

# ONE HEALTH FOR CITIES

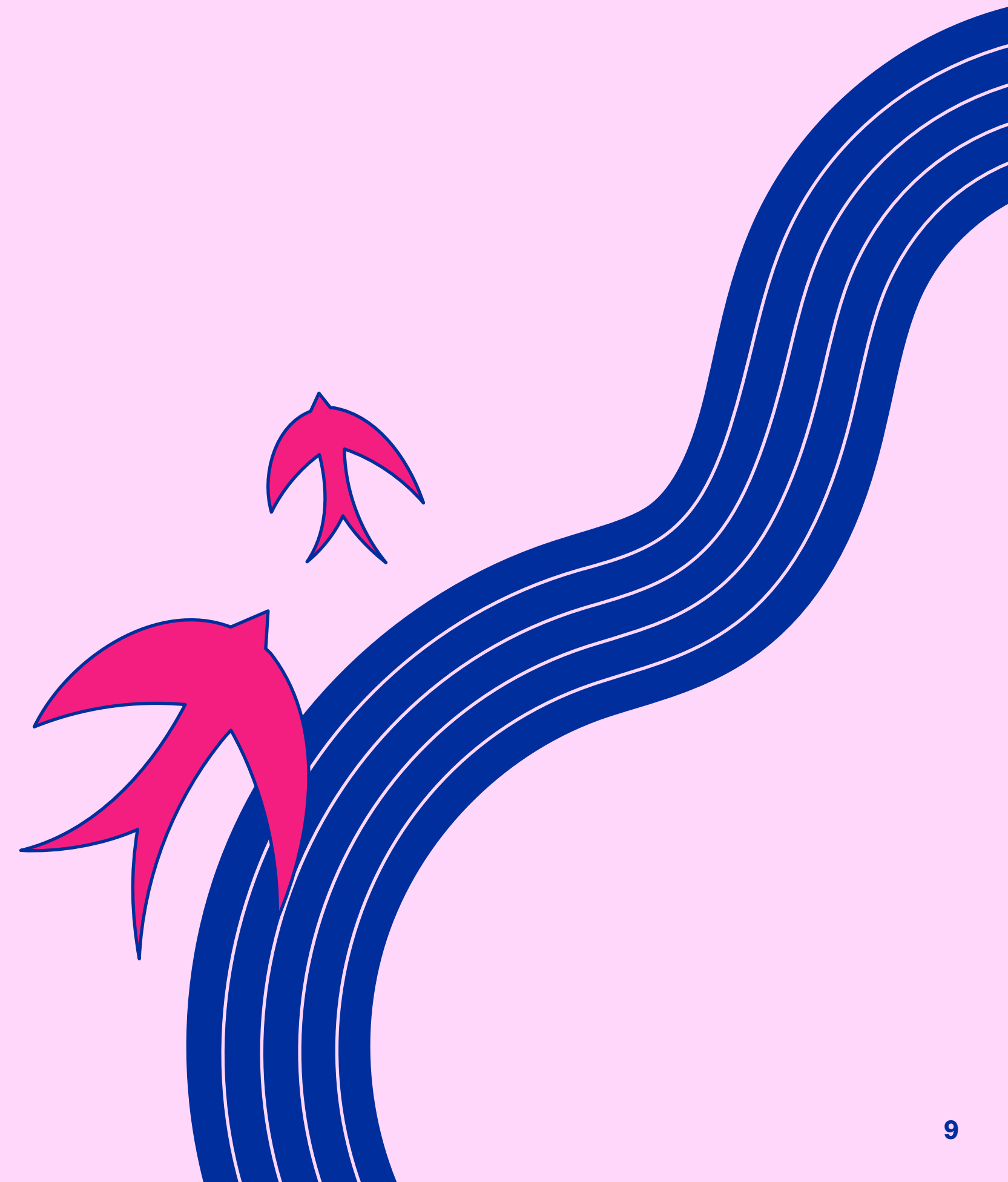


**THE ESSENTIAL GUIDEBOOK FOR CITY MAKERS**



# SECTION 1: DEVELOPING ONE HEALTH-INTEGRATED STRATEGIES

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# INTRODUCTION

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## WHY DEVELOP A ONE HEALTH-INTEGRATED STRATEGY IN CITIES?

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A One Health-integrated strategy can ensure that, through city programmes and projects, the health of all beings and environments will be a priority and seen as a united interactive ecosystem.

Developing a One Health-integrated strategy in cities is a complex but essential task. It requires **cross-sectoral collaboration, shared understanding among departments, clear communication, and coordinated planning and budgeting**. Successful implementation depends on aligning actions and resources across diverse topics, often managed by different deputy mayors or municipal departments, and integrating efforts early through city council planning, discussion, and approval processes.

Despite the complexity, the benefits are significant. Cities that effectively design and implement One Health-integrated strategies can generate lasting improvements in the health of people, animals, plants, and ecosystems. These strategies not only **deliver direct health and environmental benefits** but also **enhance city governance, promoting resource efficiency, strengthening interdepartmental cooperation, and fostering a more cohesive urban vision**.

A well-crafted One Health-integrated strategy provides a strong foundation for guiding policies, coordinating actions, and mobilising funding. Ultimately, it supports **long-term municipal commitment to building inclusive, resilient, and thriving urban environments** where all forms of life can co-exist in balance now and in the future.



# BEFORE EMBARKING ON DEVELOPING A ONE HEALTH-INTEGRATED STRATEGY

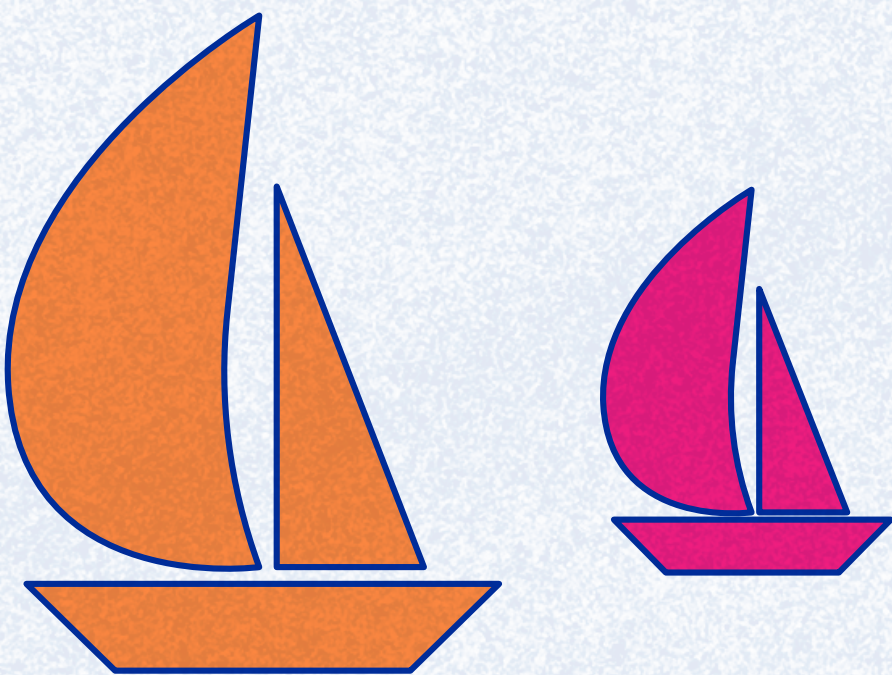
Strong **political commitment and leadership** are essential for success. City leaders and their involved teams must co-define a clear One Health vision that serves as a guiding principle for strategy development, actions, and projects, and provide a clear mandate to the administration to establish a One Health partnership and actions. This commitment is also crucial for securing the necessary human and financial resources and providing the structure to build and sustain a One Health-integrated strategy.

In the absence of political support, a **bottom-up approach** can begin by using the One Health collaborative framework and empower mid-level managers and technical staff within city administrations to form cross-departmental working groups focused on city priorities such as climate change adaptation, sanitation, urban planning, biodiversity, etc. By piloting integrated projects and demonstrating their impact, these internal champions can build strong cases for broader institutional support and eventual leadership buy-in.

Cities can integrate One Health into their strategies in three ways:

- Cross-cutting approach: Embed One Health principles into existing strategies such as public health, climate adaptation, or urban planning.
- Targeted approach: Develop a strategy focused on specific challenges, such as zoonotic disease prevention or biodiversity restoration.
- Comprehensive city-wide approach: Make human, animal, plant, and environmental health central to the city strategy, thus to all projects and policies.

The steps below are designed for developing a city-wide approach; however, they can be adapted for different scopes and scales.





# KEY STEPS AND ONE HEALTH PRACTICAL TIPS

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In this section, we provide **experience-based** guidance on how to develop a One Health-integrated strategy. We drew experience from the One Health 4 Cities Network and identified four essential steps and One Health tips for developing a One Health-integrated strategy:

- **Build One Health Competence and Shared Understanding**
- **Establish a Strategic One Health Partnership**
- **Conduct a One Health Diagnosis**
- **Co-Design the One Health Operational and Evaluation Framework**



# STEP 1: BUILD ONE HEALTH COMPETENCE AND SHARED UNDERSTANDING

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Developing a robust One Health-integrated strategy begins with ensuring that all stakeholders share a **common understanding** of its principles and significance. One Health is an interdisciplinary approach that recognises the interdependence of human, animal, plant, and environmental health. However, achieving this shared understanding requires dedicated efforts **to bridge knowledge gaps, align perspectives, and foster collaboration** across various sectors and city departments.

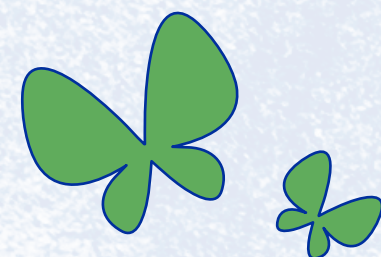
## — ONE HEALTH TIPS

### — MAP KNOWLEDGE, RESOURCES, AND DECISION-MAKING POWER

- **Map existing One Health capacity**—knowledge, expertise, and programs. Do not start from scratch; **many city departments already address these topics, usually in silos.** Existing knowledge can exist in forms of strategies, reports, public health, animal health and environmental databases, staff experience, and it can be collected through research, across the departments, with direct discussions, a survey and interviews with the city staff and key stakeholders involved in relevant projects and programmes.
- **Identify who holds decision-making power on health and related issues**, both **within and outside city structures**, to ensure effective coordination among all relevant stakeholders (including regional and national governments, public health organisations, environmental and wildlife protection and management organisations, animal health organisations and others).



## — ONE HEALTH TIPS



### — DEVELOP SHARED UNDERSTANDING AND BUILD COMPETENCE

- **Identify** within the team or hire a **One Health coordinator** who will ensure the coordination of key activities, the inclusion of all aspects of One Health in the strategy and the development of a One Health culture in the team. The One Health coordinator should receive training and keep up with One Health advancements and research to guide the strategy development.
- **Build the competence of the team on One Health** principles, based on the knowledge mapping, ensuring they understand the full scope of the approach and establish clear communication channels among them to facilitate communication and integration.
- Establish **continuous training** through expert discussions, workshops and conferences across different disciplines and their intersections.

## TOOLBOX

### TOOLS FOR KNOWLEDGE MAPPING

- One Health Knowledge Audit
- One Health Stakeholder Map

### TOOLS TO DEVELOP SHARED UNDERSTANDING ON ONE HEALTH

- One Health Governance Canvas
- One Health Role Play



# STEP 2: ESTABLISH A STRATEGIC ONE HEALTH PARTNERSHIP

Collaboration is the cornerstone of a successful One Health-integrated strategy. Given the complex and interconnected nature of One Health, **no single institution, sector, or expert can address all its dimensions alone.** Establishing a strong, multidisciplinary partnership ensures that expertise from various fields is brought together to co-design, implement, and sustain the strategy.



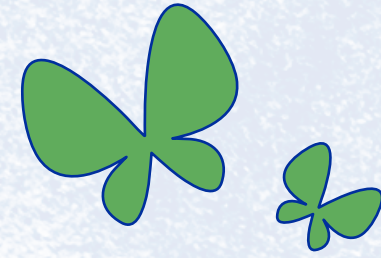
## — ONE HEALTH TIPS

### — ORGANISE A MULTIDISCIPLINARY, CROSS-SECTORAL AND INCLUSIVE PARTNERSHIP

- Assemble a **multidisciplinary, cross-departmental, and cross-sectoral team** that includes practitioners, researchers, policymakers, and key representatives from both the public and private sectors, as well as civil society. Involve stakeholders across different levels of governance and implementation to promote inclusive and coordinated action.
- Bring together expertise from public health, clinical medicine (e.g., medical doctors), epidemiology, veterinary medicine, environmental science, ecology, urban planning, human sciences, sociology, gender equity, and community engagement. **This diversity of knowledge ensures a comprehensive understanding of interconnected health challenges** and more effective One Health solutions.
- **Incorporate the creative and cultural sectors** to encourage innovative thinking and develop engaging, innovative approaches – we need out-of-the-box thinking.



## — ONE HEALTH TIPS



- Consider the different needs of different groups of stakeholders and **employ an equitable approach** to ensure similar levels of access (not a one-size-fits-all).

## — EFFICIENT COOPERATION AND COORDINATION

- Strengthen **cooperation among city departments** - no single department can fully implement One Health alone.
- Coordinate efforts to **secure and share resources across departments and stakeholders**, maximising efficiency and ensuring the strategy's development and implementation are adequately supported.
- Promote collaboration and leverage shared resources to empower all stakeholders and ensure **collective accountability** in the development and implementation of the strategy.

## TOOLBOX

### TOOLS TO MAP STAKEHOLDERS

- One Health Stakeholder Map

### TOOLS TO CO-DEVELOP A SHARED VISION AND ACTIONS

- Action Ideas for One Health

You can use all the tools from step 1 to develop a shared understanding and culture with the partnership!

*“Stakeholders come from diverse backgrounds with varying levels of training, knowledge, and needs. They may not share a unified vision or, more critically, a common understanding and language of One Health principles.”*

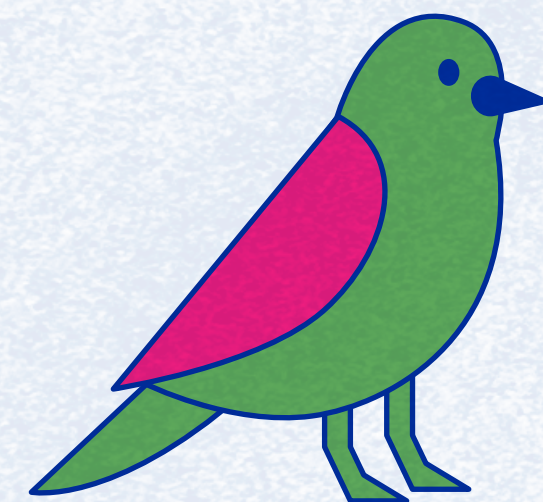
– Marlène Dussauge, City of Lyon



# STEP 3: CONDUCT A ONE HEALTH DIAGNOSIS

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A comprehensive One Health diagnosis is crucial for understanding the current state of human, animal, plant and environmental health in and around the city, as well as identifying gaps, challenges and the state of interactions. This step involves analysing existing data (mapped in Step 1) and **evaluating the city's strengths and weaknesses concerning One Health principles**, ensuring that the diagnosis is evidence-based and reflects the needs of all living beings and environment. A combined qualitative and quantitative assessment will help tailor the strategy to the city's unique context and needs, while also providing a foundation for setting measurable objectives and indicators to guide implementation and monitoring.



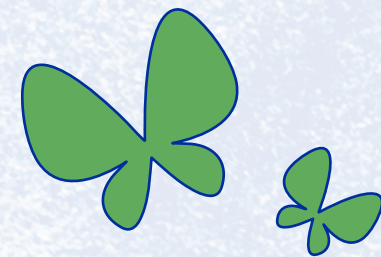
## — ONE HEALTH TIPS

### — BALANCE INFORMATION ACROSS ALL HEALTH DOMAINS AND THEIR INTERCONNECTEDNESS

- There is already so much evidence and data on the main One Health local challenges and elements (e.g. climate change, biodiversity loss, pollution, epidemiology, etc.). **Collate existing data** and knowledge to develop the diagnosis.
- Ensure that **data from human, animal, plant and environmental health are equally represented and integrated**. Avoid focusing too heavily on one domain at the expense of others, as this can lead to incomplete or fragmented strategies. Seek to uncover knowledge gaps and overlooked areas critical to One Health.
- **Identify the interconnectedness of all living beings and their environments**, analyse behaviours and uses of humans, animals and plants, their interactions and the health and disease patterns of their co-existence.



## — ONE HEALTH TIPS



### — IDENTIFY AND ADDRESS DATA GAPS

- **Identify areas where data is lacking, incomplete, or inaccessible.** Consider if and how gaps can be filled through new data collection efforts, partnerships, or by improving data-sharing mechanisms across sectors.
- Municipalities with limited internal data capacity should **develop synergies with local universities, external experts or international organisations** to fill in data gaps and establish new data collection and data repositories activities on all aspects of One Health.
- On human health, **pay attention to which demographic categories are included** in this data, as health effects will vary among genders, different socio-economic and age groups. Ideally, your data is disaggregated by these categories to be able to develop a nuanced and tailored **approach that does not amplify inequality**. Consider also qualitative data sources such as focus groups and stakeholder engagement as a source of important information to supplement quantitative data.

### — IDENTIFY AND ADDRESS ONE HEALTH BLIND SPOTS AND BIASES

- **One Health is more than zoonotic diseases**, especially in cities—**balance urgent issues** like pandemics with long-term threats such as antimicrobial resistance and endocrine disruptors.
- **Recognise non-communicable diseases, mental health issues as consequences of** environmental degradation, not just individual behaviours.
- Recognise that **One Health issues affect different groups (gender, age, ability) differently**, solutions will have to be nuanced to be effective. Ensure your approaches address diverse populations in tailored ways.
- The same applies to animals and plants, **consider most species** (endangered, indicator species, domesticated and wildlife) to ensure a holistic and inclusive One Health approach.

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## TOOLBOX

### TOOLS TO SUPPORT THE ONE HEALTH DIAGNOSIS

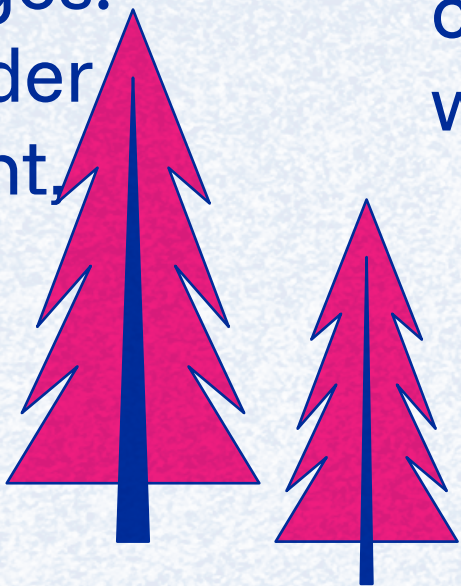
- One Health For Cities Score Tool



# STEP 4: CO-DESIGN THE ONE HEALTH OPERATIONAL FRAMEWORK

For a One Health-integrated strategy to be effective and sustainable, it must be built on a well-structured operational framework that ensures **clear objectives, accountability, and long-term adaptability**. This framework should outline specific actions, define roles and responsibilities, establish resource allocation mechanisms, and set up monitoring and evaluation processes (check section 3 on monitoring) to track progress and impact over time.

A strong evaluation component is particularly critical, as One Health is an evolving and interdisciplinary field. **Continuous assessment and learning** will allow cities to refine their approach, integrate new scientific insights, and respond to emerging health challenges. Additionally, fostering transparent communication and stakeholder engagement ensures that the strategy remains inclusive, relevant, and aligned with local, national, and international priorities.



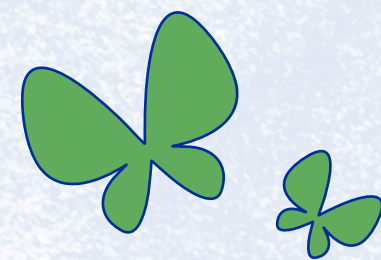
## — ONE HEALTH TIPS

### — ESTABLISH AN ADAPTIVE AND INCLUSIVE OPERATIONAL FRAMEWORK

- **One Health is an evolving topic and field**, and **continuous monitoring and evaluation mechanisms** are crucial for assessing the strategy's progress and effectiveness as well as incorporating emerging needs. It is key as well for constant learning on a newly applied topic in urban settings that requires learning, reporting and sharing.
- **Recognising the local context** when developing the strategy. Mention how to tailor the One Health approach to the specific needs and challenges of diverse communities within a city, considering things like socio-economic conditions, cultural attitudes, and local health challenges and develop ways to establish bilateral communication.



## — ONE HEALTH TIPS



### — ENSURE A TRUE ONE HEALTH APPROACH

- **Adopt a non-anthropocentric approach** that recognises human, animal, plant, and environmental health as equally important and intrinsically interconnected.
- Integrate these dimensions holistically to **avoid fragmented or siloed solutions**, and ensure both human and non-human actors are treated equitably in decision-making and implementation.

### — ALIGN WITH CITY, NATIONAL, AND EU ACTION

- Ensure that the **One Health-integrated strategy complements existing frameworks, policies and legislation**, fostering synergies and compliance with broader public health, environmental, and sustainable development goals at city, regional, national and EU levels.
- **Attract political support and international cooperation** to pursue continuous learning, advancements, and strengthen the city's position in addressing global health challenges.

## TOOLBOX

### TOOLS TO DEVELOP THE ONE HEALTH-INTEGRATED STRATEGY

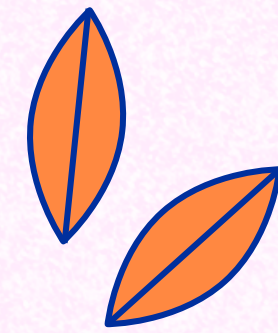
- One Health Governance Canvas
- One Health For Cities Score Tool
- Action Ideas for One Health
- The Wheel of One Health Challenges

*“You do not need to know or have this all in the very beginning. More important is to start working towards One Health targets with your colleagues and stakeholders and make it better in the long run.”*

– Päivi Sieppi, City of Lahti



# CASE STUDY



## THE NATURE'S STEP TO HEALTH, CITY OF LAHTI

The city of Lahti has been a great example of transitioning from an industrial city to a greener and healthier city. Back in the 1970s the city's lake, Vesijärvi, was heavily polluted by all surrounding industries and the discharging of wastewater. The lake's restoration brought great environmental expertise to the city and the transformation began. The cleaning of the lake lasted for many years and in the 1990s some positive results started to show already. Since then, the city has been active on various fronts, combating climate change, mobility, waste management, and the circular economy. All this work paid off, with Lahti becoming the European Green Capital in 2021. Today the citizens and visitors of Lahti can enjoy a cleaner, healthier lake and surroundings.





In 2022, the City of Lahti, Well-being Services County of Päijät-Häme, and the Lahti University Campus launched the "Nature Step to Health" strategy, a decade-long initiative aimed at addressing urban environmental and public health challenges.

The program brings together public authorities, educational and research institutions, local communities, and businesses to develop innovative solutions for preventing non-communicable diseases (NCDs), promoting well-being, and combating biodiversity loss and climate change.

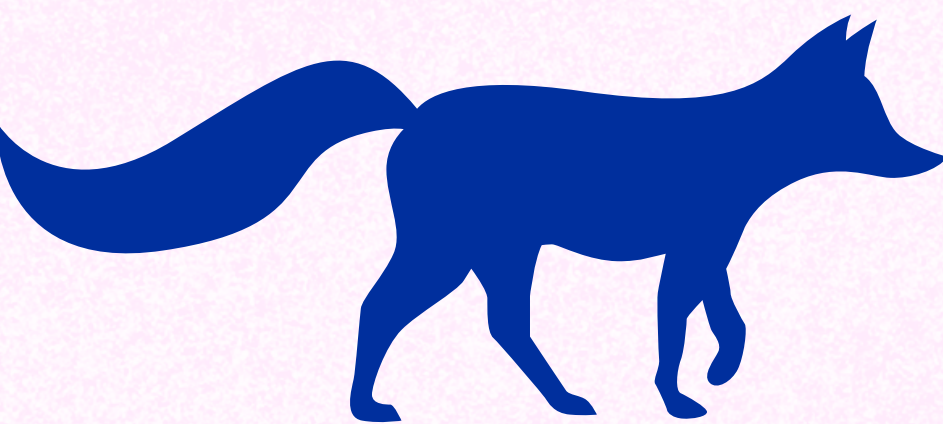
Led by the Well-being Services County of Päijät-Häme, a joint authority overseeing health, social, and rescue services, the strategy benefits from a robust intersectoral and interdisciplinary approach. Scientific contributions from the University of Helsinki and Lappeenranta-Lahti University of Technology enhance the program's design, provide effective monitoring through key performance indicators (KPIs), and support the dissemination of science-based knowledge.

The Nature Step to Health has five aims (vertical) and four objectives (horizontal) that promote both health and environmental goals.



Connecting objectives	Aims and objectives				
	Prevention of public health challenges (NCDs)	Enhancement of biodiversity	Climate change mitigation and adaptation	Cooperation between health and environmental actors	Positive economic impacts
	 Promoting healthier and more sustainable diets				
	 Promoting active mobility and physical activity				
	 Creating more healthy and sustainable living environments				
	 Promoting exposure and connection to nature				

The Nature Step to Health is already seeing progress with various multidisciplinary projects in progress across the various objectives. For example, there are projects to promote active mobility and sustainable nutrition. Connection to nature is promoted in many national and international projects, ranging from experiments with microbial diversity to supporting well-being by green structures or natural surroundings. The City of Lahti aims to achieve nature positivity by 2030. In this context, a project is underway to plan actions and develop a roadmap.



Nature step to health strategy ([Link](#))

Figure 1: Nature Step to Health Strategy Overview



# SUCCESS FACTORS OF THE NATURE STEP TO HEALTH STRATEGY

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- **A clear governance framework**, including weekly core team meetings and regular sessions with the steering and expert boards.
- **Strong political commitment** supported by the city's international recognition as the European Green Capital in 2021.
- **A multidisciplinary partnership** enabling effective coordination and implementation of the strategy.
- **Consistent engagement** that fosters active communication, breaks down siloed thinking and ensures coherence across program activities while aligning them with other local initiatives.
- **Defined KPIs and regular evaluations** to be conducted every 2-4 years to ensure accountability, adaptability, and sustained impact.





