and also propose smarter, more efficient solutions that will function standalone to SUPs. Traceability, and with it accountability, will also be a contributing factor.

Chemical mindfulness is a growing area of concern. As hand hygiene continues to be closely integrated into daily routines, the makeup of the sanitizers themselves will need to be conducive to prolonged, everyday use. The topic of sanitizer ingestion illuminates some of these concerns. In August 2020, the U.S. Centers for Disease Control and Prevention (CDC) and the Food and Drug Administration (FDA) issued warnings about methanol-contaminated sanitizer ingestions³⁸ following several reports of severe effects including seizures and death.³⁹ More recently, Alberta's Poison and Drug Information Service (PADIS) saw a 200 per cent spike in hand sanitizer exposure calls in 2021 compared to 2019.⁴⁰ Pediatric ingestions have also been a growing concern amidst the pandemic,⁴¹ and sanitizer recalls have been an ongoing mandate due to the use of unpermitted ingredients and the improper disclosure of chemicals.⁴² Going forward, transparency on part of manufacturers, vigilance on part of consumers,⁴³ and clear instruction on part of facilitators and leaders to promote the correct use of sanitizer will be key.⁴⁴

For businesses, cost-effectiveness will be a deciding factor. Solutions will need to be high-capacity, self-contained, and therefore low maintenance. Businesses can also benefit from using their hand hygiene stations as platforms to communicate safety precautions, and offset costs and build strong associations through sponsorships.

Hand hygiene is one of the most accessible yet effective tools available to stop the spread of viruses.⁴⁵ Businesses and communities alike will need to make efforts to take advantage of this resource beyond *just* sanitization. Hand hygiene stations can be markers of guidance, a ritual, an access point, reassurance, a sign of civic responsibility or a simple daily reminder. Most of all, these safeguards will get us back out there, to a more resilient “new normal” that it's helped to build.

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