



Environmental Sensitivities Coalition of Canada

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Canadian Transportation Agency
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To Whom it May Concern,

The Environmental Sensitivities Coalition of Canada is a disability advocacy group representing people with over one hundred disabilities that can be impacted by environmental irritants, allergens and sensory input.

Fragrance, quat and VOC sensitivities and allergies

As people with environmental sensitivities (ES) are negatively impacted by fragrances, quaternary ammonium compounds and high levels of volatile organic compounds (VOCs) in cleaning products, hand sanitizers, and personal care products, the use of these products in transit buildings, airports, taxis, planes, buses, ferries, subways, trains and LRTs are counter to accessible design as listed in the ACA. Currently, even though 32.2% of the population has self-identified as having negative health reactions to fragranced products, most forms of publicly available transportation do not meet the bare minimum in terms of accessibility for people with environmental sensitivities. Additionally, 1.1 million Canadians have been diagnosed with multiple chemical sensitivity, 3.8 million people have asthma, 2 million have chronic obstructive pulmonary disease, and 4.7 million people have migraines, all of whom can be affected by fragrances.

We invite you to review our full accommodation guide to see the full impact of physical issues these products can inflict on those with sensitivities. Allergic reactions can include rashes, rhinitis and oedema up to full anaphylaxis.

Recommendations

Cleaning products

All modes of transportation need to use scent free, no quat, low VOC soaps and detergents to clean their vehicles and facilities. As unscented soaps have been listed by the CDC as an effective choice to combat Covid-19, they are a safer

choice for people with ES. Considering, scented, quat and high VOC cleaning products have shown a link between [causing asthma in children](#) and [worse symptoms among healthcare workers](#).

Hand sanitizers

Health Canada states that there is [no proof that hand sanitizers kill the virus](#), but they can lower transmissions. As all hand sanitizers are not safe for people with ES, we recommend frequent hand washing with unscented hand soaps. In locations where no bathroom access is possible, refillable reservoir sinks could be set up. While not accessible for use by many people with ES, unscented benzalkonium chloride hand sanitizers (which contain quats) are preferred over alcohol based should public health insist on hand sanitizer use.

Fragrance free policies

Fragrance free policies need to be in place for passengers and staff for all modes of transportation. Fragrance free signs, awareness campaigns and ads should be created. A full list of items that could contain fragrances needs to be included in the policy. Any mode of transportation that requires advance tickets to be purchased should have full details of the policy, similar to any other travel advisory. People should be told they are at risk of having their travel cancelled or delayed if they do not follow the policy. As a transition measure, while policies are being enacted, having fragrance-free cars on trains and subways could be possible. On vehicles such as airplanes, a strict policy must be in place.

Ventilation

Proper ventilation is necessary for all modes of transportation. Charcoal based and UV-C HVAC systems are both good methods of keeping air clean. UV-C has the added benefit of helping microbial air treatment as in the case of Covid-19.

Product Sales

Sale of fragranced products in transportation facilities should be prohibited. Perfume departments, such as the duty free shop that passengers must traverse to gain entrance to their boarding gates, are huge access barriers and not accessible.

Pesticide Use

Disinsection policies on air planes are inaccessible. Currently, airplanes can spray insecticides on the airplane while passengers are sitting in their seats. The policy states that passengers are warned so that they can cover their eyes and mouth. This is not acceptable. Toxin testing rarely includes people with environmental sensitivities. People with ES react to low level substances that other people do not. Any propellant, including those in asthma inhalers can cause health issues in a person with ES. Both Permethrin and d-Phenothrin are toxic to humans in higher doses. Lower levels are not safe for people with ES. There have even been reports of people having asthma attacks, and skin peeling. This is not a safe practice for anyone and is definitely a barrier to access for people with ES.

Should pesticides be necessary on any flight, they should at minimum be sprayed when no passengers are on board. If a pesticide has been sprayed on a particular vehicle in the past, or is intended to be sprayed on a flight, there should be a prominent warning to passengers prior to ticket purchase. Passengers should be warned again before boarding.

Food Allergies

Additionally, food allergies affect as many as 6-8% of the population in Canada. People with food allergies can have symptoms ranging from rashes to full anaphylaxis, which causes them to stop breathing and potentially go into cardiac arrest. Many modes of transportation provide airborne allergenic foods for purchase, which is a risk to the safety of people with anaphylaxis. Many of those who have no food policies do not enforce them.

Recommendations

We recommend that any transportation group that offers food for sale must list the presence of the top ten allergens identified by Health Canada in their menus, as they are subject to food labelling laws. Full meal alternatives must be provided that do not contain any item on this list, otherwise people who are allergic to all of these will not have equal access to nutrition on long travel. In the case of transportation with self contained rebreathed air systems like airplanes, these foods should be not allowed in the vehicle.

Sensory Sensitivities

Sensory sensitivities refer to differences in processing sensory channels: sight, sound, taste, smell, touch, and pain. 1.4% of Canadians have been diagnosed with fibromyalgia. 1-2% of children have been diagnosed as autistic in Canada and statistics are likely higher, and similar in the adult population. Misunderstanding of the neurological condition, lack of diagnostic capacity and financial barriers to diagnosis all contribute to this number being low. People with these disabilities are more likely to have sensory sensitivities. The 4.7 million people affected by migraines and 260,000 Canadians with epilepsy can also have sensory difficulties.

Recommendations

Sight

Low light brightness options, and selection of lightbulbs that do not cause flicker or hum are best used in transportation. Do not use strobe lights or other flashing videos as these have been known to precipitate seizures and migraines.

Sound

Do not broadcast music or play video advertisement on vehicles where there are no options to avoid the noise. Do not have radio on by default in taxis. Ask passengers if they would like to have sound based entertainment. Do not auto play videos in front of passenger seats on mounted tablets in taxis. If televisions are available for passenger entertainment, provide locations where these can be easily avoided.

Provide quiet spaces or quiet cars on large vehicles. Even those without sensory issues to sound can appreciate a quiet ride early in the morning or after a long day. Provide noise cancelling headsets on long flights for passengers who require a quiet ride.

Use sound and vibration cancelling materials when designing vehicles that are noisy to ride in such as planes, trains and subways.

Taste

Many people with ES are able to taste all the same substances they can smell in the air. Proper charcoal filter air purification and HVAC systems are necessary.

Smell

All approaches outlined for fragrances, quats, VOCs and food allergies will help with sensory issues with smell.

Touch

Avoid abrasive materials for fabric seating, like wool. Avoid PVC seat covers which not only off-gas, but can become sticky in humidity. Having de-humidifiers in transportation keeps the air easy to breathe, lowers dust mites and lowers off-gassing plastics. Running de-humidifiers can help with a multitude of environmental sensitivities.

Pain

Many people with invisible disabilities such as chronic fatigue syndrome, Ehlers-Danlos and fibromyalgia need accessible seating. They are not visibly disabled and current signage for accessible seats does not represent these disabilities. Signage that not all disabilities are visible, or age dependent is necessary. Increasing accessible seating options is an important step towards removing access barriers for people with environmental sensitivities.

In accordance with [federal](#) human rights legislation, environmental sensitivities (ES) are recognized disabilities requiring accommodation. The [Accessible Canada Act](#) denotes in section eight that universal design for accessibility is necessary for all disabled people to have equal access and opportunities. Our recommendations ensure that people with ES have equal access to transportation.

Kind regards,



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Chair, Environmental Sensitivities Coalition of Canada

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