PRIMER 2

Areas of EPH Practice Impacted by the Social Determinants of Health

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The social determinants of health can impact almost any area of environmental public health (EPH) practice. Determinants such as geographic isolation, socioeconomic status, education and literacy, mental health, language, and culture, can create barriers to compliance and lead to health inequities. This Primer illustrates how barriers related to equity and the social determinants of health arise in different practice areas where environmental health officers (EHOs) work. It is the second of three **Primers on Health Equity and Environmental Public Health** produced as part of a consultation with field staff by BCCDC's *Through an Equity Lens* project. The first primer, **Five Things to Know About Equity in EPH**, provides background about the concept of health equity and how inequities and the social determinants of health (SDH) arise in EPH practice. The third primer, **Equity in EPH Practice**, discusses ways to integrate an equity lens into practice.

The quotes included in this primer are from a series of focus groups with environmental health officers (EHOs) held in March 2015 in each of BC's regional health authorities and the First Nations Health Authority. The purpose of the focus groups was to identify how barriers related to the social determinants of health impacts EPH practice in BC, how EHOs respond, and what supports would help EHOs use an equity lens in practice.

Areas of EPH practice impacted by the social determinants of health

1 Food premises

Both operators and employees of food premises can face barriers that impact their ability to engage in healthy behaviours and follow food safety guidelines or regulations.

Cash flow and other economic issues can affect business owners' ability or willingness to maintain and repair equipment and infrastructure, or to assist employees with food safety or other training. Low-wage or precariously employed food handlers may find it difficult to pay training fees for courses such as FOODSAFE, possibly limiting their work opportunities in the food industry. Those without paid sick leave may hesitate to call in sick, even when symptoms or test results (e.g., gastrointestinal, Hepatitis A) should preclude them from handling food.

The rents are insane, and you've got huge competition…You've got these larger corporations pushing out little family establishments, so there's certainly a lot of pressure to pay the bills…

I think with a lot of sanitation issues in restaurants, the owner is the one staying late, and they're tired because they're staying late each day and they don't have enough money to pay a cleaning company. And the minimum wage is going up, and they have to try to compensate for that.

In **small or isolated communities**, access to equipment, parts, and service may be limited, slow, and costly. For example, what might be a minor refrigerator repair in an urban area could be delayed for weeks while waiting for a part to be delivered to a northern community. Service providers may charge fees for travel time, and delivery costs for new or replacement equipment may be prohibitive. Food premises operating in such communities often need to work with their EHO to find alternative ways of operating safely without optimal equipment setups.

Access to professionals, equipment…at a reasonable cost. Just to get a dishwasher fixed in a restaurant in a remote area is expensive. Usually you have to wait until they're out there for other reasons or they're on their pass-through. It could take a long time getting a certified plumber in to fix plumbing issues in a restaurant. …And some of them do gouge. It's difficult because there's very little competition, very little service provided for some of these [places].

Areas of EPH practice impacted by the social determinants of health

Geography can also create challenges related to food security or access to culturally appropriate or traditional foods. In isolated communities where approved sources of food are limited (due to weather, transit costs, low demand, etc.), residents and food service operators may rely on locally produced or wild foods to meet dietary needs. Businesses and institutions that serve Aboriginal people may wish to offer traditional foods, which generally come from wild or unapproved sources. To support public health in these circumstances, EHOs prioritize risks, focusing on critical risks and educating people to do things in the safest possible way.

If they were cooking with meat that they shouldn't be cooking with … because they caught it, and in a lot of those communities, that's what they lived on and they couldn't get access to any other kind of protein. So what I would do is I would make it the safest possible for them, instead of saying, no, you can't have it at all.

Education affects people's ability to read, understand, and follow food safety or other public health guidelines. While professional chefs and food handlers may have industry-specific training that provides them with technical understanding of equipment and processes, some operators and employees have only grade school education. Without adequate training and education, it is difficult to complete certification tests, follow maintenance instructions, or create complex food safety plans. EHOs have pointed out how the complexity of food safety plans in particular requires them to spend time working with and educating food premises operators.

One thing is the requirement for food safety plans—a written document. Often the information that we give to them is WAY too overloaded—it just looks confusing. So, sitting down at the beginning and even walking through a recipe with the person really helps. So, it's just spending the time. We're meant to be educators—that's number one.

Some language that we're using might make sense to some of the chefs who have gone to culinary school, but for the ones who have maybe grade 10 or grade 9 or grade 8 level education, it can be really challenging for them to fit some of those pieces together.

Areas of EPH practice impacted by the social determinants of health

For people with limited or no English **language** skills, the barriers to understanding and completing written food safety documentation are magnified. Although some guidelines and training programs are available in different languages, the language in the translated versions may be overly complex for some people. To support public health in these circumstances, EHOs prioritize risks, focusing on critical risks and educating people to do things in the safest possible way.

And it's easier to communicate or to educate a person to get compliance when you're speaking the same language. But when you have a language barrier on top of a cultural barrier…

Something like storing rice at room temperature, people have said to me, "My family's been doing this for hundreds of years. Nobody's gotten sick. What are you talking about?"

Cultural differences—often co-existing with language barriers—can create different types of barriers. Language affects the words that people say, but culture affects communication style and interactions between food handlers or business owners and EHOs. In some cases, this comes up in the way that some people perceive the role of the EHO. Health inspectors in some countries play an enforcement role without engaging in education or health promotion in the way that EHOs do in BC. People who view health inspectors in this way are less likely to be open about their challenges or to ask for assistance, making it more difficult for the EHO to play a support role.

We are definitely not the first responder. They wouldn't call us and say "We have some issue here." They think that when there are issues, we only go in and shut the place down. But they don't see that we can actually work together.

People from other cultures may also be accustomed to different standards or processes for food preparation. Traditional food preparation practices from other countries may not be approved here or may not follow current local guidelines or regulations. Those practices may or may not be safe, but the lack of familiarity by either party can challenge the interactions between food premise operators and EHOs. These issues can be even more difficult to navigate when there is also a language barrier.

I think a lot of people that immigrate … are not able to carry on with their professions, their trained skills that they acquired in their homeland. So, they come here and they open restaurants because everybody can cook, right? Everyone can run a restaurant. I think they bring with them some of their previous cultural practices or norms and they set up shop, not realizing that there are perhaps differing standards here, differing ways of doing things, different expectations to what they've always known.

2 Personal services

As in food premises, **language** is one of the most common equity-related barriers that arises in personal services establishments (PSEs). EHOs find it difficult to communicate how and why to do things with people who do not speak English or who have limited English language skills. In the presence of a language barrier, explaining acceptable forms of sterilization, proper sanitizing procedures, and proper use of single-use items becomes very challenging. EHOs rely heavily on multilingual posters and guidance documents, but often find it difficult to explain the rationale behind recommended practices in a way that leads to sustained behaviour change and compliance.

Finances are important in any industry. Similar to the way some food handlers find it difficult to obtain FOODSAFE certification, pool or water system operators can have difficulty taking the time away from work for professional development training.

I find that a lot of people are very reluctant to want to take time off. …We require our pool operators to be properly trained, and so we offer this course. It's a full-day course but a lot of the people … say, "I can't take the time. I can't take a whole day, because if I'm not here nobody's here."

3 Drinking water and sewage treatment

Geographic isolation presents similar challenges for water systems operators as it does in food premises. Access to parts, equipment, and expertise can be difficult to obtain and expensive. In BC, drinking water operators may live several days travel from a larger centre, making it difficult to upgrade skills or attend professional development training. Even routine sampling schedules may be difficult or impossible to meet for operators in some remote locations. Weather disruptions and the need to rely on a variety of transportation connections (e.g., ferry, float plane, bush plane) can make it impossible to get samples to a testing laboratory within the prescribed time limit, regardless of how vigilant the operator may be.

Even though the operator did everything they could, it's still past [the limit of] 30 hours.

There are weather delays that can happen where the samples will get done and the whole transportation chain of coming down by float planes, to get transferred at another airport to come here, for us to get a courier. That transportation chain will fall apart at certain points. It gets frustrating for the operators to keep sending samples down and they just keep going bad.

Boil water advisories are often implemented when sampling schedules have not been met, even though there may not be a problem with the water supply. In order to avoid unnecessary boil water advisories, EHOs may encourage labs to analyse late samples or search for other assurances of water quality. This can create an ethical challenge for the EHO, who is responsible for overseeing sampling compliance and assessing water quality risk but does not want to impose unnecessary boil water advisories on a community. Guidelines that do not take into account the realities of **local context** make it difficult for EHOs to support equitable access to safe drinking water in such communities. Some EHOs have also noted that other policies (e.g., for design of septic systems) can be inappropriate or even ineffective under the geologic conditions in some communities.

Some operators of drinking water systems also struggle to pay for testing, maintenance, and upgrades of facilities. Some also face **education** and **literacy** challenges that make it difficult to follow guidelines or complete their certification exams. Because people often try to hide their literacy challenges, EHOs may be unaware that this is an issue. When they become aware of it, some work closely and discreetly with operators to explain and work through written materials verbally.

Maybe they've done it so long they KIND of know what to do, but if you write a report that's somewhat technical they don't necessarily know how to follow and read that.

Areas of EPH practice impacted by the social determinants of health

4 Built environment

The built environment is a relatively new area of practice for EPH practitioners. The emergence of healthy built environment teams within BC health authorities provides an opportunity for practitioners to apply an equity lens when commenting on development applications or rezoning permits, or when participating in local government planning processes. EHOs that are part of healthy built environment teams have been gaining specialized knowledge about how to improve health for all people through the built environment and planning. The collaborative nature of these teams facilitates **cross-sector collaboration** and provides an **opportunity for EPH input** on issues that fall outside the traditional jurisdiction.

We're starting to get mental health to come on board. They don't have the resources. But for a big development that could be impacted because of addiction, and maybe they're going to put a … liquor house on a corner of downtown but there's a residential neighbourhood around it. We can start putting those kind of comments and official community plan comments to mental health, and they're starting to get the idea that they could make comments to do with how that could affect the social structure of that particular neighbourhood, where we never had that before.

5 Housing

Housing presents particular challenges to an equity-integrated EPH practice: many of the vulnerabilities that can lead to health inequities are visible in housing situations. Because EHOs lack clear **jurisdiction** over housing related issues, they struggle to improve the quality of housing environments. In some municipalities (e.g., New Westminster), EHOs are authorized to enforce city bylaws or respond to housing complaints. Similarly, provincial legislation (e.g., Alberta Minimum Housing and Health Standards) can authorize public health inspectors to enforce housing standards, and collaborative initiatives such as RentSafe may facilitate cross-sector service delivery.

Regardless of jurisdiction or the presence of applicable legislation, health protection units receive complaints from vulnerable individuals (e.g., single mothers, the elderly, low income renters, and people with disabilities) who report health concerns related to water supply, heating, mould or other air quality issues, bed bugs, or general safety and repairs in rental units. The EHO is often the **first line of contact**, regardless of authority to act. Response varies across BC: some health regions defer response due to lack of authority and others try to **refer** individuals to services. Other agencies, such as the Landlord Tenancy Board or mental health and social service agencies, are also limited in what they can do, leading some EHOs try to intervene even though it is outside their formal mandate. Leadership support for this kind of action varies.

Areas of EPH practice impacted by the social determinants of health

Housing is an interesting situation, because I think it's pretty clear that it's not us. We all get sucked into playing the game because we're compassionate people and we want to help, and I think I feel supported in doing that on an occasional basis as I see it's warranted. [Health authority] has a culture of relationships…

If we followed the rules and they followed the rules, we couldn't get this done. But because we've built these relationships, [we help each other]. Sometimes it's under the radar because I'm not sure our managers would be that happy … But in the long term, you get the cooperation that's going to move you forward.

Regardless of local response, housing quality has been identified as a gap in BC's public health system.

So, unless the province decides that they're going to make it our mandate, it keeps falling off the plate of everybody.

Summary

Inequities in the distribution of the social determinants of health can create barriers for people in any area of practice in which EHOs work. Operators of food premises and personal services settings are frequently impacted by language, cultural, and economic barriers. Small water systems and food premises in rural or remote communities face are impacted by travel restrictions, high costs for equipment and service, and limited options for parts and service. Operators may also have literacy challenges. Housing is particularly complex: although EHOs' jurisdiction is limited, many witness people with mental health, social, and economic barriers living in unhealthy housing. The built environment, an emerging area of practice, is providing new opportunities for EHOs to play a role to support built environments (including housing) that are healthier for everyone.

The next Primer in this three-part series addresses some emerging practices used by EHOs in British Columbia to respond to perceived inequities, and identifies some options to support the use of an equity lens in EPH practice.

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