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Using Hand Sanitizer Safely During the COVID-19 Pandemic

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Faculty/Presenter Disclosure Statement

Faculty: [Anne-Marie Nicol, PhD](#)

Relationships with commercial interests: [None](#)

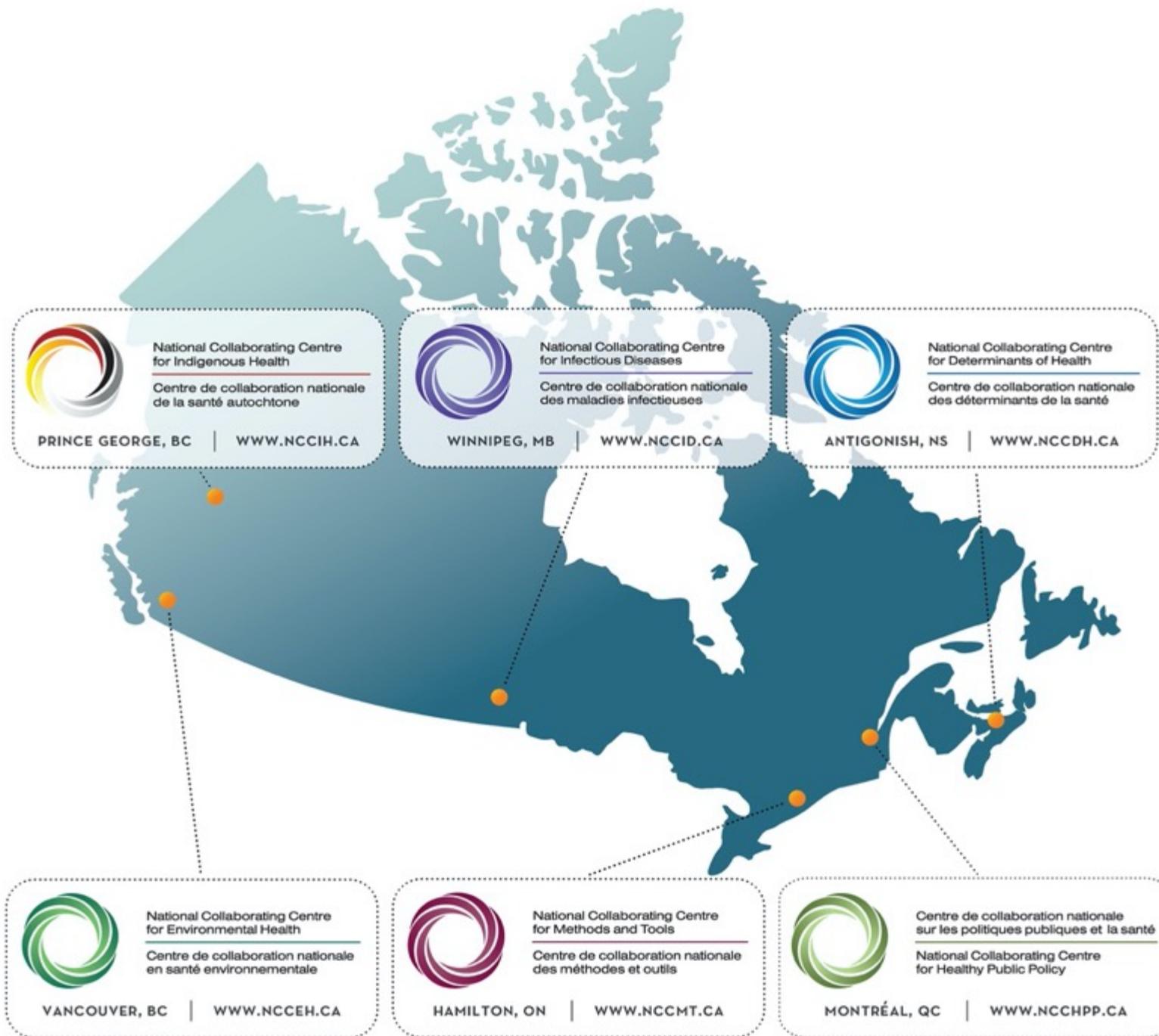
Grants/Research Support: [None](#)

Employee of National Collaborating Centre for Environmental Health
(funded by the Public Health Agency of Canada)

Evidence-based
knowledge synthesis
and translation

Identify
knowledge gaps

Foster networks,
build capacity for
Canada's public
health system



Outline

1. COVID-19 response: NCCEH KT
2. The rise of hand sanitizer in Canada
3. Production and challenges
4. Safety considerations if you use or purchase hand sanitizer
5. NCCEH resources available via links at the end of presentation

An Introduction to SARS-CoV-2

Regularly updated:

- Genomics
- How is the virus transmitted?
- When is the virus transmitted?
- Sensitivity to environmental factors
- Persistence on surfaces

The screenshot shows the website of the National Collaborating Centre for Environmental Health (NCCEH). The header includes the NCCEH logo, name in English and French, and social media icons. A navigation menu contains links for ABOUT US, PRODUCTS, COURSES, EVENTS, BLOG, FORUM, and FRANÇAIS. The breadcrumb trail reads: You are here: Home > Documents > Evidence synthesis > An introduction to SARS-CoV-2.

An introduction to SARS-CoV-2

Topic: [Full Document](#) | [Content lists and Hazards](#) | [COVID-19](#) | [Infectious Diseases](#)

[Last Updated Nov 10, 2020]

An introduction to SARS-CoV-2

The emergence of a novel coronavirus in late 2019, identified as SARS-CoV-2, has resulted in a global pandemic accompanied by an unprecedented public health response. This brief review of the properties of SARS-CoV-2 and how it is transmitted outlines some of the evidence that currently forms the basis of the evolving public health response. This document has been updated from previous versions published in April and July 2020 to reflect new findings and provide additional information about the virus that may be relevant to the public health response. As new evidence and new interpretations evolve, this document will continue to be updated.

SARS-CoV-2-genomics

Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) is the coronavirus responsible for the illness COVID-19. Coronaviruses are genetically distinct from viruses that cause influenza. They are enveloped, single-stranded RNA viruses whose surface is covered by a halo of protein spikes, or "spikes." Other coronaviruses that have caused significant and lethal outbreaks in the past 20 years include SARS-CoV-1 and MERS-CoV that caused SARS and Middle East respiratory syndrome (MERS), respectively. Phylogenetic evolutionary analysis has helped to establish that SARS-CoV-2 emerged in the human population in November 2019. Since then, continued analysis of the genomes in COVID-19 cases from around the world has identified small mutations that can be used to track the evolution of the virus.

The rate of mutation observed for SARS-CoV-2 is significantly lower than influenza, suggesting it is evolving more slowly in response to selective pressure.^{1,2} Monitoring genomic variants can help inform how the disease is spreading geographically.^{3,4} The dominant variants have shifted over the course of the pandemic, with the first wave in Europe being associated with a variant first emerged in February 2020 and became the most dominant form globally (e.g., D614G).^{5,6} During the summer of 2020, two new variants emerged in Spain accounting for the majority of sequences now observed in Europe (e.g., 20A/SUI and 20A/EUI).⁷ Genomic sequencing identified that these variants spread across Europe during a period of quarantine-free travel between many countries, highlighting a potential impact of relaxing travel restrictions.

Research is ongoing to understand how the evolution of the virus in different geographies is affecting transmissibility and severity of disease.^{8,9} Genomic surveillance data¹⁰ and conventional epidemiological techniques such as contact tracing are being used by leaders to trace the origin of outbreaks, identify clusters, and understand distribution in target populations (e.g., children and the elderly). Tracking genomic variants to health and epidemiological data can help to inform the public health response, vaccine development and the design of therapies.¹¹ Genomic sequencing and surveillance has also been proposed as a means of tracing the links between animal hosts and humans as part of efforts to prevent future pandemics,¹² and more on genomic surveillance below.

Symptoms and severity of disease

Symptoms

Symptoms of COVID-19 can include cough, fever, shortness of breath, breathlessness, sore throat, body aches, chills, and headache. Some people may also experience loss of smell or taste, nausea, vomiting or diarrhea. In some severe cases the disease can result in lethal pneumonia.^{13,14} Among children, abdominal symptoms and skin changes or rashes may be more commonly

NCCEH COVID-19 Response: KT



NCCEH COVID-19 Response: KT



When informing residents about additional cleaning measures, strata councils are cautioned against indicating that the additional cleaning is eliminating or even significantly reducing the risk of COVID-19 transmission at the property.

The National Collaborating Centre for Environmental Health (NCCEH) is a knowledge translation unit funded by the Public Health Agency of Canada and hosted within the BC Centre for Disease Control. They developed a [COVID-19 guide on cleaning and other precautions in multi-unit housing](#) that includes information on cleaning products and personal protective equipment for cleaners.

Laundry Rooms

The [NCCEH COVID-19 guide on cleaning and other precautions in multi-unit housing](#) has information about using and cleaning laundry rooms.

- NCCEH has created a [poster for shared laundries](#) with simple precautions to reduce the risk of transmission

Using Shared Laundry Facilities During the COVID-19 Pandemic



National Collaborating Centre for Environmental Health
Centre de collaboration nationale en santé environnementale

Current research suggests that SARS-CoV-2, the virus that causes COVID-19, can live for hours to days on hard surfaces, so laundry machines, countertops, and furniture need to be sanitized frequently. Health Canada has created a list of disinfectants that are safe and effective against the virus.

Although laundry from sick people should be kept bagged and separate while in your home to prevent accidental handling, there is no need to wash or dry these items separately.

DO'S



Wash your hands before and after.

Wipe down controls, and handles before and after use.



Wash with soap and the warmest water possible. Do not overload the machine.



Keep a 2 m distance from others.



Disinfect your hamper before filling it with clean clothes.



Dry items at highest temperature possible and dry them completely.



DONT'S



DON'T shake dirty laundry before putting it in the machine.



DON'T leave soiled clothing or baskets on top of machines or tables.



DON'T leave cleaning residues (like bleach) that could damage other people's clothing.



DON'T leave dryer door open when not in use.



DON'T forget to wash your hands!



COVID-19 Topic Pages

Environmental health resources for the COVID-19 pandemic

Building shutdown and re-opening

COVID-19 management during public health emergencies

COVID-19 resources as they pertain to specific EH areas.

Targeted to property managers with enacting a temporary closure, cleaning, and re-initializing.

Adapt typical emergency management practices and procedures during pandemic

NCCEH COVID-19 Response: KT

Masking during the COVID-19 pandemic

COVID-19 Risks and precautions for the performing arts | choirs

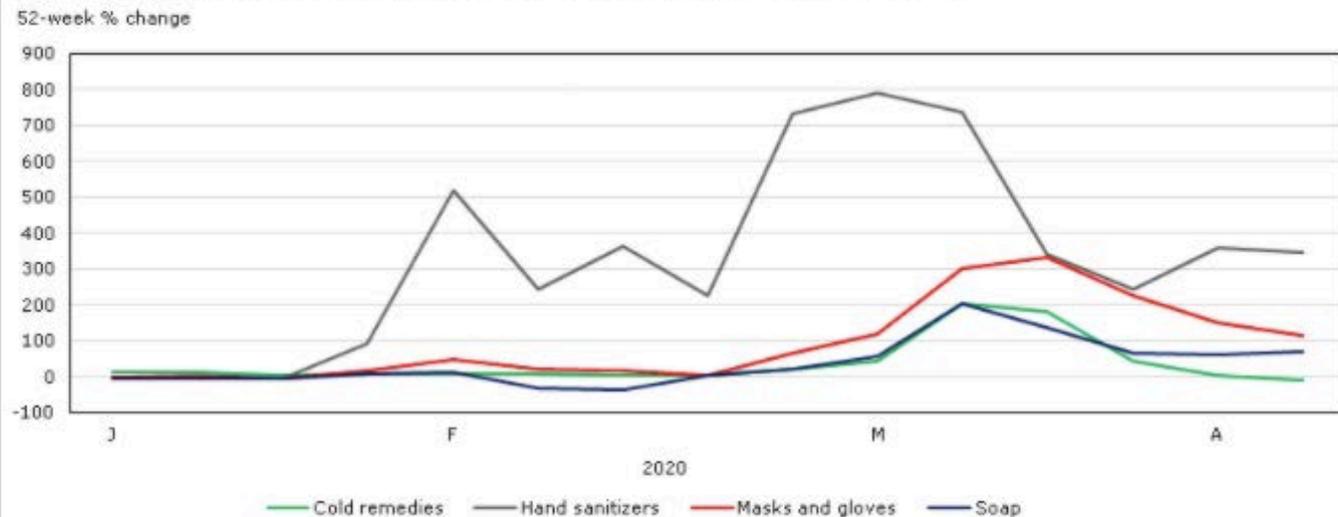
COVID-19 in indoor environments: air and surface disinfection measures

Specific settings: high humidity; public washrooms; commercial venues



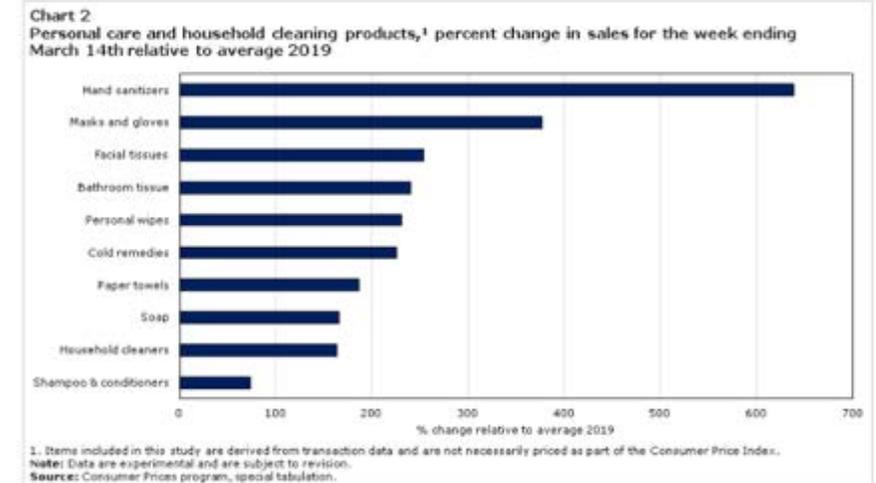
Early surge in hand sanitizer purchases across Canada- shortage ensued

Chart 2
52-week change in weekly sales of select health and personal care items



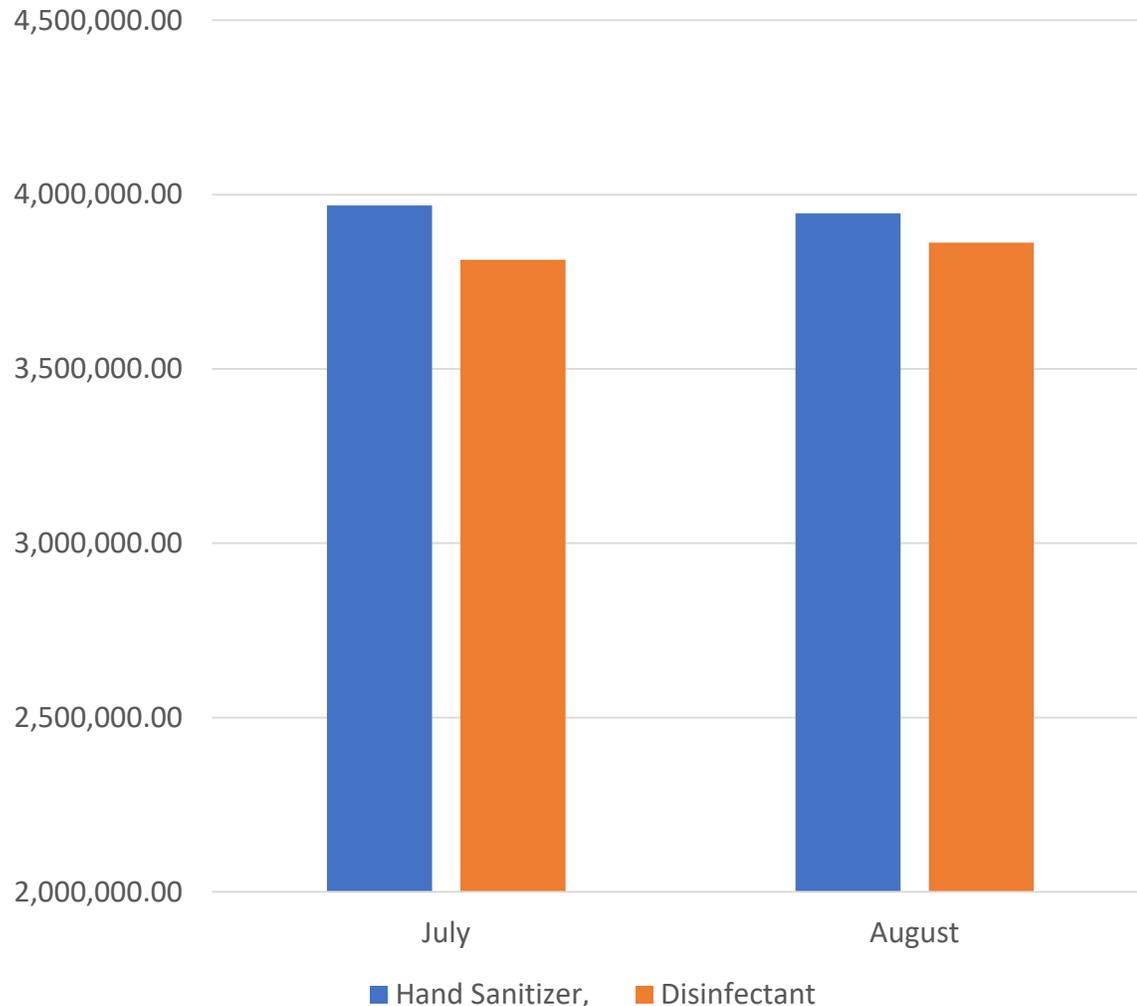
Note: Data are experimental and are subject to revision.
Source: Consumer Prices program, special tabulation.

Personal care and household cleaning products sales surge



Statistics Canada

Estimated use of essential PPE, all businesses, *in litres*. July and August 2020 (last published date) Cansim: Table: 13-10-0786-01



Businesses including retail, food services and accommodations have significantly increased purchase and use of hand sanitizer and cleaning and disinfecting products

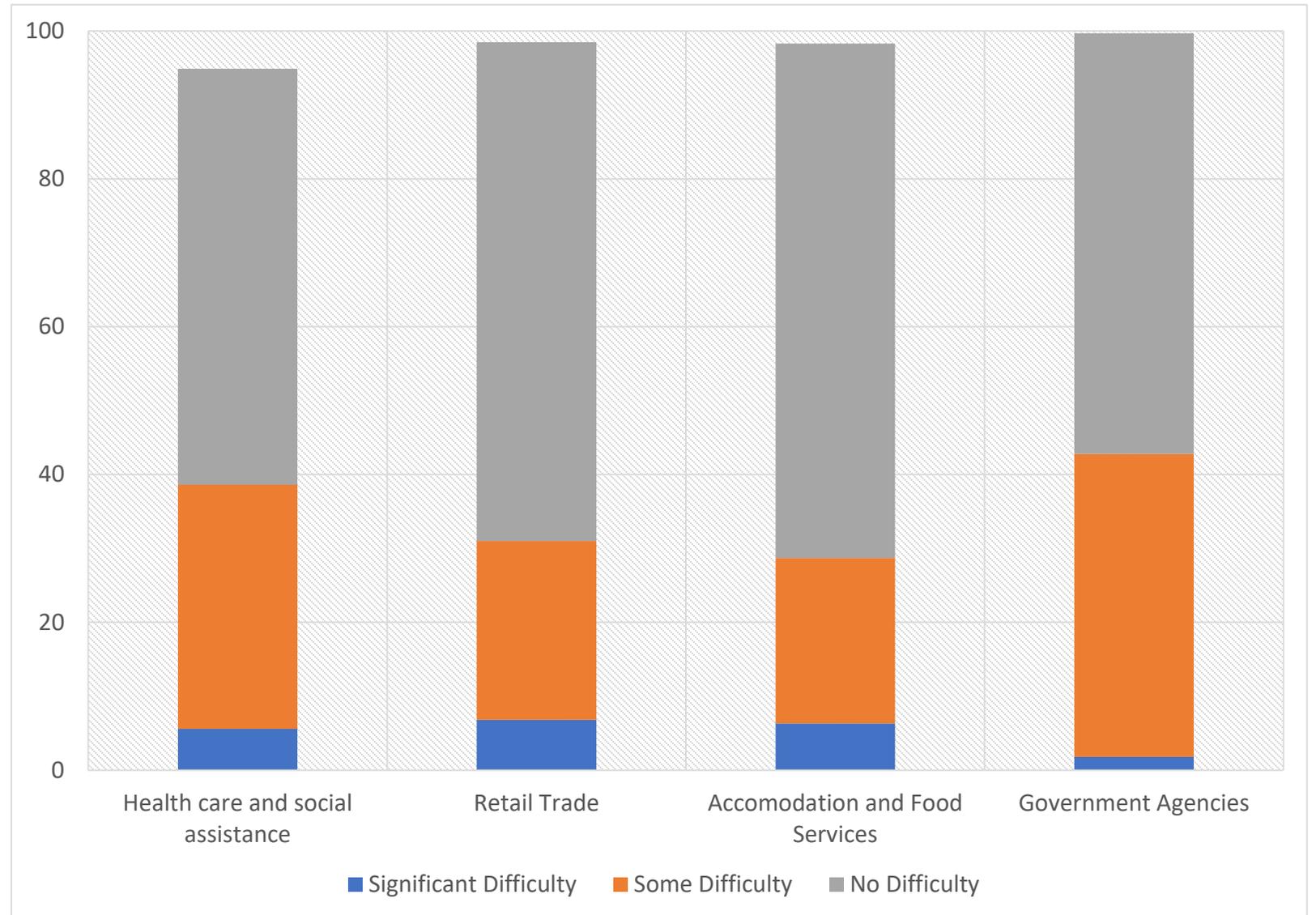
Accessed November 20th, 2020

Statistics Canada

Purchasers level of difficulty accessing products Sept-Oct 2020

Table: 33-10-0289-01

Product: Hand Sanitizer



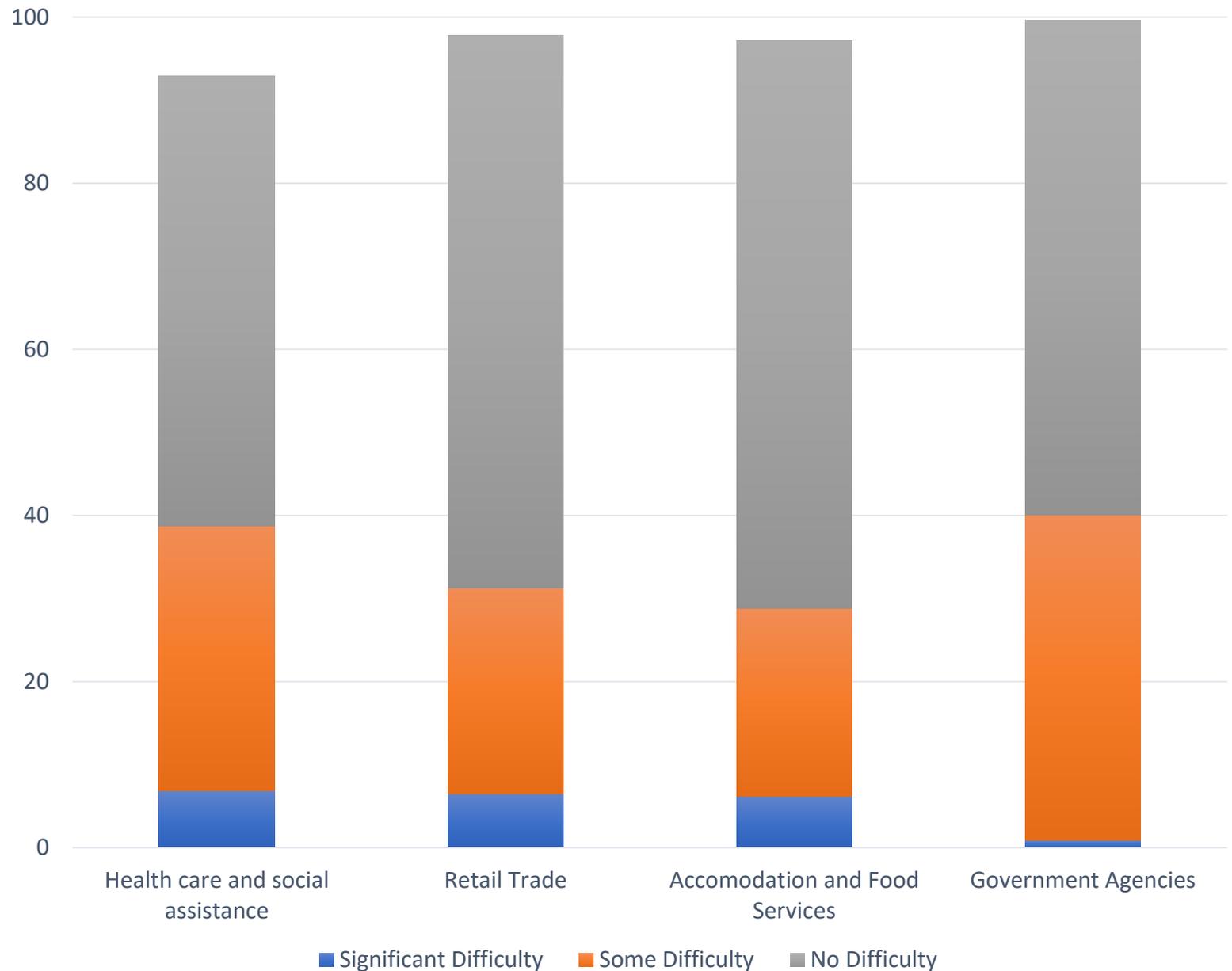
Accessed November 20th, 2020

Statistics Canada

Purchasers level of difficulty accessing products Sept-Oct 2020

Table: 33-10-0289-01

Product: Cleaning and Disinfecting



Accessed November 20th, 2020

TitosVodka @TitosVodka

Per the CDC, hand sanitizer needs to contain at least 60% alcohol. Tito's Handmade Vodka is 40% alcohol, and therefore does not meet the current recommendation of the CDC. Please see attached for more information.



Per the Center for Disease Control and Prevention (CDC), "washing hands with soap and water is the best way to get rid of germs in most situations. If soap and water are not readily available, you can use an alcohol-based hand sanitizer that contains at least 60% alcohol. You can tell if the sanitizer contains at least 60% alcohol by looking at the product label."

Tito's Handmade Vodka is 40% alcohol, and therefore does not meet the current recommendation of the CDC.

Source: <https://www.cdc.gov/handwashing/when-how-handwashing.html>

10:07 AM · Mar 5, 2020

SMALL *Dillon's* BATCH

THE DISTILLERS MADE HERE WHAT WE MAKE WHERE TO GET IT BLOG RECIPES CONTACT ENLIST SHOP

NEWS & CULTURE

HAND SANITIZER




Shortages- pivots and problems



Check to see if your product is approved for use during COVID-19 by comparing the name or drug information number (DIN) at bitly/zy@p1W



NCCEH developed resources early on to support public health

- Blogs and a poster focused on
 - How to apply
 - When to use
 - Safe storage
- Orient people away from DIY products
 - ineffective
 - dangerous
- Health Canada developed an authorized products list

<https://ncceh.ca/sites/default/files/NCCEH%20Hand%20Sanitizers%20COVID-19%20poster%20EN.pdf>

Hard-surface disinfectants and hand sanitizers (COVID-19): List of hand sanitizers authorized by Health Canada

[Overview](#)

[List of disinfectants \(COVID-19\)](#)

List of hand sanitizers

[Information for manufacturers](#)

[Products accepted under interim measure](#)

Note: This list is updated regularly, so please check back often.

The following antiseptic/antibacterial skin cleansers or hand sanitizers meet Health Canada's requirements and are authorized for sale in Canada.

To date, there are no hand sanitizers in Canada approved with COVID-19 related claims. Although they have not been tested for effectiveness against viruses such as coronaviruses, [hand sanitizers](#) can help reduce the risk of infection by, or spread of, microorganisms.

Inclusion on this list does not constitute an endorsement by Health Canada.

How to find out which antiseptic skin cleansers or hand sanitizers meet Health Canada's requirements for sale in Canada.

1. Locate the Natural Product Number (NPN) or Drug Identification Number (DIN) on the product label
2. Look for that number on the [hand sanitizers list](#)

- [Notice to industry](#)
- [Suppliers of technical grade ethanol for use in the production of hand sanitizers](#)
- [Risk assessment summary report](#)
- [Manufacturers of hand sanitizers using technical-grade ethanol](#)

Filter items Showing 1 to 15 of 15 entries (filtered from 4,430 total entries) | Show entries

Drug identification number (DIN) or natural product number (NPN) ↑↓	Product name ↑↓	Company ↑↓	Active ingredient(s) ↑↓	Alcohol based ↑↓	Product form ↑↓
80097807	Mill Street Brewery	Labatt Brewing Company Limited	Ethyl alcohol	Yes	Liquid
80098041	Farmery Hand Sanitizer	Farmery Estate Brewery	Ethyl alcohol	Yes	Liquid
80098050	Minhas Micro Brewery Hand Sanitizer 80%	MCBSW Creative Services Inc dba Minhas Micro Brewery	Ethanol	Yes	Liquid
80098100	Minhas Sask Hand Sanitizer 80%	Minhas Sask Ventures Inc dba Minhas Sask Distillery, Winery & Brewery	Ethyl alcohol	Yes	Liquid
80098278	Good Mood Brewery	Good Mood Brewery	Ethyl alcohol	Yes	Liquid
80098340	Muskoka Brewery Hand Sanitizer	Muskoka Brewery	Ethyl alcohol	Yes	Gel
80098352	Hand Sanitizer	Black Bridge Brewery	Ethyl alcohol	Yes	Gel
80098382	Troubled Monk Hand Sanitizer	Troubled Monk Brewery Ltd.	Ethyl alcohol	Yes	Liquid
80099012	Great Lakes Hand Sanitizer	Great Lakes Brewery	Ethyl alcohol	Yes	Solution
80099131	Troubled Monk - Isopropyl Sanitizer 75%	Troubled Monk Brewery Ltd.	2-Propanol	Yes	Liquid
80099211	Pump House Ethanol Sanitizer 80%	Pump House Brewery	Ethyl alcohol	Yes	Liquid
80100181	Snowgoose-Ethanol sanitizer 75%	Snowgoose Brewery Inc.	Ethyl alcohol	Yes	Spray
80100526	Yellowbelly Brewery Ethanol Sanitizer - 80%	Yellowbelly Brewery	Ethyl alcohol	Yes	Gel
80102249	Big Rig Hand Sanitizer	Big Rig Brewery	Ethyl Alcohol	Yes	Liquid
80102500	Hell's Basement Brewery Hand Cleanser	Hell's Basement Brewery Inc.	Ethyl Alcohol	Yes	Liquid

<https://www.canada.ca/en/health-canada/services/drugs-health-products/disinfectants/covid-19/hand-sanitizer.html>

Many new sectors producing hand sanitizer

- Breweries
- Wineries
- Vape manufacturers
- Hair Care
- Cosmetics
- Pharmaceutical
- Commercial Printers
- Metal products manufacturing



BioLife Sciences Inc. (BLFE) Announces the Recent Sale of Over 250,000 Bottles of Hand Sanitizer

September 24, 2020 09:47 - Source: BioLife Sciences Inc.

Toronto, Canada, Sept. 24, 2020 (GLOBE NEWSWIRE) -- via [NewsMediaWire](#) - BioLife Sciences Inc. (OTC Market: BLFE) is pleased to announce the sale of over 250,000 units of BioLife Sciences' specially formulated 70% Ethyl Alcohol Hand Sanitizer. Sales were conducted through BioLife-owned brands and their extensive network of wholesalers and distributors.

The alcohol-based hand sanitizer units were distributed to Canadian retailers including (but not limited to) Home Depot, Canadian Tire and Home Hardware. "We are very pleased that BioLife was able to assist Canadians during the peak of the pandemic with safe and effective hand sanitizer," said Mr. de Fries, CEO of BioLife Sciences. "Our goal is to ensure the public has access to quality products especially during these trying times."

Profile: BioLife Sciences Inc.
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News Alerts



Sylvan Lake brewery producing hand sanitizer during pandemic

Snake Lake Brewing Co. will continue to produce the hand sanitizer as long as there is a need

NEWS RELEASE | May 20, 2020 10:59 a.m. | LOCAL NEWS | 1000



A Sylvan Lake brewery has added an unexpected item to their production list: hand sanitizer.

"It's funny to go from producing beer, doing that as your one focus, and then now we're producing the product that none of us ever thought would ever come out of this building and now here we are," said Adam Nachbauer, co-owner at Snake Lake Brewing Co.

Problems and recalls emerged

Contaminants found in products

- *Ethyl Acetate*
- **Methanol**
- Unapproved additives

Side effects

- Headaches, dry skin, irritation
- Methanol particularly toxic
 - Dermal absorption
 - Very toxic if ingested

Labelling for products containing Technical Grade Ethanol

- Products contain more impurities than food grade ethanol

Label needs **added** cautions

- Not approved for use with pregnant or breast-feeding women
- Adult Use Only
- Do not use on broken or damaged skin

Manitoba government spent \$1.2M on unauthorized hand sanitizer subject to recall



Shared Health wouldn't say how much of the unauthorized hand sanitizer was used, or who had it



Ian Froese · CBC News · Posted: Aug 10, 2020 7:07 PM CT | Last Updated: August 10



How to protect yourself from toxic hand sanitizers

More Americans than ever are relying on hand sanitizers to keep ourselves and our families healthy, given the global pandemic. But some hand sanitizers are putting our health in danger.

8/31/2020 | Aaron Colonnese Creative Associate

More Americans than ever are relying on hand sanitizers to keep ourselves and our families healthy, given the global pandemic. But some hand sanitizers are putting our health in danger.

WEATHER SPORTS BEST OF VIDEO MORE

Than 100 Potentially Toxic call

is, COVID-19, FDA warning, Hand Sanitizer, methanol, Toxic, wood alcohol

RICHMOND NEWS ≡ MENU

Home » News

Health Canada recalling over 50 hand sanitizers

Kirsten Clarke / Richmond News

AUGUST 6, 2020 03:00 PM



Affected products

Certain hand sanitizers are being recalled because they either contain ingredients that are not permitted by Health Canada or are not properly labelled and are missing important information.

Product description

Show entries

Search:

Affected products

Product	Reason for recall	Recalling company	NPN or DIN	Affected lot number(s)	Expiry date	Date added
Siding 14 Brewing Company - Ethanol Sanitizer 80%	Missing risk statements; product not authorized to contain technical-grade ethanol	Siding 14 Brewing Company Ltd.	80098925	20.046 to 20.073	Not printed on the label	2020-11-13
Bio Life Hand Sanitizer	May contain unacceptable ingredient, methanol	10932540 Canada Inc./ Bio Life Sciences Corp.	80101522	All	All	2020-11-13
Snake Lake Brewing Company - Ethanol Sanitizer 80%	Missing risk statements; product not authorized to contain technical-grade ethanol	Snake Lake Brewing Company, Inc.	80100225	0002	May 2022	2020-11-02
Daily Shield Hand Sanitizer	Contains unacceptable ingredient, methanol; ethanol content is less than the recommended amount to be effective	10932540 Canada Inc./ Bio Life Sciences Corp.	80098979	All	All	2020-11-02
Pure Essentials Lavender and Saeo Hand	Not authorized for sale in Canada; contains	Pure Essentials	Unlicensed (no NPN or	All	Not printed	2020-10-

Health Canada created searchable database for recalled products and lots.



Morbidity and Mortality Weekly Report (MMWR)

CDC



Serious Adverse Health Events, Including Death, Associated with Ingesting Alcohol-Based Hand Sanitizers Containing Methanol — Arizona and New Mexico, May–June 2020

Weekly / August 14, 2020 / 69(32);1070–1073

On August 5, 2020, this report was posted online as an MMWR Early Release.

Luke Yip, MD¹; Danae Bixler, MD¹; Daniel E. Brooks, MD²; Kevin R. Clarke, MD¹; S. Deblina Datta, MD¹; Steven Dudley Jr., PharmD³; Kenneth K. Komatsu⁴; Jennifer N. Lind, PharmD¹; Annaliese Mayette, PhD⁵; Michael Melgar, MD¹; Talia Pindyck, MD¹; Kristine M. Schmit, MD¹; Steven A. Seifert, MD⁶; Farshad Mazda Shirazi, MD, PhD³; Susan C. Smolinske, PharmD⁷; Brandon J. Warrick, MD⁶; Arthur Chang, MD¹ ([View author affiliations](#))

[View suggested citation](#)

Summary

What is already known about this topic?

Alcohol-based hand sanitizers should only contain ethanol or isopropanol, but some products imported into the United States have been found to contain methanol.

What is added by this report?

From May 1 through June 30, 2020, 15 cases of methanol poisoning were reported in Arizona and New Mexico, associated with swallowing alcohol-based hand sanitizers. Four patients died, and three were discharged with visual impairment.

Article Metrics

Altmetric:



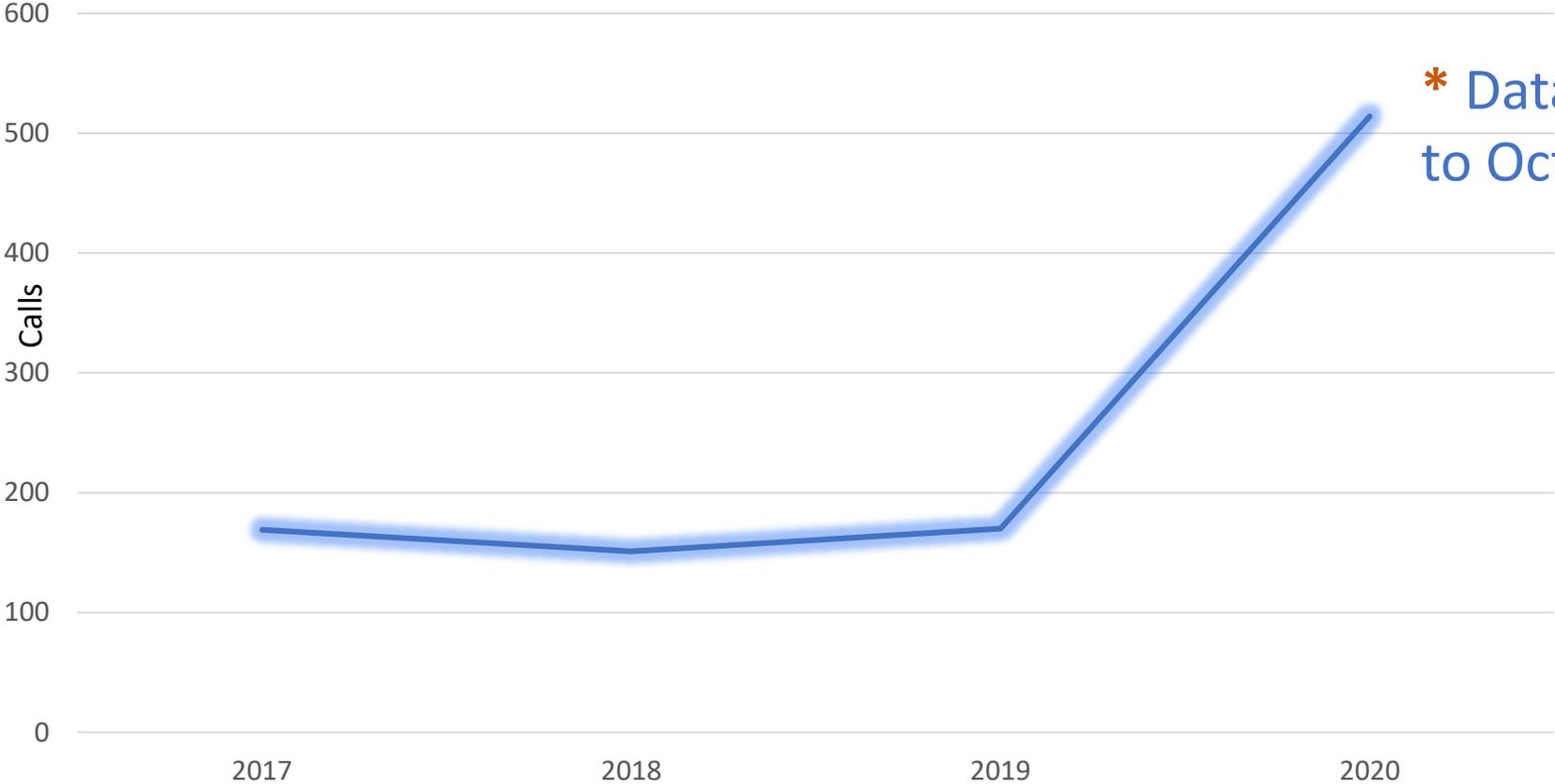
News (161)
Blogs (3)
Twitter (1598)
Facebook (11)

Citations: 0

21

Hand sanitizer related calls to BC Drug and Poison Information Centre (DPIC)

Number of Hand Sanitizer-related calls, by year



* Data- January to October 2020

Most frequent call topic was ocular involvement and next topic was vomiting

ALERT: Hand Sanitizers That Look Like Drinks

In this time of shortages across the country, many companies have taken up the call to manufacture hand sanitizers, so there is greater access to these products. There is a risk that hand sanitizer will be swallowed by accident by an adult or child when it is provided in containers that are usually used for drinks such as soda, water, and alcoholic beverages.

INCIDENT

ISMP Canada received a recent report from a concerned consumer about a hand sanitizer (Figure 1) being sold in a grocery store. He picked up a bottle thinking it contained a drink but soon realized it was hand sanitizer. The consumer shared that the product inside the bottle was a liquid, not a gel—it looked just like water. He was concerned that the product would be mistaken for water and ingested.

RISK OF ACCIDENTAL POISONING

Many companies are trying their best to get hand sanitizers out to those who need them, but they may be limited



Figure 1:

Photo of a hand sanitizer sold in a 2-litre bottle usually used for drinks.

in their ability to create or find appropriate packaging. For example, the manufacturer of the product in Figure 1 has reported difficulty in obtaining bottles normally used for household products. Instead, the manufacturer is distributing hand sanitizer in 2-litre bottles (as shown) and 500-mL containers commonly used for drinks like soda and water. Others are using containers that are already available in their pre-pandemic production processes, such as wine and liquor bottles (Figure 2 and 3). In some cases, the labels and branding are similar to known alcoholic beverages, possibly increasing the risk of accidental poisoning.

Another potential concern is the reduced ability for consumers to recognize that the product is not intended for drinking because of its taste. Most hand sanitizers contain alcohol that has been deliberately



Figures 2 and 3:

Examples of hand sanitizer sold in wine and liquor bottles.

IWK's child safety specialist warns against potential harm of hand sanitizer marketed to children



By Aya Al-Hakim · Global News

Posted August 24, 2020 12:52 pm



Hand-sanitizers marketed to young children are being sold in the province. Reynold Gregor/Global News

DPIC calls related to Hand Sanitizer- distribution by BC Health Region and Age

	Interior	Fraser	Vancouver Coastal	Vancouver Island	Northern
Younger Children (0-5)	36	126	59	44	16
Older Children (6-19)	3	12	8	8	4
Adult (20 and above)	17	53	60	40	11
Total Hand Sanitizer Calls	56	191	127	92	31
Total Calls by HA/% HS	4343 (1.3%)	9361 (2.0%)	6083 (2.1%)	5356 (0.8%)	2041 (1.5%)

Potential new issue? Hand Sanitizers are flammable products

ONTARIO POWER GENERATION **Flash Report** **Safety & Environment** *iCare* Zero Injuries Protect the Environment

INITIATED BY:
 CORPORATE GROUPS
 RENEWABLE GENERATION
 NUCLEAR
 ENTERPRISE PROJECTS

Notice No. 20-0006-SR Issued: 2020-Apr-29
OPG Safety Records #08960.2424 T5
 OPG Environment Records # 08507 T5mm
 yyyy/mm/dd

Initial Communication Summary of Investigation

Type of Event	Bulletin - External Event Fire Hazard - Ignited Hand Sanitizer
Title	Fire Hazard - Ignited Hand Sanitizer
• Location	Gassco, Haugesund, Norway
• Type of Event	Fire - Injury
• Description	The vapour from an alcohol based hand sanitizer ignited due to static electricity, causing burns to both hands.
• MRPH Rating	Low
• Environment - Significance Rating	
Date of Event	April, 2020
Event Summary	A Gassco employee used an alcohol based hand sanitizer as recommended during the COVID-19 pandemic. The individual touched a metal surface before the liquid evaporated. Due to static electricity, the vapour from the hand sanitizer ignited with an almost invisible flame on both hands. The person quickly managed to get to a sink to extinguish the flames and suffered first and second degree burns on the hands.



Issues and challenges to address

- More **education** and better **access to information** for consumer and purchasers
 - Collaboration between health promotion and health protection
 - Actively promote websites and portals
- How to navigate **difficult messaging**
 - Delicate balance- Promote use while advising about potential toxicity or problems
 - Improved information- particularly for kids
- Surveillance and transparency
 - Are products **harming** Canadians?
 - How robust is product **surveillance** for packaging and contamination?

Example- Current way to check products difficult to use

Technical-grade ethanol

Affected products

Certain hand sanitizers containing industrial-grade ethanol

Product description

Please note that the products in the following table are listed alphabetically, rather than by the date they were added.

Affected products						
Product	Unacceptable Ingredient	Recalling Company	NPN or DIN	Lot number(s)	Expiry Date	Date Added
Adclean (Technical)	Ethyl Acetate	Adfast Canada Inc.	80098241	200423-114854	April 2022	July 10, 2020
				200505-114929	May 2022	
Aktif Antiseptique instantané pour les mains	Ethyl acetate	Laboratoire Hygienex Inc.	80098088	189665189574	May 16, 2022	June 10, 2020
Biogel	Ethyl acetate	Groupe Savon Olympics, Inc.	80098684	0D991	April 2022	July 3, 2020
				0D992		
				0D963		
				0D964		
				0E998		
				0E997		
BioVectra Sanitizer	Ethyl acetate	BioVectra, Inc.	80097796	53473	September 2020	July 21, 2020
				53999	December 2020	
Biovectra Hand Sanitizer – Topical Gel	Ethyl acetate	BioVectra, Inc.	80099246	53491 53509 53518 53583	April 2021	July 21, 2020

Please note that the products in the following table are listed alphabetically, rather than by the date they were added.

Affected products					
Product	Reason for recall	Recalling Company	NPN or DIN	Lot number(s)	Date Added
204 Hand Sanitizer	Not authorized for sale in Canada; product not authorized to contain technical-grade ethanol; some lots contain technical-grade ethanol and are missing risk statements	204 Spirits Inc.	None	All	August 7, 2020
Agape Hand Sanitizer	Missing risk statements; product not authorized to contain technical-grade ethanol	Formula A Inc.	80099669 (does not appear on the label)	080620	July 17, 2020
Alco-Klean / Magiechem Inc. - Assainisseur À Base D'Éthanol 80%V/V	Missing risk statements; product not authorized to contain technical-grade ethanol	Magiechem Inc.	80099007	16679-200421	July 17, 2020
Ascencia Désinfectant pour les mains	Incorrect NPN; product not authorized to contain technical-grade ethanol; missing risk statements	Arclay Natural Technologies	80098625 appears on the label, which is the wrong NPN. 80100505 is the correct NPN.	EN142	July 6, 2020
Avery Essentials Hand Sanitizer	Missing risk statements; product not authorized to contain technical-grade ethanol	Universal Consumer Brands	80099591	20E31A	June 24, 2020
			80099412	20C30A 20D19A 20E08A 20E01A	June 24, 2020

Buyer beware, most not aware

ADDITIONAL PRODUCT INFORMATION

MICROSAN[®] Optidose[™]
Foaming Alcohol Handrub
NPN80002518

ACTIVE INGREDIENT: Ethanol 72% v/v (technical grade)

DIRECTIONS: Adults only. Apply to palms and rub hands together until dry. For external use only.

WARNINGS: Do not use on broken or damaged skin. Do not use if you are pregnant or breastfeeding. Do not inhale. Do not ingest. Keep away from flames and heat. Do not smoke while using.

Report any incident to

<https://www.canada.ca/en/health-canada/services/drugs-health-products/medeffect-canada/adverse-reaction-reporting.html>

Questions? Call 1-866-234-2345 to report any adverse reaction. In case of accidental ingestion, contact Poison and Drug Information Service at 1-800-332-1414.

Gather and connect partners

Bring in new skill sets to augment KT

Recognize new consequences likely to emerge

Keep communicating! apply best practices to continue to encourage people to:

Share experiences with other pandemic interventions that face similar challenges- ex- masks, face shields

What to do with recalled products??



When hand washing is not handy: Cautions for hand sanitizer use

Monday, April 27, 2020
Anne Marie Nicol

Washing hands with soap and water for at least 20 seconds is the most effective strategy for removing the COVID-19 virus from hands. In some situations, hand sanitizers can be used as a substitute if soap and water are not immediately available. Hand sanitizers (sometimes called hand rubs) are gels, foams, aerosols or liquids that contain antimicrobial agents. The goal of hand sanitizer use is to decrease the number of microorganisms on hands when soap and water aren't readily available. The majority of hand sanitizers are alcohol based and made from formulations of isopropyl alcohol, ethyl alcohol or n-propanol. Alcohol-based hand sanitizers are currently considered the most effective for sanitizing against viruses. Some of the other active ingredients approved by Health Canada include chloroxylenol, benzalkonium chloride, iodine, benzethonium chloride and chlorhexidine gluconate.

Shortages of hand sanitizers have led some to consider making their own using formulations found online. Health Canada has released a [warning](#) against making or purchasing homemade (DIY) products and recommends that Canadians who have these products stop using them.

Non-approved products and adverse effects from production or use

There are serious adverse outcomes that can occur from the production or use of homemade products. The alcohol-based ingredients needed to make SARS-CoV2 are flammable, can be toxic and must be handled with care in well-ventilated areas. With shortages of the basic ingredients needed to make some people may consider using other ingredients such as regular or over-proof alcohol. These substitutions are not recommended because the concern is that these solutions can destroy the SARS-COV-2 virus.

Due to current challenges accessing hand sanitizers, people may be considering alternative products such as witch hazel, tea tree oil and vinegar as replacements. However, these products do not meet Health Canada's criteria for use as disinfectants and **are not** recommended as hand sanitizer solutions. Even at low concentrations, bleach is a sanitizer ingredient as it is extremely corrosive and can damage skin, eyes and other tissues.



Hand Sanitizer contamination prompts more recalls during COVID-19

Monday, August 10, 2020
Anne-Marie Nicol

Hand washing with soap and water for at least 20 seconds is the preferred way to wash hands during the COVID-19 pandemic. When soap and water are not available, hand sanitizer is another easy, convenient, inexpensive, and accessible option to clean and disinfect hands. However, hand sanitizer use is not without risk. In April, the NCCCEH released a [blog](#) and [poster](#) that outlined how to use hand sanitizers safely and provided a link to the initial list of Health Canada authorized [products](#).

Beyond packaging- new concerns regarding hand sanitizer ingredients

Since May, Health Canada has issued and updated a series of recalls and advisories about specific brands and lots of hand sanitizers that have been sold in Canada. These warnings focus on problems with ingredients, labeling and false claims made by producers about effectiveness during COVID-19.

1) Contaminants in Hand Sanitizers

Health Canada's most common warnings and recalls on their [website](#) focus on hand sanitizers contaminated with ethyl acetate (a common solvent), methanol (wood alcohol) and unauthorized ingredients. The website provides information on the specific lot or serial numbers of the recalled products as well as the Drug Identification Number (DIN) or the Natural Product Number (NPN). This allows consumers to quickly reference their own products against the list. Health Canada cautions that products containing these ingredients could cause adverse reactions such as skin and eye irritation, upper respiratory irritation, skin cracking, dermatitis and headaches. The recalled products also pose a greater risk if consumed, particularly by children.

2) Technical grade hand sanitizer- not to be used by children or pregnant or feeding women

In late July 2020, Health Canada expanded an earlier [recall](#) of hand sanitizers that contain technical grade ethanol due to concerns about inadequate labeling. Technical grade ethanol may contain acetaldehyde and prolonged exposure to elevated levels of acetaldehyde has been linked to cancer. Health Canada's [risk assessment](#) has concluded that even though acetaldehyde levels in the hand sanitizer are low, products made with technical grade ethanol should only be used by adults and not by pregnant or breast-feeding women. To differentiate



<https://ncceh.ca/blog>



thank you!

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Statistics Canada

COVID-19 measures taken by businesses-

Retail outlets
Accommodation and Food Service

