

CAFETERIA WASTE CAMPAIGN 2019-2020

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Overview

Health care retail cafeterias face the same issues as other public-facing retail food establishments, contamination and misplaced recyclables in the recycling and compost bins, and recyclable and compostable material being placed in the garbage can rather than sorted into the proper bins. The Cafeteria Waste Campaign was designed to make recycling and composting easier for cafeteria users through new recycling and waste bin stickers, and campaign posters and banners that were fun, eye-catching, and informative. The Energy and Environmental Sustainability (EES) team engaged Be the Change Group, a consulting company, to research and design new cafeteria recycling bin stickers, campaign posters, and banners, as well as facilitate user testing.

The campaign was installed in four health care cafeterias: BC Children's and Women's Hospital, BC Cancer Vancouver, Lions Gate Hospital, and UBC Hospital. The campaign began in October/November 2019 and was designed to run for six months until the end of March 2020. Covid-19 had a major impact on this project, with cafeterias temporarily closing down or greatly reducing services beginning in March 2020. This affected the post-project results and ability to measure the original objectives since the March waste audit was cancelled. In response, the campaign was extended until October 2020 after the completion of the September 2020 waste audit. Additionally, post-project contamination data was no longer a viable metric with the change in services, so a greater reliance on anecdotal evidence was used.

Overall highlights include:

- The humorous, eye-catching campaign assets do attract attention from cafeteria users, and guests will stop briefly at the recycling stations to determine into which stream to place their recyclables
- Users still do not always make the correct choice, for various reasons
- The acrylic display boxes allow for some amount of customization for each site's cafeteria items

Introduction

The idea for the Cafeteria Waste Campaign project was initially identified in collaboration between the Energy & Environmental Sustainability (EES) team and the Waste & Sustainability Committee, both of whom support the four Lower Mainland Health Organizations: Fraser Health, Providence Health Care, Provincial Health Services Authority, and Vancouver Coastal Health. The Waste & Sustainability Committee works to improve the environmental sustainability of food services operations in both the patient kitchen and retail food operations. From bi-annual waste audits, they identified that contamination (i.e. placing waste items in the incorrect containers) was an important issue to address. EES was brought in to implement a communications campaign to improve cafeteria recycling behaviours, with the support of consulting company, Be the Change Group.

Project Objectives

The project objectives included:

1. Reduce contamination in recycling and composting
2. Increase waste diversion rates
3. Make recycling easier for users

Project Description

The project included new physical assets designed to promote proper recycling and waste segregation behaviour by trickling key messages throughout the cafeteria visitor flow.



Fig 1. Poster set up at self-serve utensil station

Smaller posters were placed at self-serve stations (Fig 1), at the cash register, and on walls throughout the cafeteria, stickers were put on each table where users would be eating (Fig 2), and large banners were placed on walls with sightlines throughout the space (Fig 3).



Fig 2. Stickers on cafeteria tables gave visitors something to read while eating



Fig 3. Large banners were highly visible throughout the space

These awareness-building assets were complemented with cafeteria-specific waste container stickers showing photographs of the items users were most likely to encounter in their visit (Fig 4). Stickers were developed for each waste stream: Mixed Containers, Mixed Paper, Refundable Beverage Containers, Food Scraps & Food-soiled Paper, and Garbage.



Fig 4. Updated stickers with photographs of cafeteria items

One site, BC Cancer Vancouver, also received a display box above the waste containers that held actual recyclable items showing where they should be placed (Fig 5) (see Appendix A for additional site photos).



Fig 5. Display box showing real waste items and where they should go

Development of Assets

Cafeteria managers were asked to provide items that users would be placing in the different waste containers. These items were generally standardized across all four cafeterias, although there was some variation. All items were photographed and the most frequently encountered items were included on the waste bin stickers.

In order to test the first versions of the assets, one standard focus group and one guerilla focus group was completed. The standard focus group included two

staff volunteers who gave feedback on the campaign assets and bin stickers. The guerilla focus group consisted of setting up a table with the assets in the UBC Hospital cafeteria and soliciting feedback from passing visitors and recycling station users. Both groups' feedback was used to create the final version of all the assets and stickers.

The assets were installed at the four sites throughout October and November 2019:

- UBC Hospital: October 2
- BC Cancer Vancouver: October 3 & 9
- Lions Gate Hospital: October 7 & 10
- BC Children's and Women's: November 8*

*BC Children's and Women's had to relocate their vending machines and paint a wall in order to accommodate the campaign, which delayed the installation.

Project Deliverables

Deliverables included the following (see Appendix B for images of all assets, stickers, and displays):

1. Campaign posters, table stickers*, and large banners
2. Redeveloped bin stickers for five waste streams: Mixed Containers, Mixed Paper, Refundable Beverage Containers, Garbage, and Food Scraps & Food-soiled Paper
3. Design specs for and construction of a display box

*Table stickers were designed to be food-safe and cleanable with the products used by staff to clean the tables, without losing colour.

Assumptions

1. Increased desire to recycle combined with improved knowledge of proper recycling, will result in a reduction of contamination in recycling waste streams and an increase in waste diversion rates.
2. Health care cafeteria users represent a desirable demographic of people we want to engage with, including staff, patients, and visitors.

Project Results

Objective 1: Reduce contamination in recycling and composting

Visual contamination audits were performed at each site before the campaign assets were installed. The visual audit consisted of looking into each waste bin and counting all visible contamination. Contamination was considered to be any item that did not belong in that waste bin, including a misplaced recyclable. Contamination was reported as an average, calculated per waste stream by total contamination counted over the total number of bins of that waste stream in the cafeteria. All averages were totalled to show overall contamination average per site.

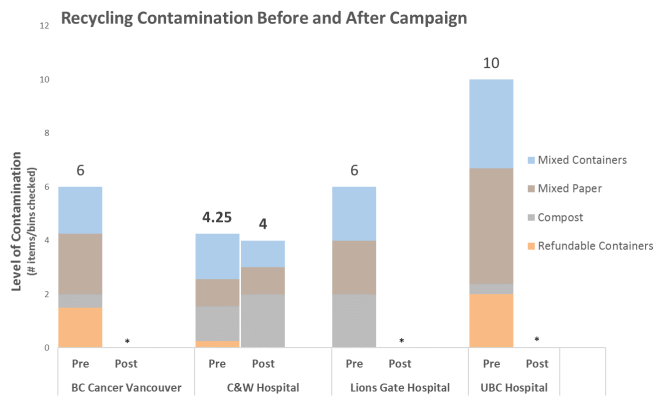


Fig 6. Visual contamination audit results at C&W show a slight, but not significant, decrease in contamination

Fig 6 only shows post project visual contamination data for the BC Children's and Women's Hospital cafeteria, since theirs was the only one to resume a level of service comparable to September 2019. Lions Gate Hospital Café has yet to reopen as of the writing of this report, and the UBC Hospital cafeteria was open only to hospital staff and the vast majority of staff chose to take food away and not eat in the cafeteria.

The visual audit data from C&W shows a slight, but not significant, decrease in contamination over the four recycling and compost streams. The largest decrease came from the Mixed Containers bins, from 1.7 to 1 average contamination level. This was countered with an increase in contamination in the Food Scraps & Food-soiled paper bins, from 1.3 to 2. In both pre and post data, coffee cups remained a contaminant, despite strong messaging from the campaign assets. More

work will need to be done in this area; however, efforts are made more difficult due to regional differences in coffee cup disposal. Some municipal regions accept coffee cups in Mixed Containers, while others accept them in compost bins. This external mixed messaging can make it confusing for users, even with clear direction in the cafeteria.

Objective 2: Increase waste diversion rates

Waste audits performed bi-annually by cafeteria staff were used to track waste diversion rates. In March and September of every year since September 2017 (with the exception of March 2020), the front-of-house waste streams in the cafeteria are sorted and weighed in order to determine the waste diversion rate. For this report, we compared September 2019 to September 2020 audit data. The findings are summarized in Fig 7.

Out of the test sites, BC Cancer Vancouver had the

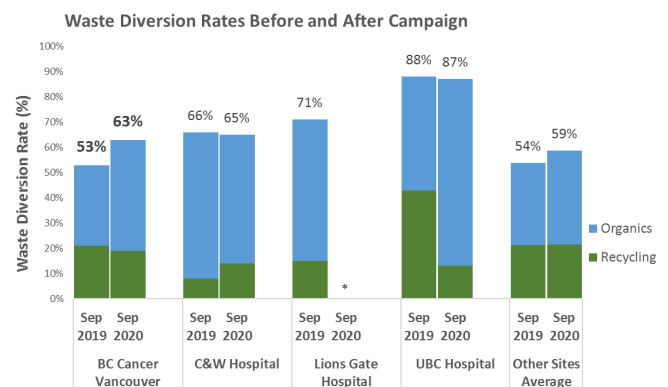


Fig 7. Waste diversion results from bi-annual waste audit show variable changes across test sites

largest change in waste diversion rates, increasing from 53% to 63% between September 2019 and September 2020. The other sites, including BC Children's and Women's Hospital and UBC Hospital did not see significant changes in their rates. Lions Gate Hospital does not have any audit data since the cafeteria is still closed as of the writing of this report. The average of all other sites that had audit data for September 2019 and 2020 show a slight increase from 53% to 59%. The waste audit data is variable from year to year, possibly reflecting single day variations. While we cannot draw strong conclusions from the data presented, waste diversion rates are generally good and the large rate

increase at BC Cancer Vancouver may be in part due to the installation of the acrylic display box, which all staff agreed was an effective tactic.

Objective 3: Make recycling easier for users

This objective was tracked from anecdotal evidence from cafeteria staff observing users interacting with the campaign assets and visitor comments that were made to staff. This information was solicited from cafeteria staff via direct emails and a survey. There were not a lot of responses, but this report includes the feedback that was provided.

The campaign assets and the updated waste bin stickers both received positive feedback with comments that they were easy to understand and the pictures of waste items were an improvement over the previous generic illustrations. Staff noticed cafeteria users stopping to look at the stickers to see where they should put their items. Staff recommended the campaign be installed at other health care cafeterias. Special note was made of the acrylic display boxes with comments that the boxes could easily be installed at other sites. It allows for customization of the display to align with the specific items in the cafeteria, which was desirable.

EES received mentions and emails about the cafeteria campaign assets, including a request for assets to be put up at the Fraser Health Central City corporate offices, an unprompted mention in a clinical staff meeting about waste reduction, and comments from users during the campaign installation with positive feedback. The Fraser Health request was fulfilled and the coffee cup posters were put up in coffee stations in the Surrey Central offices.

Other Results

Engagement with the campaign was not one of the original project objectives; however, there was some notable engagement that occurred. Each participating site's leadership team received a memo with information about the campaign and its objectives. BC Cancer Vancouver responded with a request for more information in order to share it site-wide through the "In the Know" staff email newsletter (see Appendix C). EES worked with the site operations lead to draft content, which was then shared by the leadership team.

This is an example of active and visible sponsorship by health authority leadership, which is a key component of making environmental sustainability a priority in health care.

EES wrote a news story that was shared internally by PHSA and VCH as part of their staff newsletters and posted on their respective intranet sites (see Appendix D). There was engagement with the news stories by staff, with five likes on the PHSA story and nine likes and four comments on the VCH story.

Additionally, scannable QR codes were included on all table stickers, allowing cafeteria users to use their smartphones to scan the code and visit a web page with information about the campaign

(<https://bcgreencare.ca/cafeteria>). Throughout the campaign period, 17 unique visitors scanned the QR code. This is not a large amount, considering the number of cafeteria users throughout the day, but the addition of the QR code was simple and did not add any additional burden to the project. It was a low-effort way to increase overall engagement.

Confounding Factors

Covid-19 greatly impacted this project by delaying the project end and hindering the collection of post-project data. The project-monitoring period was intended to finish at the end of March 2020 with the completion of the March waste audits; however, the affects of Covid-19 in early March meant that those waste audits were cancelled. With the closure and/or reduced service in all of the cafeterias, a decision was made to extend the project to October 2020 with a plan in place to complete the waste audits in September 2020.

However, service levels never reached the same point as pre-Covid operations, so contamination comparisons pre and post campaign will not accurately demonstrate any behaviour change that may have occurred.

Conclusion and Next Steps

This project was intended to make cafeteria waste segregation easier for all users: health care staff, patients, and visitors, and as a result reduce the contamination that has been an issue in recycling and compost and increase waste diversion rates by diverting

more recyclables from the garbage into their correct streams.

Through this project, we learned that humorous, eye-catching posters, banners, and table stickers do attract attention from cafeteria users, and guests will stop briefly at the recycling stations to determine into which stream to place their recyclables. Users do not always make the correct choice, for various reasons. Mixed messaging across municipal regions, lack of attention while placing the items, and large amounts of different waste items encountered in their visit may negatively impact contamination rates. However, site engagement was high during project development, and the campaign assets demonstrated the site's commitment to waste diversion and proper recycling.

Feedback received from some cafeteria staff suggested that waste bin stickers could be updated as products change, and made specific to each site's products. This would be more time-intensive and expensive, as the products must be professionally photographed and edited onto the bin stickers in a visually effective way. This feedback brings up the ongoing issue of standardization versus customization and the benefits and drawbacks of each. The campaign waste bin stickers were more customized than the standard stickers used throughout the rest of the facility, however they were standardized across all the participating cafeterias. While there are some variation in products between cafeterias, the intent was to select the most common items found in all cafeterias along with those items that were commonly misplaced. It is recommended to continue using these waste bin stickers unless there is a major change in products used and the stickers become obsolete. Customization could be provided by use of the acrylic display boxes, which could be filled with any waste items staff choose.

Next steps include identifying other suitable health care cafeteria sites that could benefit from this campaign. After sites are identified, the campaign could be installed in 2021. The acrylic display boxes were well received and additional boxes could be made and installed, even without the full campaign assets; this would be a cost-effective improvement for cafeteria

waste segregation. Findings from additional campaigns would build on the results shown here and allow the Energy & Environmental Sustainability team to improve recycling communication and engagement tools and tactics.


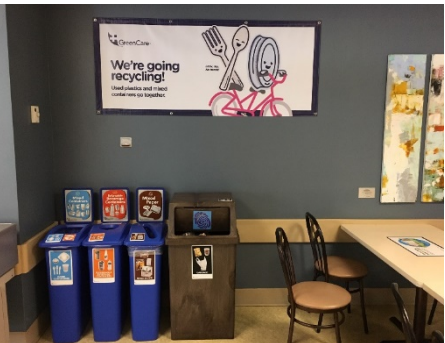





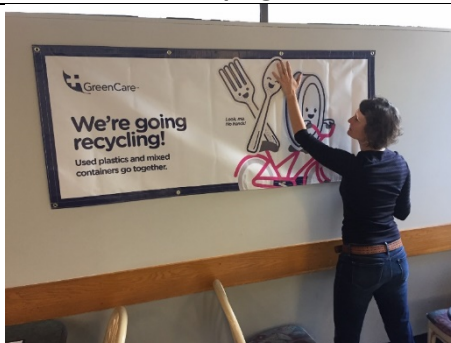
Acknowledgements

The Energy and Environmental Sustainability team would like to recognize the support and assistance from BC Cancer Vancouver, BC Children's and Women's Hospital, Lions Gate Hospital, and UBC Hospital, without which this project could not have succeeded. Specific thank you to Anithia Felix, BCCA Regional Centre Services Manager; Elaine Kwan, BCCA Retail Food Services Manager; Bill Young, BCCA FMO Supervisor; Robert Tan, C&W Retail Food Services Director; Arvind Chari, C&W Production Manager; David Hartono, LGH Retail Food and Catering Services General Manager; Michael Qiang, UBCH Retail Food Services Manager; Linda Forbes, former Chair of the Waste & Sustainability Committee; Waste & Sustainability Committee members; project collaboration with Be the Change Group and GNW Scene Shop, all of whom made the project a success.

Appendices

Appendix A

Site Photos of Campaign

BC Cancer Vancouver		
Before	After	Other Campaign Photos
		
		
BC Children's and Women's Hospital		
Before	After	Other Campaign Photos
		

Appendix A continued







Lions Gate Hospital		
Before	After	Other Campaign Photos
		
UBC Hospital		
Before	After	Other Campaign Photos
		

Appendix B

Campaign Asset Designs

Banners	Table Stickers	Posters
 <p>I'm cute but I'm complicated. Each part of a coffee cup must be disposed of separately.</p> <p>Garbage Mixed paper Mixed containers</p>	 <p>I'm cute but I'm complicated. Each part of a coffee cup must be disposed of separately.</p> <p>Garbage Mixed paper Mixed containers</p> <p><small>Know what to throw. Dispose of your waste in the right bin. bcgreencare.ca/cafeteria</small></p>	 <p>I'm cute but I'm complicated. Each part of a coffee cup must be disposed of separately.</p> <p>Garbage Mixed paper Mixed containers</p> <p><small>Know what to throw. Dispose of your waste in the right bin. bcgreencare.ca/cafeteria</small></p>
 <p>We're going recycling! Used plastics and mixed containers go together.</p> <p>Look, ma. No hands!</p>	 <p>We're going recycling! Used plastics and mixed containers go together.</p> <p>Look, ma. No hands!</p> <p><small>Know what to throw. Dispose of your waste in the right bin. bcgreencare.ca/cafeteria</small></p>	 <p>We're going recycling! Used plastics and mixed containers go together.</p> <p>Look, ma. No hands!</p> <p><small>Know what to throw. Dispose of your waste in the right bin. bcgreencare.ca/cafeteria</small></p>
 <p>We're three peas in a pod. Food and food-soiled paper items go together in the compost.</p> <p>Composting really floats our boat.</p>	 <p>We're three peas in a pod. Food and food-soiled paper items go together in the compost.</p> <p>Composting really floats our boat.</p> <p><small>Know what to throw. Dispose of your waste in the right bin. bcgreencare.ca/cafeteria</small></p>	 <p>We're three peas in a pod. Food and food-soiled paper items go together in the compost.</p> <p>Composting really floats our boat.</p> <p><small>Know what to throw. Dispose of your waste in the right bin. bcgreencare.ca/cafeteria</small></p>

Appendix B continued

Lid Sticker (3.88x3.88)	Bin Sticker (6x10)	Label Sticker (22.5x3)
		
		

Appendix B continued

 <p>MIXED PAPER</p> 	 <p>MIXED PAPER</p> 	<p>MIXED PAPER</p>
 <p>REFUNDABLE BEVERAGE CONTAINERS</p> 	 <p>REFUNDABLE BEVERAGE CONTAINERS</p> 	<p>REFUNDABLE CONTAINERS</p>
 <p>FOOD SCRAPS & FOOD SOILED PAPER</p> 	 <p>FOOD SCRAPS & FOOD SOILED PAPER</p> 	<p>FOOD SCRAPS & FOOD SOILED PAPER</p>

BC Cancer Vancouver “In the Know” site-wide newsletter



Provincial Health Services Authority

IN THE KNOW

Vancouver

September 3, 2019

Cafeteria Waste Campaign

What's happening?

- The cafeteria at BC Cancer Vancouver Centre is getting a refreshed recycling bin station and engagement campaign intended to reduce contamination in recycling, increase waste diversion from landfill, and make recycling easier and less confusing for cafeteria users.
- The cafeteria will see new recycling bin stickers and tools to indicate where waste items should go, along with banners, posters, and table stickers to help visitors think about waste before getting to the recycling station.

Why are these changes required?

- BC Cancer Vancouver Centre has a waste diversion target of 50% by 2020 and this campaign will help to reach that goal. It demonstrates a commitment to our shared environmental sustainability goals and reminds visitors about the importance of reducing our environmental impact from waste.

How This May Affect You?

- This project doesn't change how anything is happening at BC Cancer Vancouver Centre! The same recycling and composting is still happening, hopefully now it will simply become easier to do the right thing.

When can we expect this to occur?

- The new tools are expected to be implemented during the first week of October 2019 and run through the end of March 2020.
-

Questions?

Please contact Anithia Felix Centre Services Manager via email at afelix@bccancer.bc.ca

News stories included in PHSA and VCH staff newsletters

January 7, 2020

New cafeteria waste campaign launched at select PHSA sites

CURRIE, SARAH

SUSTAINABILITY CONSULTANT

- 5 likes
- 0 comments

Recycling in the cafeteria just got less confusing, thanks to GreenCare's new informational campaign that helps cafeteria users sort their food, paper, and container waste.

How does it work?

The campaign uses humorous messages on banners, posters, and stickers, strategically placed on tables and bins, to make recycling and composting a little more fun.

The goal of the campaign is to reduce contamination in recycling, divert more recycling and compost from landfill, and generally make it easier to figure out where the waste should go. It also provides an effective daily reminder of the importance of reducing our environmental impact from waste.

PHSA has a target of reaching 50 per cent waste diversion by 2020 and maintaining that through 2030. This campaign is one way that staff and visitors can help PHSA achieve that target.

Where is it happening?

The cafeteria waste campaign has been installed in two PHSA sites: BC Children's Hospital and BC Women's Hospital + Health Centre and BC Cancer - Vancouver. It is also running at two Vancouver Coastal Health pilot sites: Lions Gate Hospital and UBC Hospital. It will run for six months, from October 2019 to March 2020.

How can you get involved?

Campaigns like this are successful when more people participate. If you are a health care staff member and want to do more to green your department, join the [Green+Leaders](#)! The Green+Leaders Network is a collection of engaged staff volunteers who help create healthy workplaces on a healthy planet by improving the environmental performance of health care operations across the Lower Mainland. Explore our website to learn more about our programs and initiatives.

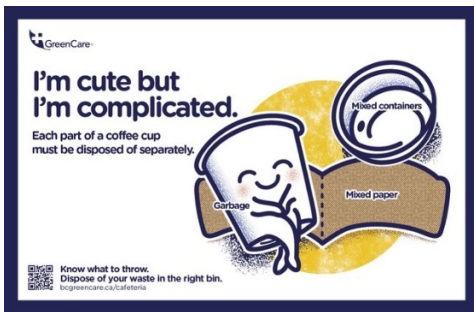
Cafeteria waste campaign launched at Lions Gate and UBC Hospitals

Sarah Currie

Sustainability Consultant, Energy and Environmental Sustainability Team

January 15, 2020

- 9 likes
- 4 comments



Coffee cups: cute but complicated

Recycling in the cafeteria just got less confusing, thanks to GreenCare's new informational campaign that helps cafeteria users sort their food, paper, and container waste.

How Does It Work?

The campaign uses humorous messages on banners, posters, and stickers - strategically placed on tables and bins - to make recycling and composting a little more fun.

The goal of the campaign is to reduce contamination in recycling, divert more recycling and compost from landfill, and generally make it easier to figure out where the waste should go. It also provides an effective daily reminder of the importance of reducing our environmental impact from waste.

VCH has a target of reaching 50% waste diversion by 2020 and maintaining that through 2030. This campaign is one way that staff and visitors can help VCH achieve that target.

Where Is It Happening?

The cafeteria waste campaign has been installed in two VCH pilot sites: Lions Gate Hospital and UBC Hospital. It is also running at two PHSA sites: BC Children's and Women's Hospital and BC Cancer Vancouver Centre. It will run for six months, from October 2019 to March 2020.

How Can You Get Involved?

Campaigns like this are successful when more people participate. If you are a health care staff member and want to do more to green your department, join the [Green+Leaders](#)! The Green+Leaders Network is a collection of engaged staff volunteers who help create healthy workplaces on a healthy planet by improving the environmental performance of health care operations across the Lower Mainland. Explore our website to learn more about our programs and initiatives.