

Using This Handbook

This handbook has been produced as a tool to get students curious about the connection between air quality and sustainable transportation.

This Handbook is for:

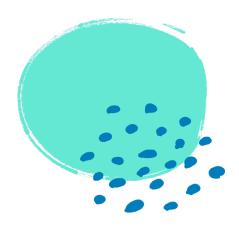
- Teachers
- Parents
- Education Administrators
- Municipal and community club staff
- Non-profit organization staff

Everything here is free to reproduce and adapt to your specific needs. Use what you like from this handbook to make a great Clean Air Day for your students.



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Clean Air Day

What is Clean Air Day?

Clean Air Day is held annually on the first Wednesday of June, during Environment Week across Canada and is an important milestone for conducting air quality-related education and outreach. The event promotes clean air and celebrates pollution free travel.

Since 2016, Green Action Centre has developed and managed a Clean Air Day event for Health Canada that promotes active transportation for school-aged children.

It has integrated Health Canada's Air Quality Health Index information and messaging, providing a positive impact for schools and communities in Manitoba.

Clean Air Day is one of many events and activities within Green Action Centre's Active and Safe Routes to School program. It acts as a final celebration for Bike to School Month, which takes place in May, and touches on many topics that we promote throughout the year, including sustainability, air quality, transportation safety for students and children.

The Active and Safe Routes to School program's goal is to increase the number of students walking, cycling and using other active modes of transportation for the trip to and from school. This results in a number of personal and community benefits, including increased physical activity levels for children and a healthier lifestyle for the entire family; reduced traffic congestion around schools; safer, calmer streets and neighbourhoods; and improved air quality and fewer greenhouse gas emissions.

History

Environment Week takes place during the first Wednesday in June in Canada. Established in 1971, it celebrates Canada's environmental accomplishments and encourages Canadians to contribute to conserving and protecting their environment. Clean Air Day is just one piece of the many things that are celebrated this week!

What is Sustainable Transportation?

Any means of transportation that is 'green' and has a relatively low impact on the environment

This includes active modes of transportation like walking, cycling, and scootering, as well as other modes such as transit, carpooling, and car sharing.

Air Quality

When it comes to the health impacts of human-made climate change, air quality and transportation are inextricably linked. The increased use of fossil fuel powered transportation leads to poor air quality. When air quality is negatively affected by transportation emissions, it can make it less safe to do physical activity outdoors and get around by bike or by foot. Conversely, increased levels of sustainable transportation can play a part in reducing air pollution. Choosing to walk, bike, or take the bus is good for your health, and for the health of your community!

Air pollution is a problem, both on a global scale and for local communities. It is one of the most significant environmental challenges affecting public health, and one of the most avoidable causes of death and disease. Evidence shows that exposure to air pollution increases susceptibility to respiratory viral infections and pneumonia. Our individual and collective actions contribute to the quality of the air. So let's do our part to protect and preserve it for future generations.



Air Quality Health Index (AQHI)

The Air Quality Health Index (AQHI is a scale designed to help you understand what the air quality around you means to your health. You can quickly access the AQHI through the Weather Canada App or <u>website</u>.

It is calculated based on the relative risks of three common air pollutants that are known to harm human health: Ozone (O_3) , Particulate Matter $(PM_{2.5})$, and Nitrogen Dioxide (NO_2) . It is designed to help you take action to protect your health by limiting short-term exposure to air pollution and adjusting your activity levels during increased levels of air pollution.

This index pays particular attention to people who are sensitive to air pollution, such as younger children, older adults, and those with pre-existing health conditions. The Index is helpful for parents, teachers, other educators to make healthy decisions based around children's activities, such as recess or field trips. As the climate continues to change, the index will likely be used more and more.

The AQHI communicates four primary things;

- It measures the air quality in relation to your health on a scale from 1 to 10. The higher the number, the greater the health risk associated with the air quality. When the amount of air pollution is very high, the number will be reported as 10+.
- A category that describes the level of health risk associated with the index reading (e.g. Low, Moderate, High, or Very High Health Risk).
- Health messages customized to each category for both the general population and the 'at risk' population.
- Current hourly AQHI readings and maximum forecast values for today, tonight, tomorrow and the next day.



In-Person Events

Clean Air Day in-person events have consisted of learning opportunities for students and community members in the form of activity stations. These stations are a great way for students and the public to become more engaged in environmental stewardship and learn about the benefits of having clean air in their community. This hands-on approach allows you to engage many people at once with the ability to adjust the difficulty level of the information based on the participant.

In-person events can be a great opportunity to invite a variety of community organizations and members to come to your event, promote their own organization's sustainability efforts, and learn about air quality.









Event Accessibility

We want our Clean Air Day events to be inclusive and accessible to all. Here are some suggestions to think about when planning your event to enable everyone in your community or school to participate!

- Choose a location within your community that is easily accessible by several modes of transportation and ideally in a central location for participants
- Have a First Aid trained worker present
- Select a location that is accessible to individuals with different physical abilities (look for a venue with fewer stairs, updated ramps, crosswalks, accessible parking spots nearby)
- Include a land acknowledgement to recognize and honour the traditional land that the event will be occurring on
- Contact a sign-language interpreter to be at the event
- If possible, make sure that your event has a first aid worker to assist in the unlikely event of a health concern in the crowd
- Make sure there is an adequate amount of washrooms present at the event which should include an accessible washroom, a gender-neutral washroom and a family styled washroom with an infant changing table
- For online events, consider adding closed captioning to videos and social media posts



Sustainability Tips

One of Clean Air Day's objectives is to help people reduce the number of single vehicle trips they make, as these are one of the largest contributors to greenhouse gas emissions. It is important to reduce the barriers for participants to take a more sustainable method of transportation to your venue site.

- Encourage participants to arrive at the Clean Air Day event using an environmentally friendly mode of transportation such as bussing, biking, walking, or carpooling.
 - Point out popular bus routes or bus stops that participants can use
 - Have an area event map showing where the bike racks are located
 - Consider providing bike valet services at the event
 - Suggest a local ride sharing program such as GoManitoba
 - Provide participants the location of accessible sidewalks surrounding the venue

The following are additional suggestions to help decrease the amount of waste the event may generate. This list is not exhaustive and we encourage you to think of your own ways to make sure events are waste free! Plan on-site waste systems with proper recycling, composting and garbage containers

- Use an online platform to host the registration forms for participants
 - Promote the event using social media and other electronic strategies
 - Swap out paper hand-outs at the event for QR codes, for any information they may find helpful
 - Use reusable Clean Air Day banners to put up year after year at your venue.
 - Promote bringing reusable water bottles to the event and provide a water station for participants to use (either portable or stationary)



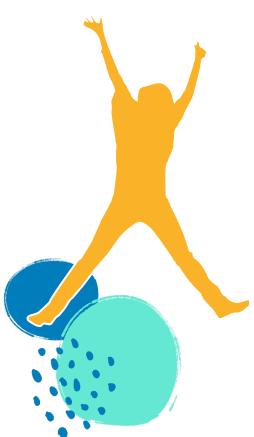
In-Person Event Tips

Some ideas of guest organizations to have present at your Clean Air Day event include:

- Representatives from Health Canada
- Your provincial/city/municipality sport governing body
- Local bike shops and bike clubs
- Your provincial lung society
- Local transit authority
- Ride share representatives
- Local wildlife rescue and rehabilitation organizations
- A nature organization
- Urban farm coop or organization

Ideas for your own in-person event:

- Create a passport system for your participants to encourage them to visit every station!
- Use air quality particle counters and let participants test the surrounding air, which they can compare to the Air Quality Health Index from Health Canada
- Compare the air quality of different provinces/ cities and have participants guess why there may differences between them
- Ensure there is space for participants to gather to eat their lunch or snack
- Create a "save the date" to send to possible participants in advance of the event



Event Checklist

This Event Checklist is to help you keep track of your planning. These are the main tasks your Clean Air Day team can focus on to make sure your event runs smoothly. Every event is different and comes with different challenges. We encourage you to use our Event Checklist and your own judgment on the tasks which need to be completed for a successful outcome.

In-person Event Checklist:

Set goals for the event with your Clean Air Day team
Research and choose an accessible venue that participants can easily access through sustainable and active transportation
Determine the number of people your venue can accommodate safely
Check to see if your venue has public water fountains for participants to use; if not, plan to have an accessible water station
Decide on a date and time for the event
Develop a site plan for your venue
Develop a promotional strategy for your event
Recruit volunteers for the event and assign them working roles
Identify what event or temporary permits you may need with the help from your local municipality
Create an event evaluation form for participants
Implement a contingency plan in the event of poor weather. See page 13 for more.
Create a "save the date" for possible participants

Promotions

If you host a public event, promotion is one of the most important aspects to ensure the success of your event. It will help increase participation and demonstrate your commitment to sustainable initiatives. There are many ways to get the word out, including traditional media, print media and online. If you are a teacher, and this event is just for your school, use promotion to share how the event went, what kids learned and any takeaways.

Start by brainstorming the avenues in which you could promote your event, which may include;

- Local radio
- Local news
- Newspapers
- Social media such as Facebook, Instagram and Twitter
- On your website
- In emails blasts to teachers, parents and school administrations
- Through a media advisory and press release. You may be asked to do interviews on the event so preparing some talking points is a good idea as well.

To help prepare a streamlined promotions plan, consider the following:

- Identify the timeline for promotions leading up to the event
- Understand where you will reach your target audience
- Use a calender template to start planning promotions releases
- Begin preparing each material
- Develop the media advisory and press release for local news stations, radio and newspapers

If you plan to have a photographer during the event, or want to take photos yourself, ensure that you have photo waivers to either send out before the event or to have on hand in person.

Planning for Disruptions

While we always hope for the best for our events, sometimes things come up. Because of this, it is important to have a contingency plan in place.

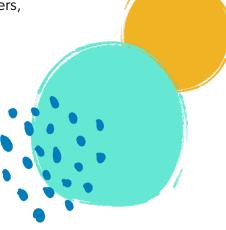
Ways your event can be disrupted include;

- Presenters or booths dropping out
- Inclement weather
- Poor air quality
- Schools or participants dropping out
- Issues with facilities

These issues may come up, so it is important to have a plan in place to ensure your event or programming can go on. Use these tips to keep everything on track for your event.

- Choose an event space that has a mix of indoor and outdoor space. Choose a community centre with a field or a park with large shelters. This can help if the weather takes a turn on the day of the event. Alternatively, if you have funding, you can consider renting a large event tent
- Create a "save the date "a few months before your other promotion begins for your event and send it out to possible participants. This way, teachers can secure transportation if it is required.

 Once you have participants confirmed, ensure you continue your communication with teachers, parents or administration.



Virtual Events

Depending on your situation, it may be necessary to host some or all of your Clean Air Day events virtually. This could be due to a number of reasons. Your participants may be spread out geographically and cannot attend an event, public health orders do not permit in-person gatherings, and more.

While virtual programming can sometimes be less engaging than in-person programming, it has the benefit of being able to easily reach a larger audience. Even if you are able to host a main event in person, it can be beneficial to provide activities for students and children to enjoy at home as well.

Tips for online programming:

- Try to design your activities for a range of ages and abilities.
- Keep your activities low/no cost whenever possible
- Create a web page to share your online activities with registrants, or email activities to participants on the day of the event.
- Make use of mailing lists! You can create an online registration form with free software and use it to collect participant email addresses as well as information about demographics, number of children/students, activities that they would be interested in participating in, and more.
- Social media is an important tool for promotion of your online event, and it can also be a way to engage your audience through contests and prompts. Photo contests are a great way for participants to showcase their activities and raise awareness about your event.
- Check out some examples of online activities from Green Action Centre at the end of the handbook!

Virtual Event Checklist

Checklist:

Set goals for the event with your Clean Air Day team

Decide on a date and time for the event

Develop a promotional strategy for your event (social media, news releases, etc.)

Plan and prepare online content such as activities, workshops, and videos for the event

Circulate an event registration form

Send out email blasts to notify audience

Create an event evaluation form for your participants to provide feedback

Host your virtual event! Send out emails and share any live workshops or videos



Resources

Interested in learning more about sustainable transportation and air quality? Check out these other online resources for more information!

Green Action Centre

https://greenactioncentre.ca/asrts/

Green Communities Canada

https://greencommunitiescanada.org/

Ontario Active School Travel

https://ontarioactiveschooltravel.ca/

Health Canada air pollution resources

https://www.canada.ca/en/environment-climate-change/campaigns/canadian-environment-week/clean-air-day.html

Tips for planning an accessible event from Accessibility Canada https://accessibilitycanada.ca/resources/

Example Activities

The following pages are activities you can use or edit for your Clean Air Day Events!





Walking Across Panada Cross the country together

Stay Fit, and have fun

Challenge your community (students, teachers, individuals and families) to collect footsteps or kilometers on Clean Air Day or throughout the month to travel from one end of the contry to the other!

Compete as a family, as a classroom, or in a group. The bigger the group, the better!

What you need:

- A chart to track distance (see example on the next page)
- A pedometer (optional)

How to Walk Across Canada:

- With a pedometer: Walk 1km with your pedometer (2.5 laps around a track, or calculate it on Google Maps). Multiply your step count by the total kms to cross Canada to find out the total amount of steps you will need.
- Without a pedometer: Track your distance on each walk or bike ride and add it up throughout the day or month to find your total! If you need to guess, the average person can walk 5km or bike 20km in an hour.

While 7,428km seems like a lot for one person, it gets easier when you share the distance! Divide the total distance by the number of people participating to determine how much walking or biking each person has to do.

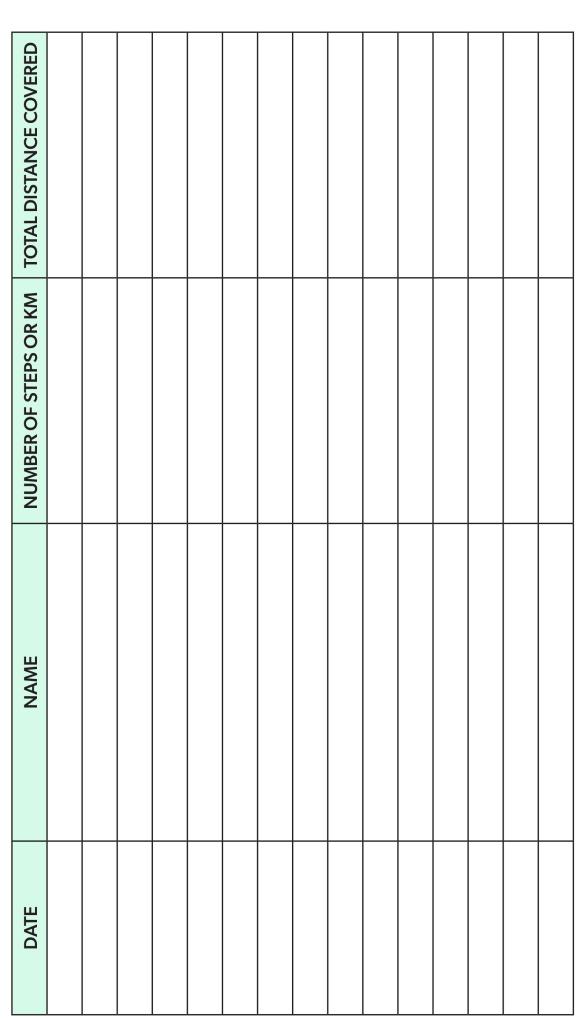
Total Distance: 7,428 km!

FROM	D	DISTANCE
IQALUIT, NT	YELLOWKNIFE, NWT	2200km
YELLOWKNIFE, NWT	WHITEHOURSE, YT	2704km
WHITEHORSE, YT	VICTORIA, BC	2763km
VICTORIA, BC	VANCOUVER, BC	66km
VANCOUVER, BC	EDMONTON, AB	1244km
EDMONTON, AB	REGINA, SK	764km
REGINA, SK	SASKATOON, SK	256km
SASKATOON, SK	WINNIPEG, MB	829km
WINNIPEG, MB	THUNDER BAY, ON	715km
THUNDER BAY, ON	TORONTO, ON	1384km
TORONTO, ON	MONTREAL, QC	539km
MONTREAL, QC	QUEBEC CITY, QC	270km
QUEBEC CITY, QC	FREDERICTON, NB	586km
FREDERICTON, NB	HALIFAX, NS	346km
HALIFAX, NS	CHARLOTTETOWN, PEI	232km
CHARLOTTETOWN, PEI	ST. JOHNS, NL	1294km



Walking Across Panada Cross the country together

Here's a chart to get you started! Print this off or make your own





Air Quality and Pollution Undestanding clean air

Air quality can be measured

There is a scale, called the Air Quality Health Index (AQHI), to help us understand if the air is clean or dirty. Watch these videos and then do an activity to learn about AQHI from the Government of Canada.

What you need:

- Computer
- Speakers
- Internet

What are you breathing today?

Watch this video to learn about the Air Quality Health Index from Health Canada.

What AQHI is, and how to understand it.

https://www.youtube.com/watch?v=CZcwHKAB5tQ



The Science of Air Pollution

about air pollution. Learn about the different gases, and impacts on Environment Canada has put together some resources and posters the environment and human health.

Go to Environment Canada website:

https://www.canada.ca/en/environment-climate-change.html

Air Quality and Weather Videos

These three videos from Environment Canada talk about how weather can affect air pollution.

https://www.youtube.com/watch?v=J1MQKjglgUQ 'An upside down morning" - Therman Inversions

https://www.youtube.com/watch?v=vPIJHgOszMU "A view on Smog" - Topography

https://www.youtube.com/watch?v=WHdtwVOCc6Q "Far-reaching Smog" - Long-range pollution



An Upside-down Morning



I pledge to...

What's something you can do that's good for your body or the planet?

•••••••••

