

# Planetary Health at VCH

Richmond Hospital Physician Society Lunch  
April 30, 2026



**Dr. Rashmi Chadha**

Clinician Engagement Lead, Planetary Health

# Territory Acknowledgement

Vancouver Coastal Health is committed to delivering exceptional care to 1.25 million people, including the First Nations, Métis and Inuit, within the traditional territories of the Heiltsuk, Kitasoo-Xai'xais, Lil'wat, Musqueam, N'Quatqua, Nuxalk, Samahquam, shíshálh, Skatin, Squamish, Tla'amin, Tsleil-Waututh, Wuikinuxv, and Xa'xtsa.

**We wish to acknowledge that the land on which we gather is the traditional and unceded territory of the Coast Salish Peoples, including the x<sup>w</sup>məθk<sup>w</sup>əy'əm (Musqueam), Sk̓wx̓wú7mesh (Squamish) and səliłwətał (Tsleil-Waututh) Nations.**

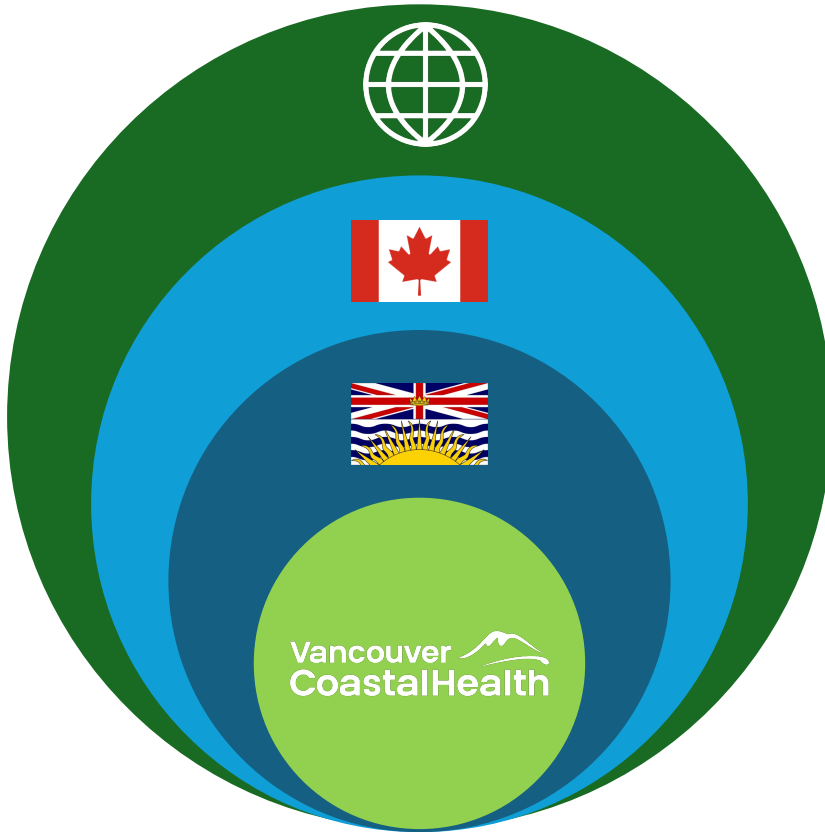


# Planetary Health

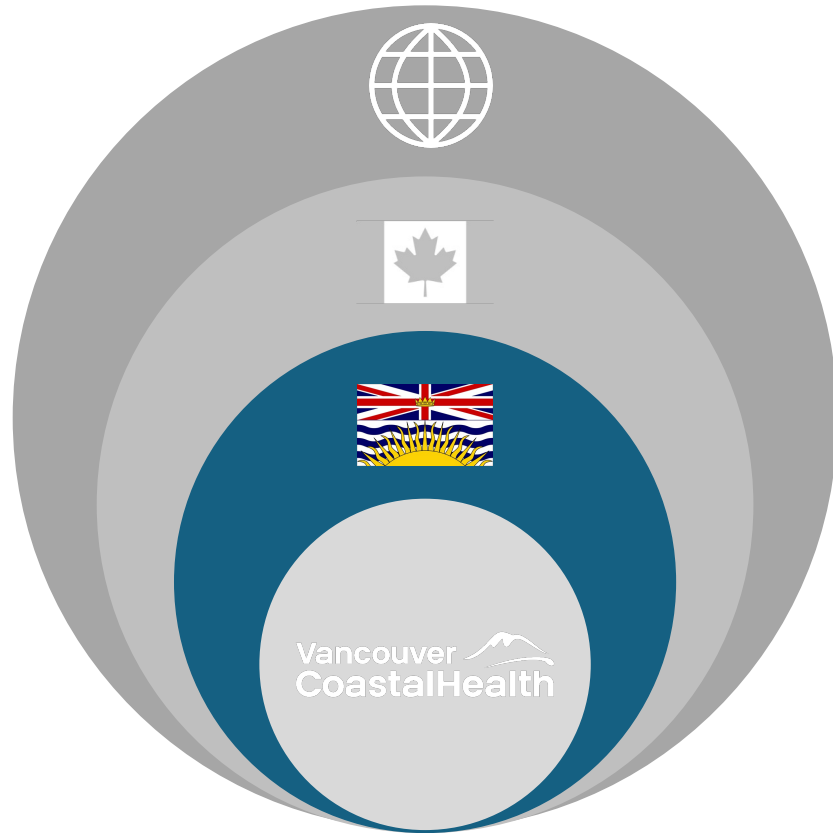
# Climate change, human health and the health system | Relationships and Impacts



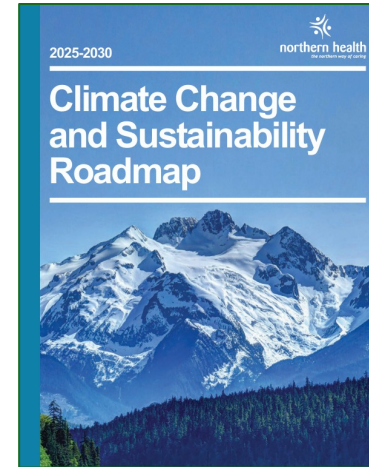
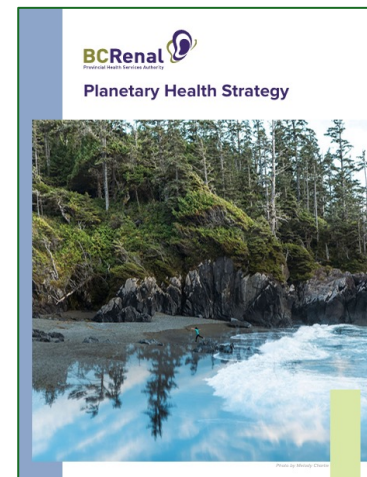
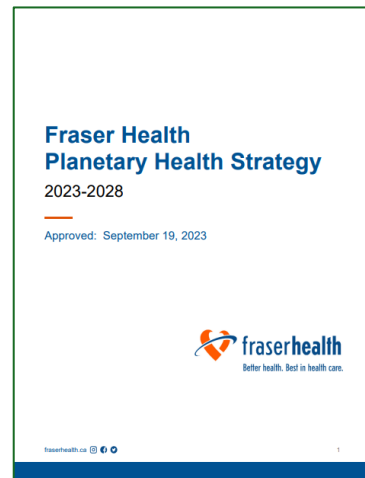
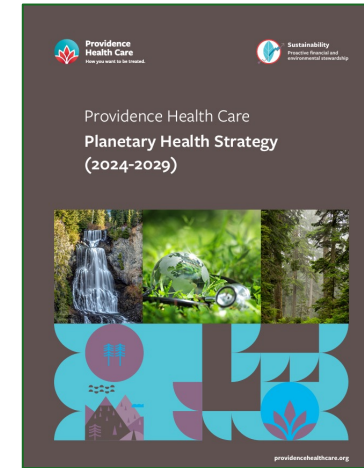
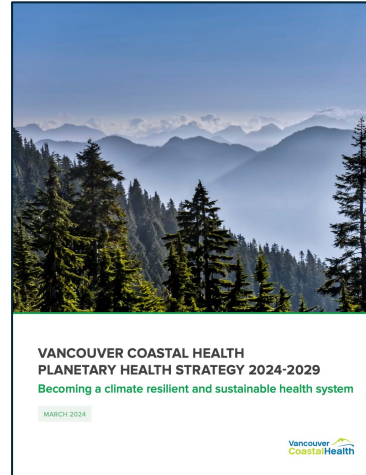
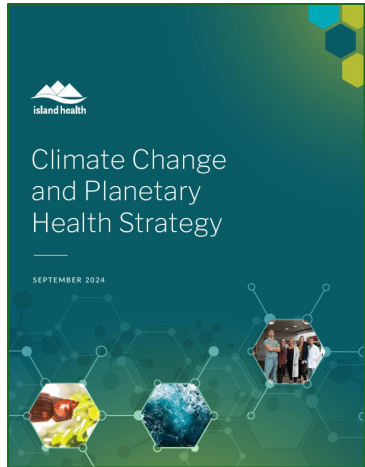
# Planetary Health Landscape



# Planetary Health Landscape: Provincial



# BC Health Authorities and Agencies



# Provincial Matrix: Environmental Sustainability Across Quality Dimensions



## Environmentally Sustainable High-Quality Clinical Care

We're advancing high-quality clinical care while reducing the environmental impact of how it's delivered.

Across BC, we're working with those who deliver care and system leaders to reduce emissions, shift clinical practices and align decisions to support both patients and planetary health. This work is grounded in evidence, shared learning and a commitment to sustainability.



# Provincial Sustainable Clinical Services Working Group



## Provincial Sustainable Clinical Services Working Group

This provincial group brings together organizations committed to integrating environmental sustainability into clinical care. Health Quality BC collaborates with BC Health Authorities, CASCADES Canada, the Ministry of Health and the Rural Coordination Centre of BC to align priorities, share strategies and support a more climate-resilient health system. The group's key goals are to:

- ✔ Collaborate and Innovate
- ✔ Align Actions
- ✔ Spread Quality Improvement Initiatives



**OBJECTIVE 1: ADVANCE APPROPRIATE CARE, SUPPORTING CLIMATE-CONSCIOUS CLINICAL RECOMMENDATIONS**

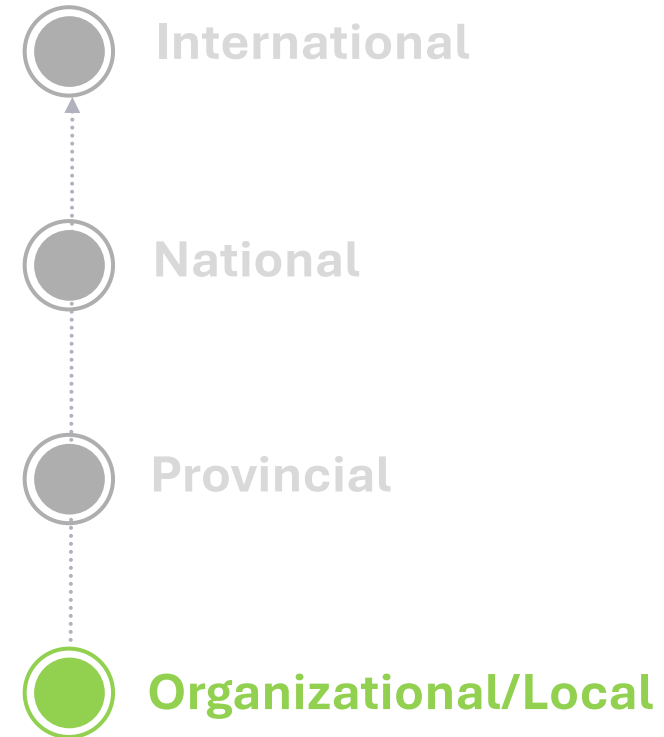


**OBJECTIVE 2: INCREASE EFFICIENCIES AND REDUCE WASTE IN CLINICAL SUPPLY CHAIN PROCESSES AND PRACTICES**



**OBJECTIVE 3: EMBEDDING SUSTAINABILITY IN THE HEALTH SYSTEM**

# Planetary Health Landscape: Organizational/Local



# Strategic direction

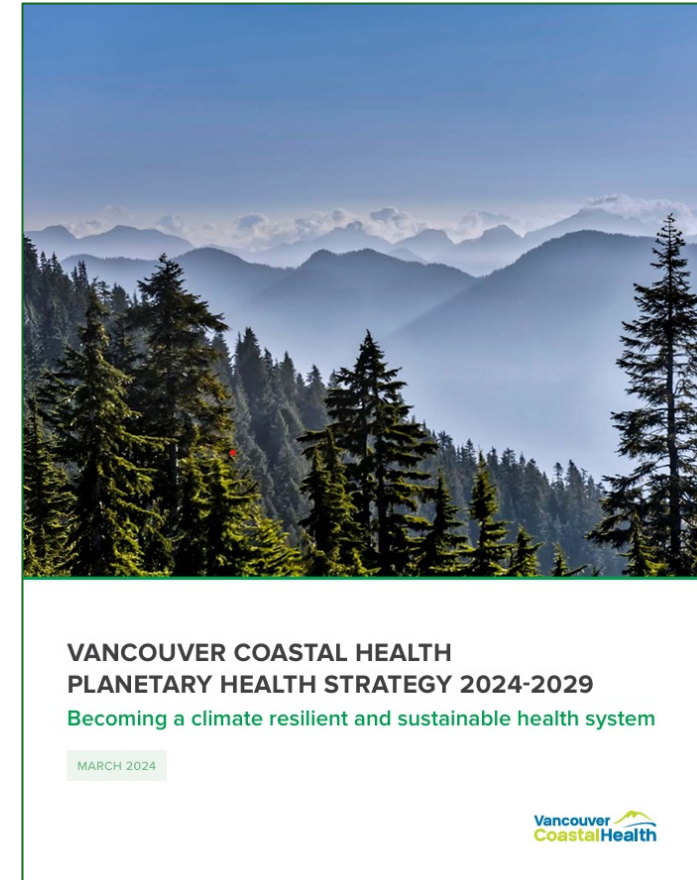
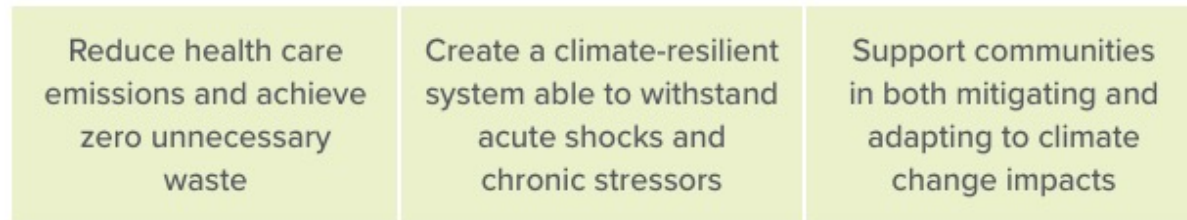
## Vancouver Coastal Health pillars

The VCH strategic framework has four pillars:

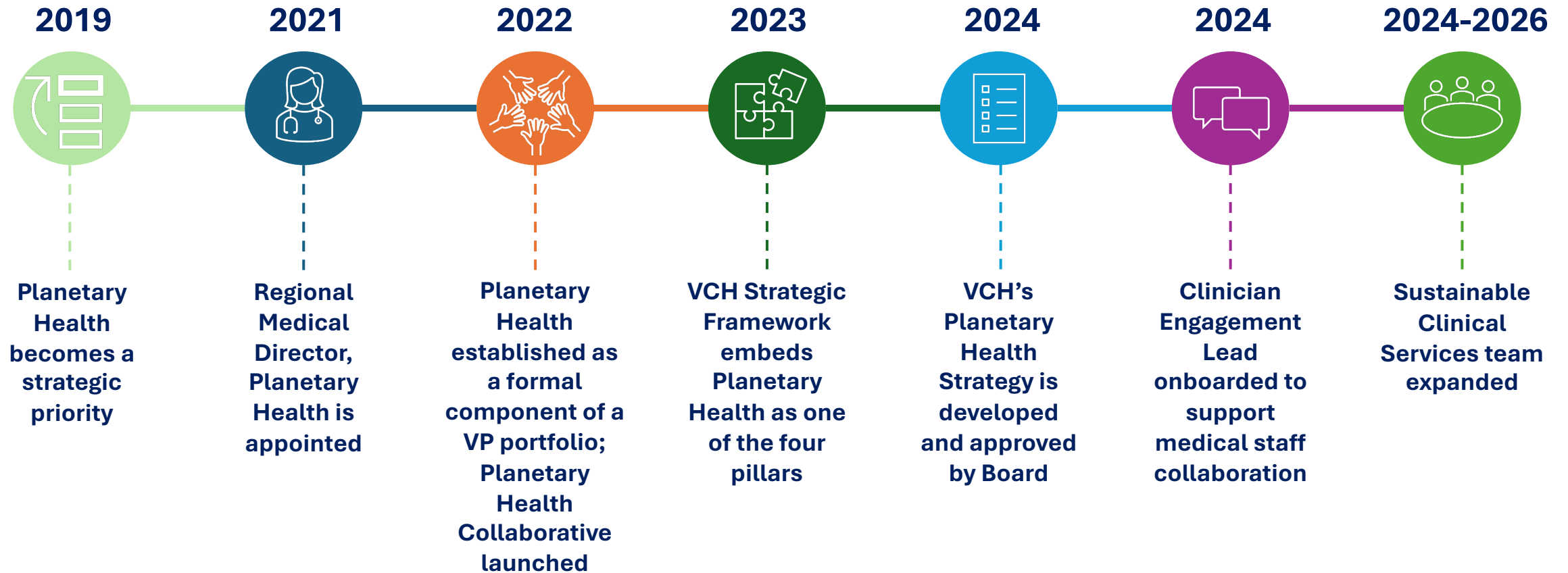


## Planetary health goals

VCH is working towards the following goals:



# Vancouver Coastal Health: Planetary Health Pioneer



# VCH Planetary Health Collaborative

**Planetary Health Collaborative**  
VP Strategy, Innovation and Planetary Health



Public Health



**Population and Public Health**

VP Public Health and Chief Medical Health Officer

Sustainable Clinical Services



**Quality & Patient Safety**

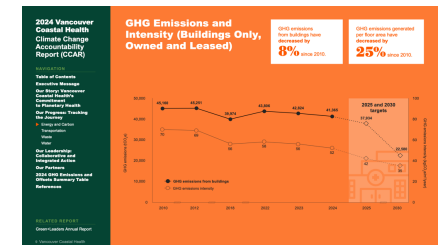
Vice President, Professional Practice,  
Chief Nursing and Allied Health Officer,  
Chief Clinical Information Officer  
VP Medicine and Academic Affairs

Energy & Environmental Sustainability

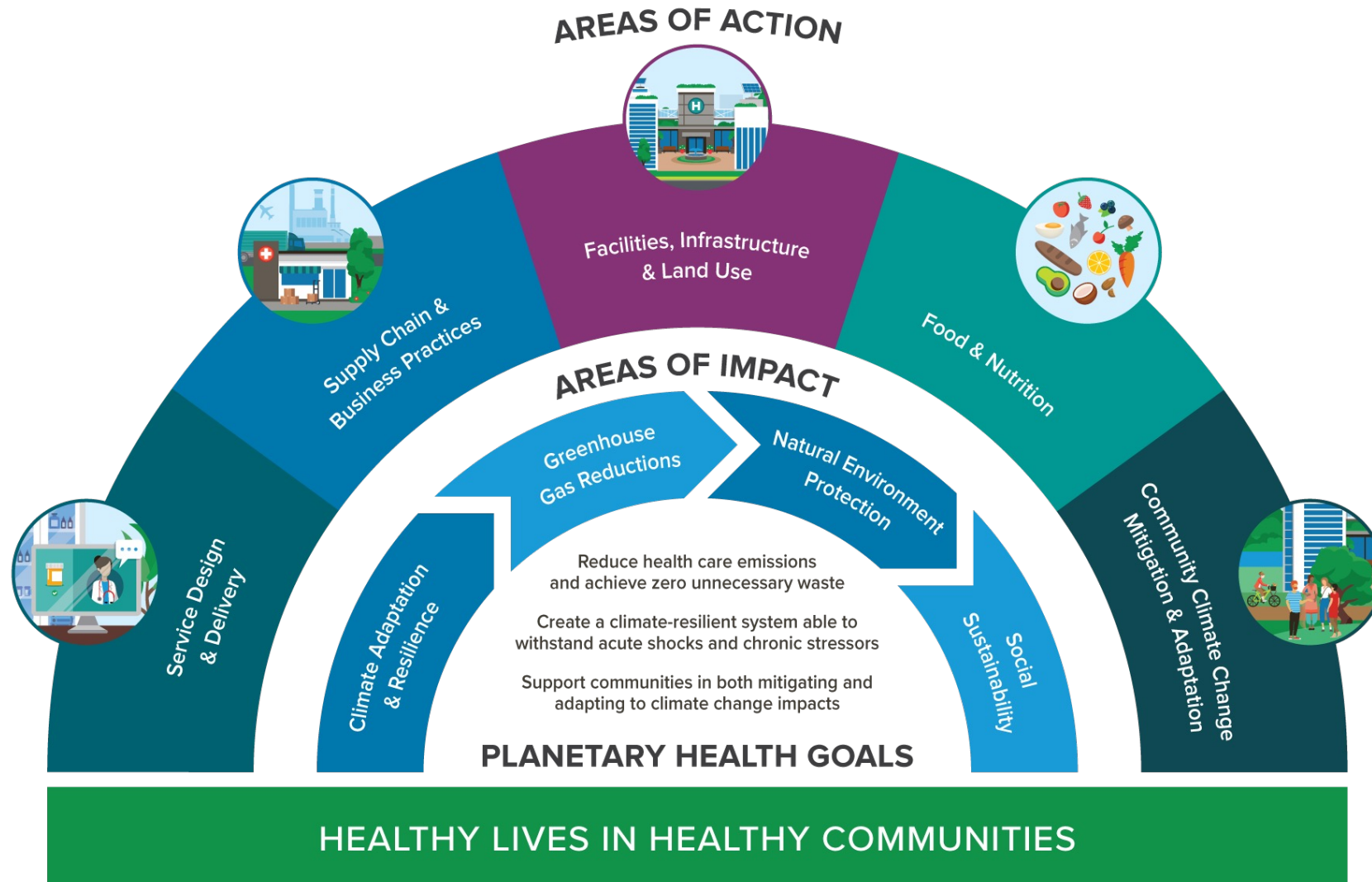


**Facilities & Maintenance**

VP Strategic Business Services and Chief Financial Officer



# VCH Planetary health Strategic Plan



# Sustainability-Embedded Quality Improvement Toolkit

## Approach

- A structured tool to embed and measure environmental sustainability within quality improvement
- Integrates environmental sustainability into everyday QI practice and existing quality domains
- Generates tailored metrics, guidance, and resources for teams



## Impact

- Validated across seven Canadian provinces
- High usability, acceptability, feasibility, and appropriateness among participants
- Informing development of the SE-QI Spotlights

## Scale and Opportunity

- National launch planned for summer 2026
- SE-QI Spotlights enabling visibility and spread of sustainability-embedded QI initiatives
- Integration into organizational and national structures

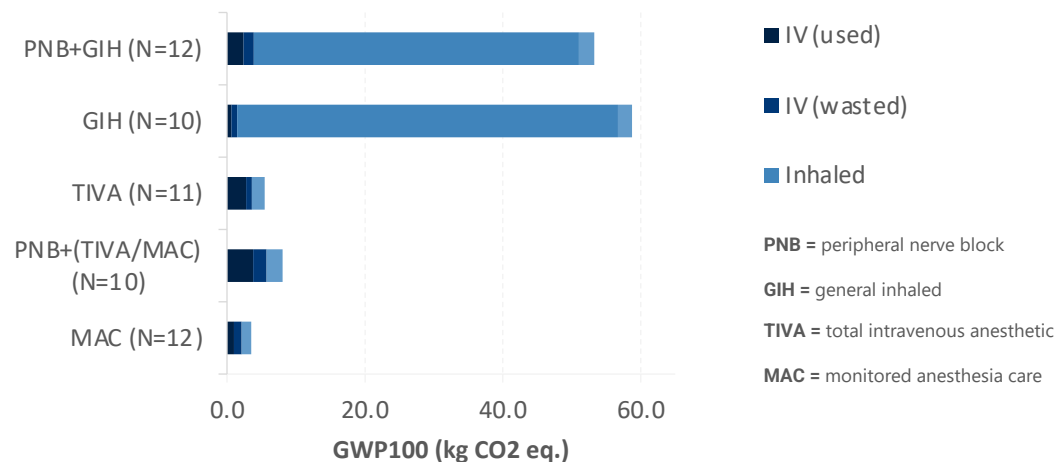


# Regional Anesthesia

## Approach

- Increased use of regional anesthesia as alternatives to inhaled anesthetics
- Improves patient experience, outcomes, and operational efficiencies
- Implemented new workflows, staffing, data tracking at VGH; piloted with Ortho Trauma and Vascular Surgery

**Global Warming Potential of Anesthetic Techniques**  
(Sherman, Tunceroglu, Parvatker, Sukumar, Dai, Eckelman)



## Impact

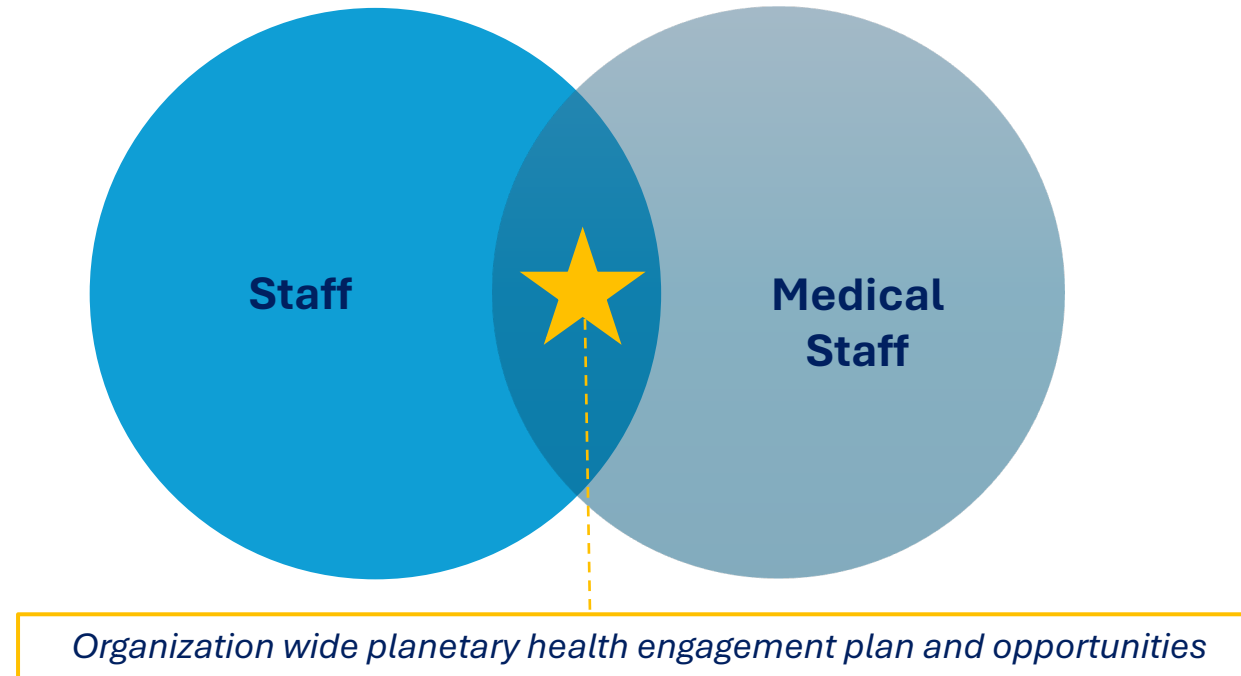
- 8% reduction in sevoflurane-related emissions (2022–2025)
- 13% reduction in emissions intensity
- 80 % (40/50) of patients satisfied or extremely satisfied with pain management; no pain-related follow-up

## Scale and Opportunity

- Continued expansion within Ortho Trauma and Vascular Surgery at VGH
- Spread to General Surgery at VGH and initiate partnership with Richmond Hospital


# 2026-2028 engagement plan

# Planetary health is for everyone



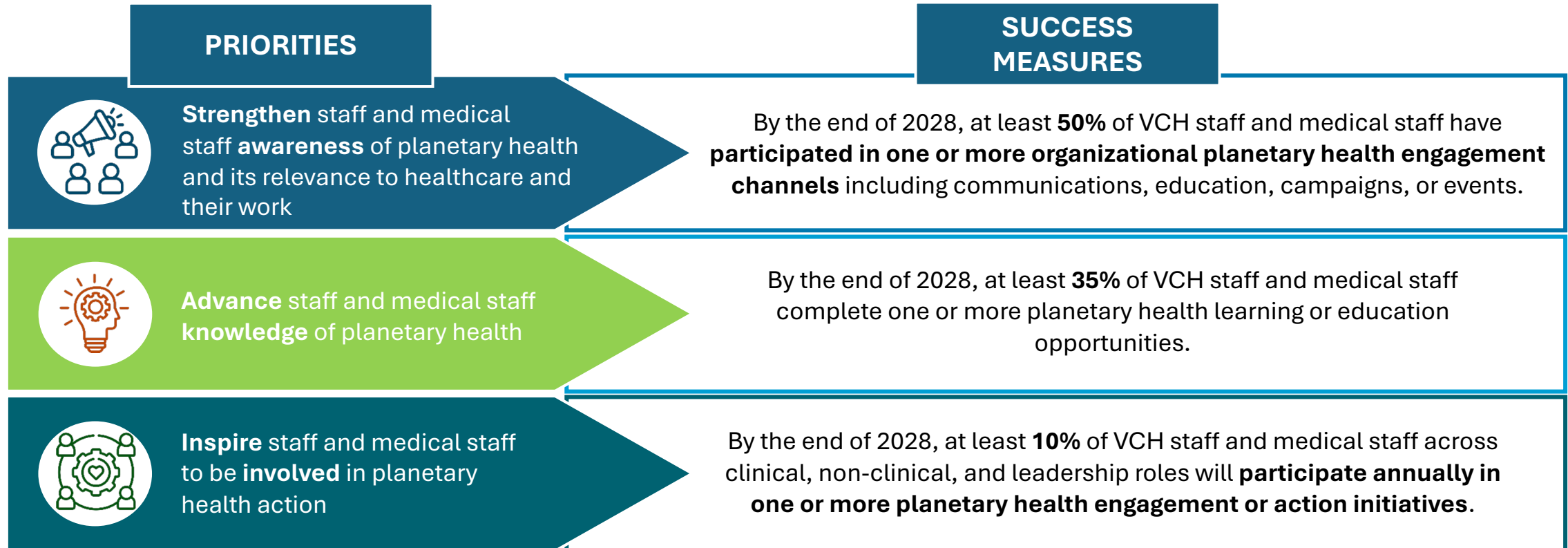
Informed by a staff and medical staff advisory group, the Transformation Team and the Planetary Health Clinician Engagement Lead co-created a multi-year engagement plan with multiple pathways for staff and medical staff to **build awareness, understanding, and take action on planetary health at VCH.**

## Get engaged with planetary health at VCH

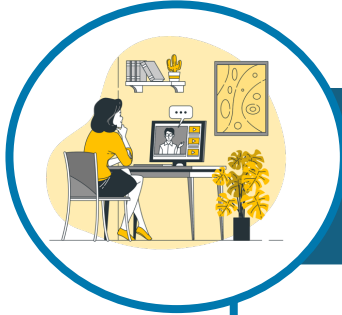


Our goal: Staff and medical staff are **supported** and **empowered** to integrate **planetary health** into their daily roles and decision-making.

# Priorities and success measures



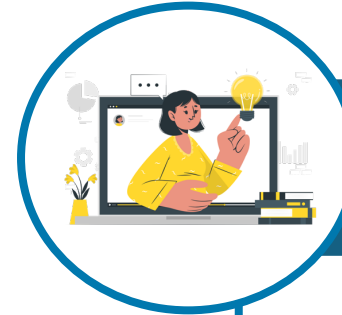
# Start (or continue) your learning journey



## Orientation to Sustainable Health Systems

- Explore the impacts of climate change on health and health systems
- Understand how health systems contribute to climate change, and
- Identify opportunities to integrate sustainability into your work.

**Available now on Learning Hub!**



## Planetary Health Workshop: *Finding your place to act*

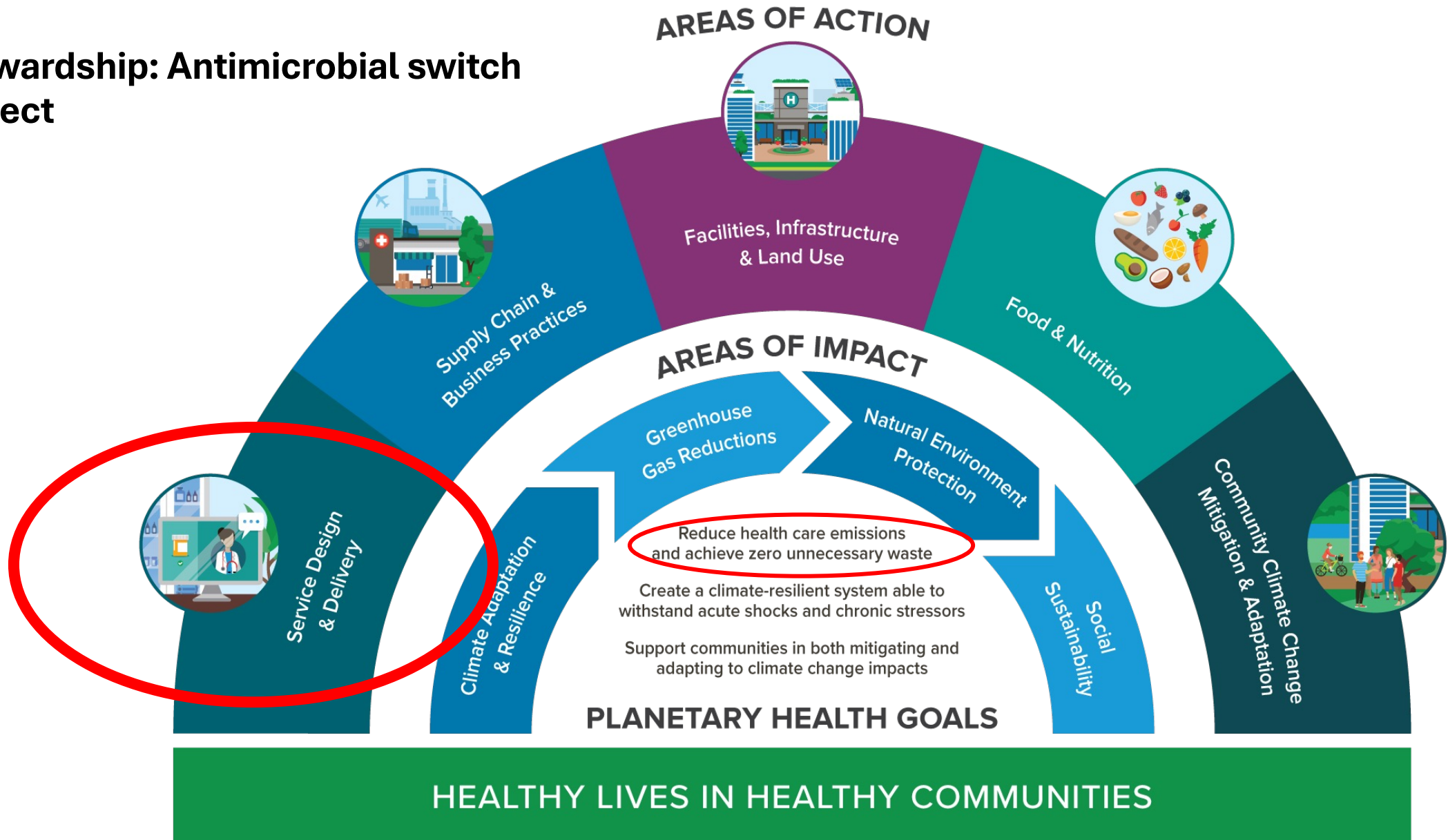
**New!**

- Explore the systems shaping climate change and health care
- Identify your sphere of influence, so you can take practical and focused action in your work.

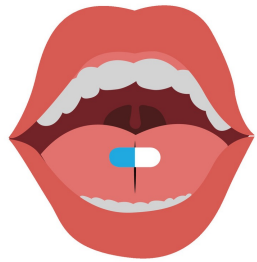
**Coming Fall 2026; take the Orientation to Sustainable Health Systems course first!**

# VCH Planetary Health Strategic Plan In Action

# Stewardship: Antimicrobial switch project

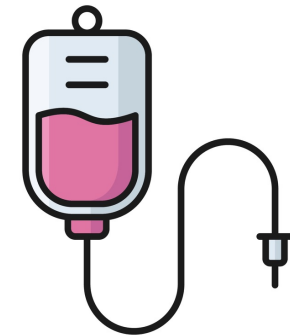
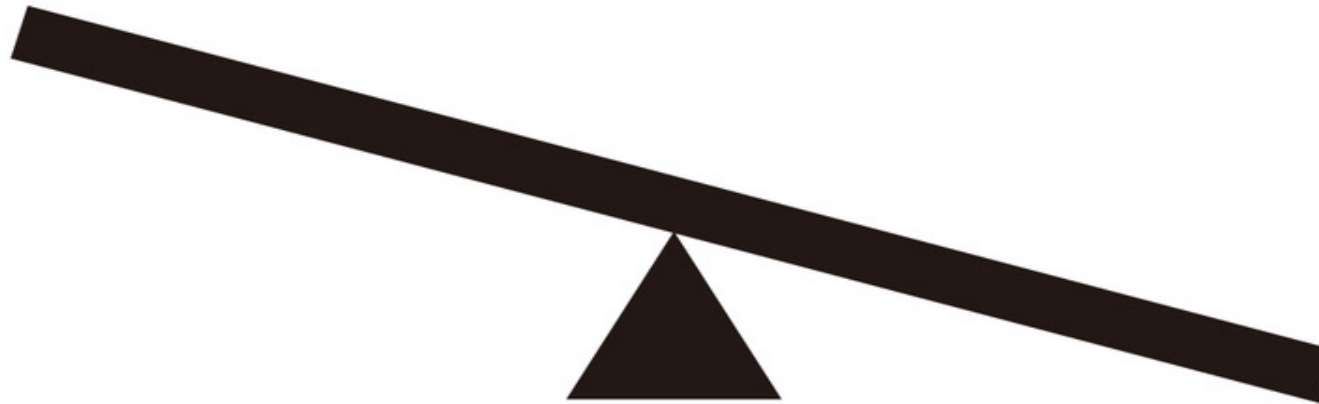


# Benefits of administering antibiotics orally vs intravenously



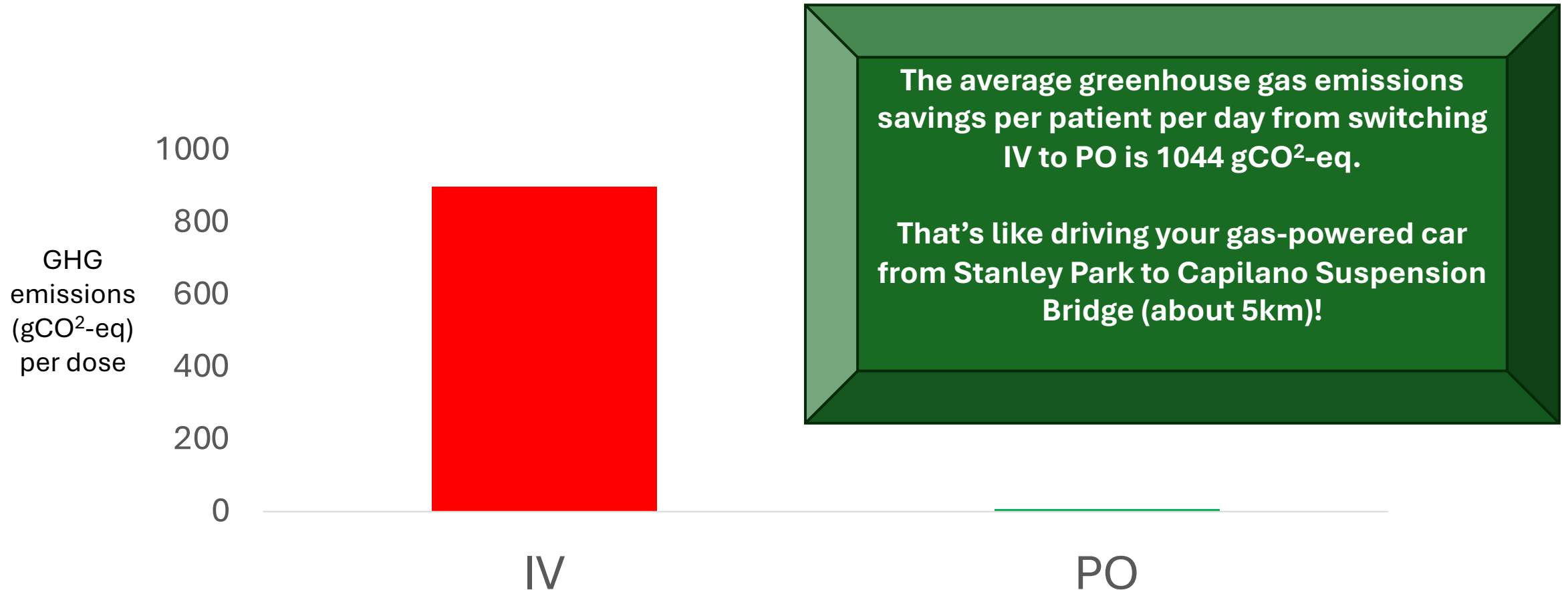
**Oral (PO)**

- ↓ hospital length of stay
- ↓ line-related adverse effects
- ↑ patient comfort
- ↓ healthcare resources
- ↓ hospital costs
- ↓ carbon footprint



**Intravenous (IV)**

# IV antimicrobials have ~140x higher carbon footprint compared to PO equivalents



# IV to PO Antimicrobial Switch: An example of Stewardship



**Let's GO, PO!**  
**Oral (PO) antimicrobials have a lower carbon footprint than intravenous (IV) and can often be safely prescribed.**

**IV antimicrobials:**

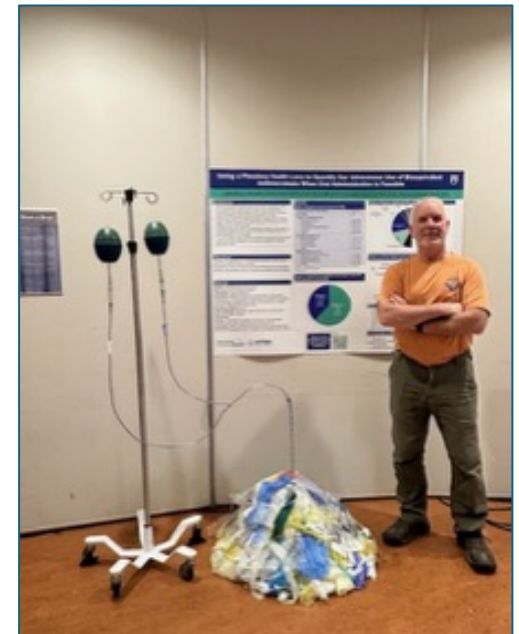
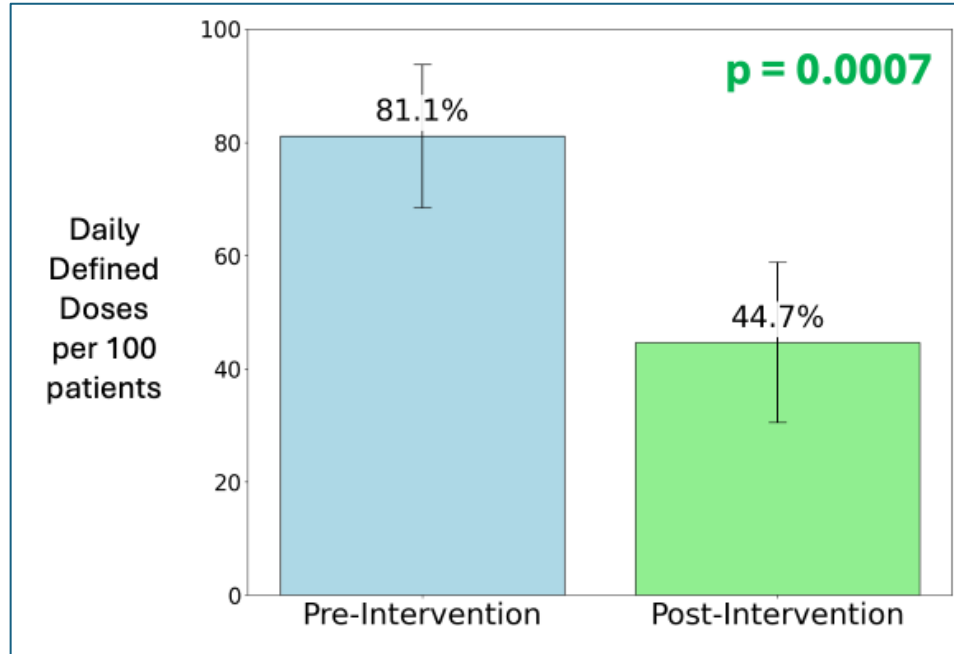
- Increase risk of adverse effects for patients (clots, line infections)
- Require more health-care resources (compounding and administration)
- Produce more environmental waste and contribute directly to climate change

**PO antimicrobials:**

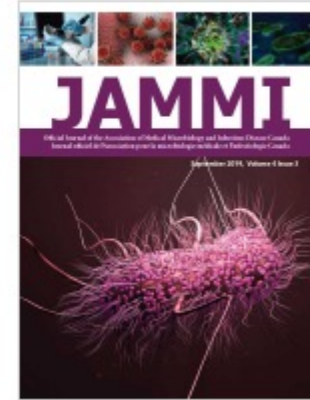
- Are easier for patients to take
- Avoid IV catheter-related adverse effects
- Reduce length of hospital stay and health-care costs
- Reduce environmental waste and greenhouse gas emissions

**What you can do**  
 Scan the QR code to access the IV-to-PO switch guideline in our Firstline app and use antimicrobials *preferentially* whenever clinically appropriate.

Vancouver Coastal Health



# Journal of the Association of Medical Microbiology and Infectious Disease Canada



 **OPEN ACCESS** | Research Article | 12 February 2026



## Using a planetary health lens to quantify intravenous use of bioequivalent antimicrobials when oral administration is feasible

**Authors:** Meghan MacLaren, BSc, Rosanne Thalakada, PharmD, ACPR , Hui Zhu, BSc, Tim T Y Lau, PharmD, ACPR, Salomeh Shajari, BSc, Xiaotao Bi, PhD, PEng, and Shaqil Peermohamed, MD, MPH | [AUTHOR INFORMATION AND AFFILIATIONS](#)

**Publication:** Journal of the Association of Medical Microbiology and Infectious Disease Canada • Advance Access  
[https://doi.org/10.3138/jammi-2025-0029\\_MacLaren](https://doi.org/10.3138/jammi-2025-0029_MacLaren)



Slide courtesy of Dr. Peermohammed

BC Quality Awards  
**RUNNER-UP**

ACHIEVEMENT IN  
**SUSTAINABLE HEALTH CARE**

**Intravenous to Oral  
Antimicrobial Switch:  
A Win for Patients and the  
Planet**



# Thank you!

## Please complete our survey

