



Understanding the role of **public health in building resilient food systems** in Oregon

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Hi everyone, thank you for joining this session today. My name is Briana Arnold and I am currently a Senior Consultant with Rede Group in Portland, Oregon. Before I was with Rede Group, I contracted with the Oregon Health Authority's Climate and Health Program to analyze some survey data and write a brief paper. The information collected is really exciting because it will help inform public health's role to help build resilient food systems in Oregon and we wanted to share it far and wide.

Background



“Promote and inform policy and planning that improves the resilience of our local food systems.”

First I want to provide you a little bit of background on the survey. This work started in 2017, when the OHA published their [Climate and Health Resilience Plan](#). The plan prioritizes many strategies for Oregon’s public health system, such as standardizing the use of a health equity framework and increasing the number of policies and plans that include health and climate considerations. There are 16 strategies in total. There is one in particular that is very important for public health and food systems. It is to: (1st) “Promote and inform policy and planning that improves the resilience of our local food systems.”

What is a resilient food system?

- It provides adequate, nutritious food over time despite natural and non-natural hazards
- It is stable despite threats
- It can be proactively built to weather times of crisis



Figure credit: <https://www.edrincollab.com/sites/media/files/016/022119/241320021>

I'm going to detour for just a moment to talk about what a resilient food system is. (1st) A resilient food system reliably provides adequate, nutritious food over time despite natural and non-natural hazards^{2,6}. This is to say food systems face threats; events like climate change, urbanization, economic crises, hurricanes, and droughts, which can all diminish the stability of a food system^{1, 2}.

It needs to be stable despite threats. (2nd) What do I mean by this? If climate change contributes to drought conditions in a year, farmers may lose crops from water shortages or extreme heat, much like we experienced this year. This means that food isn't going into the food system, potentially leading to food shortages. This has also been happening during COVID; food bank usage dramatically increased while the supply food banks received didn't.

(3rd) What we can do to combat this is to proactively build a resilient food system. This can improve the ability of individuals and communities to obtain an adequate amount of healthy food during times of crisis².

Survey



(1st) We're going to now re-focus on the climate and health resilience plan work. (2nd & 3rd) The first step to achieve that strategy I mentioned, "promote and inform policies and planning that improve the resilience of our local food systems", was to (4th) assess the public health system's role and capacity to further support community food strategies. To do this, the [Climate and Health Program](#) partnered with researchers at Oregon State University and conducted a study. In 2018, the study team invited public health professionals working in local public health authorities and the OHA's Public Health Department to participate in a 14 question survey.

Survey

“Assess respondent’s familiarity, current work, and knowledge of public health strategies for building resilient food systems.”

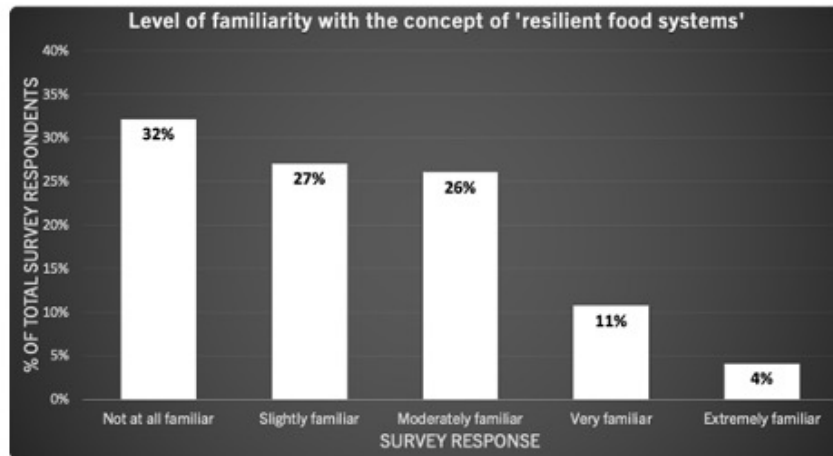
Areas of Inquiry:

1. Public health workforce understanding of resilient food systems as a concept
2. How current public health work and activities intersect with food systems
3. Identification of public health strategies to support a resilient food system
4. Barriers faced and resources needed to further incorporate resilient food systems into current public health work

The survey’s intent was(1st) to assess respondent’s familiarity, current work, and knowledge of public health strategies for building resilient food systems. The survey focused on four areas. (2nd) The first was gauging public health professional’s understanding of resilient food systems. (3rd) The second was how current public health work connects with food systems. (4th) The third was to ID public health strategies to build this resilient food system. (5th) And the fourth was barriers to do this work.

Area of Inquiry #1:

Public health workforce understanding of resilient food systems as a concept



First, we'll talk about area of inquiry #1, public health workforce understanding. We found that only eight people out of the total amount of respondents who chose to answer this question were extremely familiar with the concept of a resilient food system. A few more were very familiar, but most everybody was moderately, slightly, or not at familiar with what a resilient food system is.

Area of Inquiry #2:

How current public health work and activities intersect with food systems

- 36% - Never worked in this area, N/A
- 29% - My program indirectly touches the food systems
- 23% - My program directly touches the food systems
- 12% - Other

The second area of inquiry was really to figure out how public health work *already* intersects with the food system, respondents were asked to reflect on this. (1st) 36% have never worked in this area, although some mentioned that their clients may face food insecurity. This is important because while they see the impacts of inequities in the food system, their job may not allow them to address it. (2nd) 29% said their work indirectly touches the food system and (3rd) 23% said their work directly touches the food system. And then there was this 'other' category.

The (4th) 12% who said other includes working in medicine, personal work that touches the food system but professional work that doesn't, and public health work that reactive rather than proactive. But the thing we want to focus on is just (5th) 23% of respondent's said their work directly touched the food system. Food systems are a major contributor to health, and this may indicate that public health isn't as involved in food systems as it could be.

Area of Inquiry #3:

Identification of public health strategies to support a resilient food system

Six themes emerged from their answers:

1. Programming/education
2. Food production
3. Relationships
4. Policy
5. Data gathering
6. Other

"Linking agriculture, water management and soil management in food production at the local scale."
-Survey Respondent

"We have a food system and political system that hides the fact that our entire food system is dependent on a large, underpaid workforce that our society has not welcomed with open arms. If we cannot ensure a stable labor force we have no food."
-Survey Respondent

Now this third area of inquiry is really interesting. Public health professionals were asked what they thought would be the best ways for public health, specifically, to help build a resilient food system. They were asked to provide three ideas, and after aggregating all of their ideas, 5 major themes emerged. They were:

1. (1st) First, or most mentioned, was programming and education. This included education in schools, at community centers, and other public and private organizations to increase knowledge and work in resilient food systems
2. (2nd) Second was food production. This included public health supporting community gardens or getting resources to families so that they could garden or produce their own food.
3. (3rd) Then was relationships, which included things like collaborating with other organizations doing this work.
4. (4th) Fourth was policy, which was sometime vague or mentioned food-related regulations
5. (5th) And last was data gathering, which surprisingly only a couple of respondents mentioned
6. (6th) Then, there is this other bucket, where respondents provided unique ideas to address this intersection of work. Some ideas were
 - a. Developing social marketing campaigns
 - b. Elevating voices of those who are experiencing food insecurity
 - c. Supporting grant applications to address shortages

d. Engaging in food waste management programming and policy

Area of Inquiry #4:

Barriers faced and resources needed to further incorporate resilient food systems into current public health work

- Funding/resources
- Time/capacity
- Know-how
- Influencing change
- Collaboration
- Prioritization
- Cultural specificity

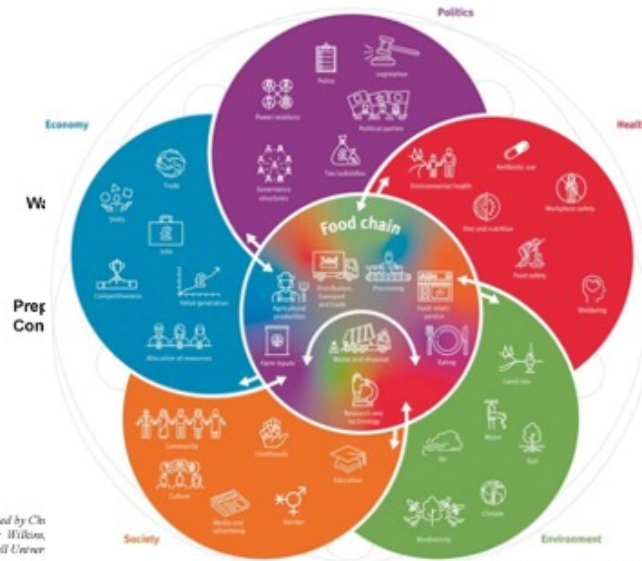
**"Funding, staff time, leadership
priority LONG term."**
-Survey Respondent

**"I think the biggest barrier is
understanding what public health can do
on this topic. I am still unsure on specific
strategies."**
-Survey Respondent

In the fourth area of inequity, respondents were finally asked what barriers they anticipated facing to incorporate resilient food systems work into their current work. And this really focused in a few big themes.

Respondents talked about a (1st) lack of funding or resources and (2nd) time or capacity. Respondents in many ways expressed (3rd) a lack of "know-how", indicating the need for more tools, data, capacity, skills, or expertise. They talked about a lack of public health ability or leadership to (4th) influence structural or systemic change within a giant industrial agriculture. They spoke to the (5th) challenges of linking across different levels of government and across different sectors, or collaboration. Some talked about State and local public health leadership not making food systems work a (6th) priority and even called out (7th) a lack of culturally-specific services

Gaps in respondents' understanding:



I want to touch on an important observation made from these data. There seemed to be a gap in respondents' understanding of food systems concepts. Particularly, we noticed there may be an incomplete visualization of the food system, end to end. Some respondents may have mentioned the whole food system, but lacked understanding about certain aspects of the system. Even this image that I included does not include the complexity of the food system, leaving out elements like agricultural and food worker rights, food policy, and so much more. (1st & 2nd) The food system would really look something like this, which is really complex. We can see, briefly, through this image, that it is normal not to understand all the elements of such a large system and that workforce education may help with this.

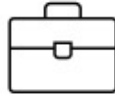
Recommendations

1. Bring PHD food systems-related work together to better **understand gaps and opportunities** for coordination.
2. Identify, engage with and **learn from community partners** to advance shared goals and public health outcomes.
3. **Train and support public health professionals** in understanding and advancing resilient food systems strategies.
4. Engage in **long-term planning and policy** to build resilient food systems.

Ultimately, the study resulted in a list of recommendations. I wanted to highlight them because they are an incredibly important first step to incorporating resilient food systems work into public health work in Oregon. (1st) The first is to better understand just *how* to coordinate this work. (2nd) The second is to work with community partners, (3rd) the third is to train public health professionals about resilient food systems, and (4th) the fourth is to set this up as a long term priority and advance policies that support it.

Recommendations in light of COVID-19 pandemic:

- Work with partners to conduct a **COVID-19 and food systems assessment**
- Learn about any **new strategies or practices** that may have developed during the pandemic
- How public health might **incorporate strategies into emergency preparedness plans**



Beyond those four recommendations, we created a general recommendation in light of COVID-19. Prior to the pandemic, (1st) literature called out pandemics as a threat to the food system in general. Interestingly, the survey data was collected before the pandemic, then analyzed right during the start of the pandemic.

The disruptions that we saw in Oregon to our food system because of (2nd) COVID-19 were very ominous, highlight just how unresilient our food system is. In the months following the first diagnosis of COVID-19 in Oregon at the end of last February, more than 270,000 Oregonians had lost their jobs (3rd), applications for SNAP benefits nearly quadrupled, and food banks saw a 35% rise in customers seeking food. While this was happening, there were closures of restaurants and schools, which are prominent distribution outlets for local farmers (4th), leading to a dramatic decrease in the amount of product that farmers could sell.

This resulted in farmers plowing under crops, losing money, and laying off workers. Despite an increased need in the community for food from alternative sources, such as food banks, getting food to these outlets required infrastructure that was not prepared (5th), leaving both farmers and communities grappling with what to do.

So we'd recommend that (6th) public health professionals work with food systems players to assess and figure out what people have done during the pandemic to (7th) to overcome barriers with new strategies, and (8th) incorporate food systems strategies into emergency preparedness plans.

Takeaways

- ✓ Start to this work
- ✓ General recommendations
- ✓ Act on recommendations



<https://clf.jhsph.edu/projects/food-system-resilience>

[There's a] perspective that public health is not agriculture, why would we tell other people how to do what they are experts in? Existing federal and international policies incentivize the way we do things now."

-Survey Respondent

(1st) Ultimately, this survey shows a small but very important step forward for public health in Oregon to start incorporating food systems work into existing public health work. (2nd) It, food systems, can often be a theme that receives little if any attention from big public health players. This is because many factors, which are exacerbated by the food system being so large and so complex, like we talked about earlier. Working to make an equitable, resilient food system can seem like an overwhelming task for the best funded, staffed, and organized organization.

And this survey provided just a window into how public health professionals in Oregon view food systems within their current professional scope. (3rd) It provided us a general direction in terms of recommendations, like training public health workers and making this work a long time priority.

(4th) Now, it's time to act on these recommendations. Not only does the OHA have the opportunity to act on these recommendations, but other public health professionals can take the information found in this survey, along with it's resulting recommendations, to start or build upon this work in local communities.

And this image I've pulled is from the RWJF's work on resilient food systems, which has a lot of great resources linked.

<https://clf.jhsph.edu/projects/food-system-resilience>



Thank You

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Thank you so much for your time today and please feel free to reach out to me with any questions.