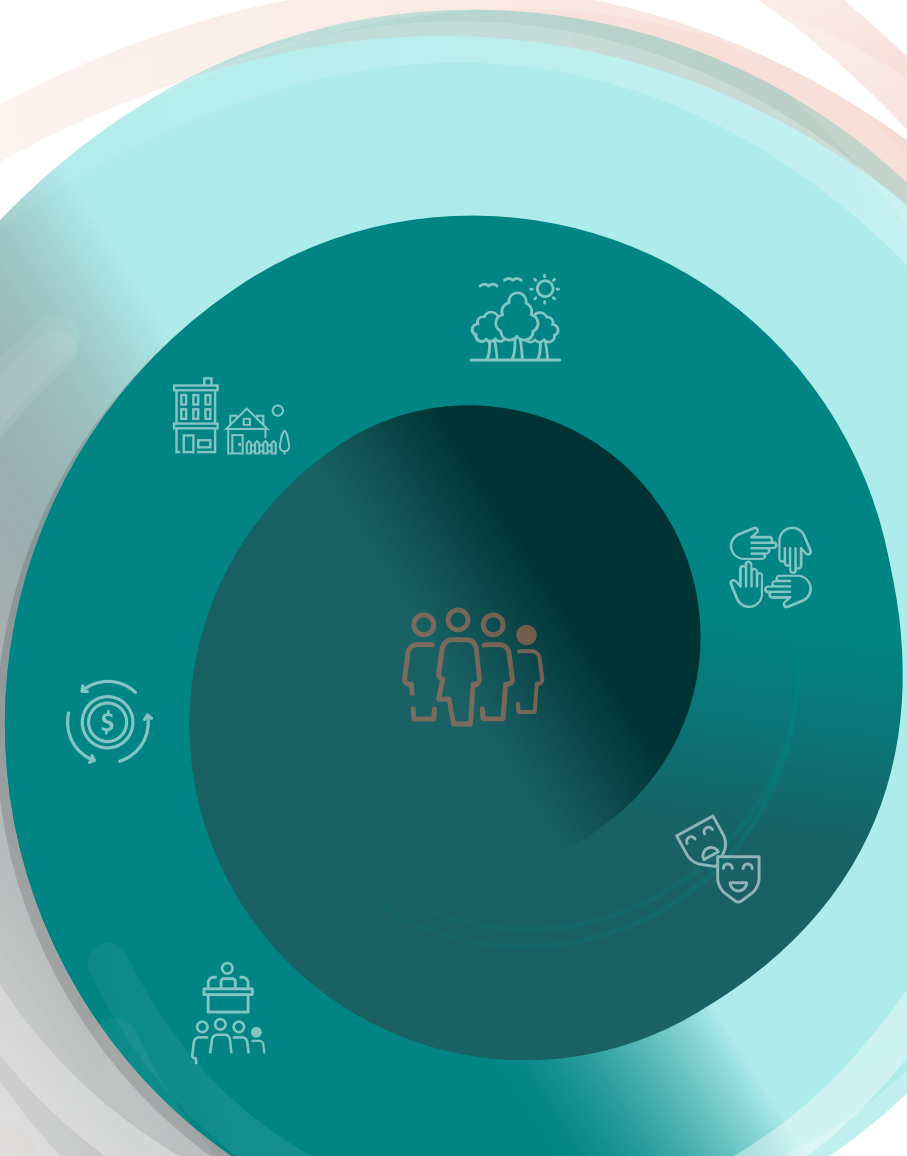
INSPQ
INSTITUT NATIONAL
DE SANTÉ PUBLIQUE
DU QUÉBEC

Municipal Action to Create Environments Conducive to Health and Quality of Life

A SYSTEMIC ANALYSIS FRAMEWORK



Québec

AUTHORS

Julie Lévesque, Scientific Advisor
Mathieu-Joël Gervais, Specialized Scientific Advisor
Éric Robitaille, Specialized Scientific Advisor Direction du développement des individus et des communautés
Institut national de santé publique du Québec

Marie-Ève Couture-Ménard, professeure
Professor Faculty of Law,
Université de Sherbrooke

The authors have duly completed their declarations of conflict of interest and no situations ar risk of real, apparent, or potential conflicts of interest were found.

UNDER THE COORDINATION OF

Caroline Delisle, Unit Head
Institut national de santé publique du Québec

IN COLLABORATION WITH

Josefina Ades, Mélanie Beaudoin, Maryse Beaudry, Odile Bergeron, Pascale Bergeron, Marie-Eve Dupuis, Dominique Gagné, Annie Gauthier, Lise La plante, Pierre Maurice, Andréane Melançon, Annie Montreuil, Réal Morin, Élisabeth Papineau, Marie-Claude Paquette, Daria Pereg, Patrick Poulin, Philippe Robert, Louis St-Laurent, Mathieu Valcke
Institut national de santé publique du Québec

REVIEWERS

Carole Clavier, Université du Québec à Montréal
Marie-Soleil Cloutier, Institut national de recherche scientifique
Evelyne de Leeuw, University of New South Wales
Jean Simos, Université de Genève

The reviewers were asked for their input on the pre-final version of this document and therefore did not review or endorse its final content.

TRANSLATION AND ENGLISH REVIEW

Alison McGain

LAYOUT

Marlène B., Graphic Designer

This document is available in its entirety in electronic format (PDF) on the Institut national de santé publique du Québec Web site at: http://www.inspq.qc.ca.

Legal deposit – 2nd quarter 2024
Bibliothèque et Archives nationales du Québec
ISBN: 978-2-550-92457-9 (PDF) (French PDF)
ISBN: 978-2-550-97585-4 (PDF)

ACKNOWLEDGMENTS

This publication is the result of a collaborative effort. Several people from the municipal and public health sectors commented on the draft table of contents and the preliminary version of the document. We would like to thank them.

In particular, we would like to thank the following people for reviewing the document:

Carmen Baciu, Léa Laflamme, Virginie Moffet, Valérie Noël, Marie-Pier Parent, Armand Pourashraf

Ministère de la Santé et des Services sociaux

Marc-Olivier Brouard, Marie-Ève Dubé, Maude-Emmanuelle Labesse, Geneviève Lapointe, Marc Lemire, Florence Morestin, Patrick Morency, Patrick Poulin, Marie-Claude Roberge, Émile Tremblay

Institut national de santé publique du Québec

Gabrielle Bureau, Brigitte Camden, Nathalie Guerra, Marie-Eve Thériault

Direction de santé publique des Laurentides

Josée Charlebois, Véronique Juneau, Marcella Kafka, Marie Poirier

Direction de santé publique de l'Outaouais

Kathleeen Pelletier

Direction de santé publique du Saguenay–Lac-Saint-Jean

Maryse Drolet, Union des municipalités du Québec

Marielle Fecteau, retired warden, Municipalité régionale de comté du Granit

Kim Kornellisen, former director, Réseau des femmes élues de la Montérégie

Denise Lavallée, retired city councillor, Ville de Rouyn-Noranda

Denis Lapointe, retired mayor, Ville de Salaberry-de-Valleyfield

Audrey Lefebvre, Ville de Saguenay

Isabelle Lizée, Espace MUNI

Denis Marion, Agence Gestion Alter Ego

Alexandre Pirsch, Ville de Gatineau

Caroline Proulx, Ville de Sherbrooke

Nathalie Roussel, Ville de Victoriaville and Réseau Municipalités accessibles

Christian Sénécal, Les Arts et la Ville

Michel Vallée, Culture pour tous

TABLE OF CONTENTS

KEY MESSAGES

In Québec and around the world, growing urbanization of territories and current demographic, socioeconomic, cultural, environmental and health issues are having a significant impact on the health and quality of life of populations[1]. The climate crisis, ecosystem degradation, poverty, social exclusion and, more recently, the pandemic, are just a few examples of the complex challenges that require a combination of interventions by all levels of government and in various sectors, particularly at the municipal level.

International organizations (WHO, UN) describe municipalities that are conducive to health and quality of life as being inclusive, equitable, safe, resilient and sustainable[2-4]. Here, health is "a state of complete physical, mental and social well-being, and not merely the absence of disease or infirmity (WHO)"[5].

In Québec, municipalities are considered to be local governments that "exercise essential functions and offer their population services that contribute to maintaining a high-quality, safe and healthy living environment[6]. These living environments are shaped, at the local level, by a diversity of elements from the built, natural, economic, social, cultural and political environments. However, the local level is subordinate to the societal context at regional, provincial, national and international levels.

Municipalities have several areas of jurisdiction, powers and levers that have been conferred upon them by Québec government legislation so that they can modify the above-mentioned environments and make them more conducive to health and quality of life. For example, in accordance with section 2 of the *Municipal Powers Act* (MPA), a municipality has the power to adopt any by-law to ensure the general welfare of its population. In addition, under the provisions of this Act "municipalities are granted powers enabling them to respond to various changing municipal needs in the interest of their citizens"[7].

The implementation of certain municipal policies and actions by municipal departments (e.g. culture, recreation and community life, urban planning, environment, public safety, public works, civil protection) makes a variety of levers available to municipalities for acting on a range of factors that have a major influence on the health and well-being of their population.

However, municipalities cannot act alone. To ensure the success and sustainability of their actions, many public health experts and authorities consider it essential to set up internal and external collaboration mechanisms with a variety of partners, and at different stages of interventions [8-12].

SUMMARY

This document is intended for actors in the public health network, as well as municipal actors as a whole. A review of several reports by public health authorities, government policies and reports, along with scientific articles from Québec and international sources has led to the development of a systemic analysis framework for exploring, at the municipal level, various strategies that can be used to create environments likely to improve citizens' health and quality of life. This systemic analysis framework includes:

- Current and emerging demographic, ecological, socioeconomic and health issues that have an impact on health and quality of life.
- The areas of jurisdiction and powers of municipalities that enable them to act on environments that have an impact on health and quality of life.
- The main elements linked to the political, economic, built, natural, social and cultural environments in a municipal context that have an impact on health and quality of life.
- Principles for guiding municipal actions and policies that are conducive to health and quality of life.
- Examples of municipal actions targeting environments that are conducive to the health of citizens.

Issues that influence health and quality of life

Municipalities are faced with complex issues and challenges that have an impact on health and quality of life. Demographic, economic, social, environmental and health transformations are accentuating certain public health issues[20]. In addition, the upheavals related to the COVID-19 pandemic and its many collateral effects have required resilience on the part of municipalities[4] and their local partners[15]. A number of the issues identified by Québec and Canadian municipalities, Québec's public health authorities, and Canadian and international public health agencies[17–21] are prompting rural and urban municipalities to adapt their actions.

Areas of jurisdiction, powers and levers

Municipalities have access to many levers and powers conferred upon them by a number of laws that enable them to help create environments conducive to health and quality of life, including the:

- *Municipal Powers Act* (MPA)[22];
- *Act respecting land use planning and development*[23].

Municipalities deliver services and make decisions that influence the health and quality of life of their citizens. For example, municipal decision-makers are required to:

- adopt by-laws (zoning, subdivision);
- adopt and implement a range of policies on families, youth, seniors, immigration, food, culture, housing, sustainable mobility, the environment, social development, and public participation;
- adopt a planning program providing for the general aims of land development policy in the territory of their municipality;
- be ready to respond to emergencies or disasters likely to occur on their territory.

The six environments

Six main environments with an impact on health and quality of life have been identified in this document, namely, the political, economic, built, natural, social and cultural environments.

The political environment refers to political systems and institutions, as well as to all public policies such as laws, regulations, action plans, codes, and so forth that structure and guide the conduct of society's actors[24].

The economic environment corresponds to the structures and operating modes that are linked to the production, consumption, use and distribution of wealth, as well as to the values, motivations and interests that underpin the economic decisions of individuals, local governments and businesses[24].

The built environment is defined as any component of the built or human-made physical environment. It corresponds to, for example, land use (e.g. density, land use mix), the configuration of transportation networks and housing supply (e.g. sanitation, size, price)[25].

The natural environment designates natural components, such as green spaces, air, water, soil, natural resources, and plant and animal life, as well as their interrelations with human beings[26].

The social environment refers to the social context in which people live and interact. It includes the social norms, shared values, structures and modes of operation that guide individual and collective actions and interactions[27, 28].

The cultural environment designates all culture-related elements that have an impact on individuals and communities. Culture manifests itself through the arts, literature and artistic creation; tangible and intangible heritage; handicrafts, fine crafts and know-how; language; beliefs and lifestyles; public art, design and architecture; and relationship with the land, local products and the landscape[29, 30].

The five principles: inclusion, equity, safety, resilience and sustainability

To act on health determinants and contribute to creating municipal environments conducive to health and quality of life, municipal actions and policies should be guided by certain principles such as inclusion, equity, safety, resilience and sustainability[2–4].

Inclusion

Inclusive municipalities ensure that local partners and citizens take part in decisions that concern them[31, 32] and they seek to implement actions that will make all citizens feel welcome, respected, safe and supported in their daily activities, regardless of their origin, identity, abilities or sociodemographic characteristics[31, 32].

Equity

Municipalities that place equity at the heart of their actions act to increase access to various resources and opportunities for all citizens (e.g. access to food, parks and green spaces, and quality jobs and housing). They act by paying particular attention to the most vulnerable or disadvantaged individuals[33–35].

Safety

Municipalities act with their partners to foster a climate of cohesion, social peace and equity and to protect rights and freedoms[36].

Resilience

Resilient municipalities aim to create the conditions needed to cope with environmental, economic, social and health crises and emergency situations that might arise, including those linked to climate change[37].

Sustainability

Sustainable municipalities act to increase well-being, equity and justice for current and future generations by taking ecosystem limits into account[32, 35]. They take actions to foster development that integrates economic growth, social development and environmental protection[38].

Schematic summary

The diagram on the next page illustrates the main components of the analytical framework. It highlights the relationships between the different issues, levers, actors, interventions and potential results .

FIGURE 1
MUNICIPAL ACTION FOR ENVIRONMENTS CONDUCIVE TO HEALTH AND QUALITY OF LIFE

VISION

Create environments likely to improve citizens' health and quality of life

ISSUES WITH AN IMPACT ON HEALTH AND QUALITY OF LIFE

Demographic changes • Social and health inequalities • Discrimination and stigmatization • Violence and crime • Poverty • Physical inactivity and diet • Pollution and climate change • Use of psychoactive substances

Issues

MUNICIPAL AREAS OF JURISDICTION AND POWERS

Culture, recreation, community activities and parks • Local economic development • Power development and community telecommunications systems • Environment • Sanitation • Nuisances •Safety • Transportation

Civil protection • Land use planning and development • Social development

Programming • By-laws • Policies

Leverage

ACTING ON ENVIRONMENTS

Political environment (regulations, policies, governance)

Economic environment (job market and working conditions, income and income inequalities , price of goods and services, local economy, commercial sector practices)

Built environment (neighbourhood design, transportation networks, food systems and housing)

Natural environment (green spaces, air, water, soil, noise)

Social environment (social relationships, feeling of safety, community and civic participation, social norms and conventions)

Cultural environment (local context and cultural rights, handicrafts and fine crafts, expression, tangible and intangible heritage)

Interventions

PRINCIPLES TO GUIDE INTERVENTIONS

Sustainability Resilience Safety Equity Inclusion

PEOPLE AT THE HEART OF MUNICIPAL ACTION

Achieving results in terms of quality of life and health depends on the actions of municipal sector and community players:

Regional county municipalities (RCMs), metropolitan communities, urban agglomerations, local municipalities and boroughs are the administrative entities of Québec's municipal sector.

Municipal players are represented by elected municipal officers, the persons in charge of various municipal services and their local partners, such as community organizations acting within the territory of the municipality and the regional offices of the various government departments.

Results

INTRODUCTION

It has long been recognized that Québec municipalities have levers for improving environments in order to make them more conducive to health and quality of life. By the late 19th century, health issues were already becoming a source of concern for Montreal's municipal services, which were starting to develop new infrastructures aimed at improving the population's health. However, it was especially as of the 20th century, with the consolidation of water supply and sewer systems, and the implementation of safer construction techniques, that population health was recognized as an area of municipal action[39].

Municipalities still have several levers at their disposal for taking action to promote health and quality of life[40]. The actions of municipal services (culture, recreation and community life, urban planning, environment, public safety, public works) influence the natural, built, economic, social and cultural environments[41]. Municipalities can thus help citizens to achieve their full potential, in collaboration with organizations in other sectors.

Many of today's evolving and complex issues, such as social inequalities, poverty, aging, climate change, the pandemic and its collateral effects, call for the commitment of a variety of players and levels of government, including municipalities, to implement coherent and complementary actions[42] conducive to the health and well-being of citizens.

Among the strategies advocated by the World Health Organization (WHO)[43], "Health in all Policies" proposes that public policies in all sectors of activity be approached in such a way as to take into account equity and the effects of decisions on health, while seeking synergies between sectors to avoid negative impacts on health. According to the United Nations' Sustainable Development Agenda 2030[A], the New Urban Agenda[3] and the WHO Healthy Cities strategy[4], safety, sustainability, equity, inclusion and resilience[2-4] are principles that must guide municipal actions and decisions.

In Québec, the importance of integrating health and quality of life into municipal concerns is increasingly recognized[48, 49]. Under the leadership of the Ministère de la Santé et des Services sociaux, the Taking Care of Our World approach was launched in 2015, to promote collaboration between the municipal and the health sectors[50].

Several recent provincial government strategic documents, programs and action plans also highlight the need to intensify collaboration with the municipal sector in order to improve the population's health and well-being. Suffice it to mention the Politique gouvernementale de prévention en santé (government health prevention policylocy)[17] and its Plan d'action interministériel (interdepartmental action plan)[48], the Programme national de santé publique (Québec's national public health program[18], the Stratégie gouvernementale pour assurer l'occupation et la vitalité des territoires 2018-2022 (government strategy to ensure the vitality and occupation of territories 2018-2022)[51], the Politique nationale d'architecture et d'aménagement du territoire (national architecture and land use policy) (PNAAT)[52], the 2030 Plan for a Green Economy[53], the Plan d'action gouvernemental en habitation (Québec government's housing action plan), the Stratégie de lutte contre la pauvreté et l'exclusion sociale (strategy to combat poverty and social exclusion) and the Plan d'action gouvernemental pour l'inclusion économique et la participation sociale (government action plan for economic inclusion and social participation) (PAGIEPS) 2017-2023[53].

The purpose of this document is thus to provide a systemic analysis framework for public health actors in order to facilitate their interactions with the municipal sector in creating environments conducive to citizens' health and quality of life.

A Goal 11 aims to make cities inclusive, safe, resilient and sustainable.
Source: Cities - United Nations Sustainable Development Action 2015

TARGET AUDIENCES, OBJECTIVE AND METHODOLOGY

Who is this document for?

This document is intended for actors in the public health network. The content presented is also likely to be of interest to the various players in the municipal sector, namely: elected officials in charge of municipal services - recreation, urban planning, culture, environment, safety, public works - as well as their local partners, such as community organizations operating within the municipality, and the regional offices of government departments.

Objective

The general objective of this project is to propose a systemic analysis framework anchored in the Québec context and making it possible to examine different strategies that municipalities can use to create environments that improve their citizens' health and quality of life.

The following parameters have to be documented in order to achieve this objective:

- Current and emerging demographic, ecological, socioeconomic and health issues that influence health and quality of life;
- The areas of jurisdiction and powers held by Québec municipalities in order to act on the political, economic, natural, built, social and cultural environments that have an impact on health and quality of life;
- A definition and description of the elements of the political, economic, built, natural, social and cultural environments in a municipal context that have an impact on health and quality of life;
- Principles to guide municipal actions and policies that promote health and quality of life;
- Examples of municipal actions targeting environments conducive to the health and well-being of citizens.

Methodology

Four complementary stages were required to carry out the project. The methodology is described in detail in the appendix:

- Document search and analysis: this stage involved identifying and analyzing scientific articles and reference works written by international organizations (WHO, UN). To take the Québec municipal context into account, several Québec documents, including laws, regulations, by-laws, policies, programs and action plans, were also identified and analyzed;
- Consultation of scientific and academic experts;
- Consultation of potential users;
- Contribution of experts (scientific advisors, physicians) from the Institut national de santé publique du Québec (INSPQ) to the drafting of specific content in their respective fields of scientific expertise.

Despite the scope of this methodological approach, the present report does not include:

- a demonstration of the scale of the health burden of all the issues addressed ;
- a complete list of all the factors that influence health (health determinants);
- a complete list of all the levers available to municipalities;
- a summary of scientific knowledge on effective municipal actions to address health determinants.

Although regional county municipalities (RCMs) and metropolitan communities (MCs) are identified as municipal partners with their own powers and levers, this document discusses to a greater extent the possible actions and levers of local municipalities.

1

ISSUES THAT INFLUENCE HEALTH AND QUALITY OF LIFE

Municipalities are faced with complex issues and challenges that have an impact on health and quality of life. Growing urbanization of territories[1] coupled with demographic, economic, social, environmental and health transformations are accentuating issues such as social and health inequalities, poverty and ecosystem degradation[13]. The upheavals associated with the COVID-19 pandemic and its many collateral effects have required resilience on the part of municipalities[52] and their local partners. The issues presented here have already been identified by Québec and Canadian municipalities, Québec's public health authorities and Canadian and international public health agencies[17–21]. These different issues can guide rural and urban municipalities in adapting their actions.

A constantly evolving population

Québec's demographic make-up is diverse: in addition to ethnicity, language, age, gender, gender identity and sexual orientation, it comprises many other forms of diversity, such as geographic origin, socioprofessional category, religion, level of education, income, physical appearance and family structure[55]. This composition is evolving and transforming social, cultural and economic dynamics. For example, Québec is one of the world's most ageing societies[56], and immigration is one of the driving forces behind population growth[57].

A municipality can analyze the differential impact of its decisions, policies and by-laws on certain sub-groups of citizens, based on their sociodemographic characteristics. It can also adapt its actions accordingly.

Social and health inequalities

The maintenance and progression of social inequalities affect the population's state of health and well-being, undermine economic prosperity and point to a deterioration in social cohesion[54]. These inequalities manifest themselves at every stage of life, affecting children, teenagers, workers and seniors alike.

- These inequalities can take various forms, such as unequal access to employment, food, housing, asset accumulation, the arts, culture, recreation, sports, green spaces, waterfronts and bodies of water, or certain essential services such as transportation and education[54];
- These social inequalities generate unjust and avoidable health disparities. For example, in 2011-2012, in Québec, men living in the most disadvantaged areas lived in good health ten years less than those living in the most advantaged areas. For women, the difference was around eight years[58].

Discrimination and stigmatization

Discrimination and stigmatization create and reinforce inequalities and affect people's health and quality of life[59]. At the individual level, stigmatization is a barrier to housing, employment, improved income and health care. Forms of exclusion or barriers to social participation based on criteria such as gender identity, ethnicity (visible minority, racism), literacy level, sexual orientation, age, social status, religious beliefs, nationality, physical appearance and disability have the potential to seriously undermine social cohesion and citizens' well-being[49, 50].

Violence and crime

There are many manifestations of violence and crime, and some groups suffer more than others. In the private sphere, there may be domestic violence, child or elder abuse and neglect, burglary, vandalism, fraud or attempted fraud and extortion. Other manifestations occur in the workplace, at school, and in the public or digital space. Homicides or attempted murders resulting from gang warfare[51], discriminatory behaviour towards minorities, bullying and harassment, hate speech against a person or a group are all problems that disrupt social peace and require intervention on the part of municipalities. Some of these problems have become particularly worrisome. These include women's safety in public spaces (e.g. public transit), hate crimes[62] and gun violence.

Poverty and its effects

For years, around 10% of Quebecers have been living on low incomes. Single adults and single-parent families are much more affected, and some of the poorest have to live on half the income needed to cover their basic needs[63]. In 2020, 8.6% of Québec households faced moderate or severe food insecurity[64, 65]. The COVID-19 pandemic exacerbated the problem, with the result that by April 2022, the rate had risen to 14%[66, 67]. As for housing, a number of challenges have become more acute in recent years: shortage of housing (especially affordable housing adapted to the needs of families), rising property prices, gentrification of certain neighbourhoods, difficulties in accessing home ownership, etc. In 2018, in Québec, the estimated number of people experiencing homelessness was 5789, an increase of 8 to 12% compared to the 2015 count[68].

Municipalities have various levers at their disposal for participating in efforts to combat poverty and food insecurity (e.g. solidarity alliances - agreements with the Québec government through the Ministère du Travail, de l'Emploi et de la Solidarité sociale [MTESS]). Theys also have levers for helping to develop affordable housing, particularly for vulnerable groups (e.g. regulatory relief, donation of land or buildings, support for organizations, etc.).

DID YOU KNOW?

- Between 1971 and 2021, the proportion of the Québec population aged 65 and over almost tripled (from 7% to 20%). By 2066, the proportion should reach 27%[69].
- In 2020, Québec's population included 521 952 children aged 0 to 5, representing 6% of the population as a whole[70]. Children in this age group are full-fledged citizens who grow up and participate in the social and economic life of their municipalities. The quality of their development in their early years will have an impact on them throughout their lives[71, 72].
- According to the 2016 census, more than 35% of First Nations people with registered Indian status lived in off-reserve towns and cities in Québec[73].
- Nearly 14% of the population has an immigrant background[74].
- The number of people living alone in Canada has quadrupled over the past 35 years. The proportion of single-person households rose from 7% in 1951 to 28% in 2016[75].
- In Québec, one person in five (20%) has very limited ability to process written information, and has difficulty reading a long text or finding a telephone number on a website or in a brochure[76].
- In Canada, one in four people report having experienced discrimination based on gender, sexual orientation, race, ethnic origin or religion in the course of their lives[59].

Physical inactivity and diet deterioration

Physical inactivity and diet-related issues are not without consequences for the health of Quebecers. Physical inactivity affects more than one in four adults and over 80% of adolescents[77]. In Québec, half of the population aged 12 and over does not meet the recommended minimum number of hours of physical activity per day[78, 79]. Food-related issues have also been observed in Québec in recent years. For example, in 2015, the vast majority of teens and adults (83% to 95%, depending on age group and gender) did not consume the minimum number of servings of fruits and vegetables recommended by Canada's Food Guide in effect at the time[80].

Increase in mental disorders and deterioration of mental health

In 2014, 11.3% of the Québec population was diagnosed with a common mental disorder (e.g. depression, anxiety disorder[81]. In Canada, for over 20 years, the prevalence of major depressive disorder among people aged 18 and over has been around 7%, and it is estimated to have doubled during the second wave of COVID-19, in fall 2020[82]. Overall, fewer Canadians aged 18 and over reported high levels of self-rated mental health or a strong sense of belonging to their community in 2020 than in 2019. Satisfaction with life was significantly lower in 2020 than in 2019[83]. This situation illustrates the importance of reinforcing the positive dimension of mental health and preventing the onset of mental disorders. More recently, the pandemic generated increased uncertainty, stress, isolation and feelings of loneliness[84, 85], with repercussions for people's mental health and well-being.

Psychoactive substance use and gambling

The stakes associated with the use of psychoactive substances have been on the rise in recent years. In Canada, the costs associated with alcohol and drug-related harm were estimated at $14.6 billion and $11.8 billion, respectively, in 2014[86, 87]. Vaping has doubled in two years among teenagers, rising from 11% in 2016-2017 to 21% in 2019[67]. In Québec, two-thirds of the population gamble. Among this group, 120 000 people have reported gambling problems[87], which can result in psychological distress, financial difficulties and, more broadly, impoverishment and social problems for communities[89].

Climate change

The effects of climate change manifest themselves in many ways: droughts, floods, extreme heat, coastal erosion, forest fires, and so on. These hazards are not without impact on people's health. For example:

- Extreme heat events lead to increased mortality among the most vulnerable individuals exposed to these climate conditions[90];
- In addition to generating a risk of injury, respiratory problems and drowning, the psychological consequences (anxiety disorders, post-traumatic stress, depression, etc.) for populations who have experienced flooding episodes can be significant[91] and affect volunteers and workers involved in crisis management and post-disaster recovery;
- Warmer temperatures also encourage the migration of certain insects, such as ticks that carry Lyme disease (the number of cases of which is rising in Québec[92]. Such temperatures also lengthen the season for allergenic pollen.

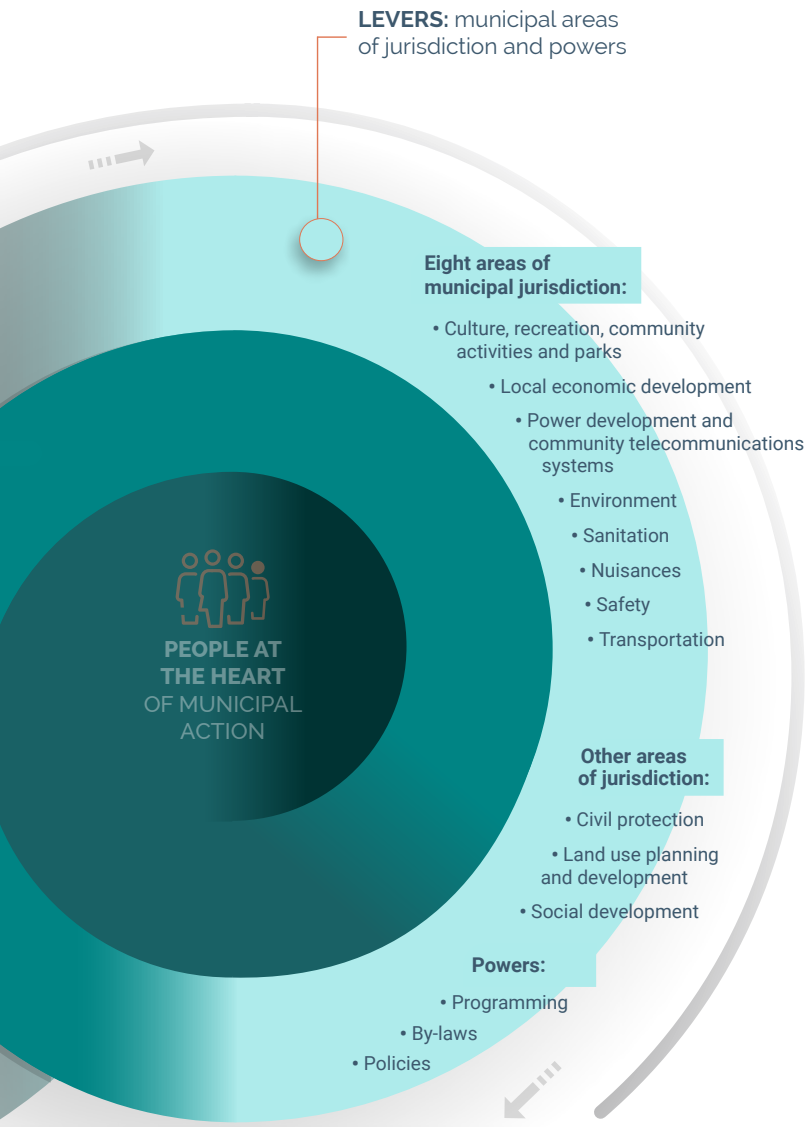
Far from being exhaustive, these few examples illustrate the impact that the climate crisis can have on health, not to mention the damage it can cause to housing as a result of flooding, the impact of forest fires on air quality or the increase in food prices caused by drought. Municipalities are key players in the necessary shift towards adapting to and combating climate change.

Forms of pollution

Noise, light, soil, water and air pollution, as well as the loss of green spaces[93, 94], are just some of the current issues affecting people's health and quality of life. The polluted air that accumulates over cities, also known as smog, can affect many healthy people (children, outdoor sports enthusiasts, seniors), with the possible consequences of respiratory tract irritation, coughing, shortness of breath and breathing difficulties[95]. Noise pollution is on the increase, as are the complaints it generates[93, 94]. Ecosystem degradation resulting from soil pollution can have environmental, economic and health repercussions. Pesticides all have varying degrees of toxicity and can be toxic to non-target organisms, including humans[96]. The use of pesticides often leads to contamination of water, air and soil, with negative impacts on biodiversity[96].

2

LEVERS FOR ACTION: MUNICIPAL AREAS OF JURISDICTION AND POWERS



In Québec, the municipal sector comprises, at the provincial level, the Ministère des Affaires municipales et de l'Habitation (MAMH) and, at the supra-local level, regional county municipalities (RCMs), metropolitan communities and the Kativik Regional Government. At the local level, it includes local municipalities[B], boroughs and urban agglomerations. The municipal entity is the government closest to citizens.

Municipalities have many powers that have been conferred upon them by laws. This section deals in part with the areas of jurisdiction and powers of municipalities that enable them to implement actions leading to the creation and development of environments conducive to health and quality of life.

Eight areas of jurisdiction under the *Municipal Powers Act* (MPA)

A jurisdiction is "the legal competence of a public authority to perform an act in a given area"[98]. To exercise their jurisdiction, municipalities have various types of powers, i.e. levers, granted to them by law. The adoption of by-laws and resolutions, the granting of permits and contracts, and the levying of taxes are all examples of these powers[99].

B "Not all local municipalities have the same designation; they may be called a town, a municipality, a village, a parish, a township or a united township."[97]

In Québec, the *Municipal Powers Act* (MPA) is the main piece of legislation that establishes the areas of jurisdiction and powers of municipalities. Under the Act, local municipalities can implement measures in the following eight areas[22]:

- Culture, recreation, community activities and parks;
- Local economic development;
- Power development and community telecommunications systems;
- Environment;
- Sanitation;
- Nuisances;
- Safety;
- Transportation.

"The *Municipal Powers Act*, which came into force on January 1, 2006, consolidates and modernizes the powers of municipalities covered by previous versions of the Municipal Code and the Cities and Towns Act. The administrative and regulatory powers granted to municipalities are drafted in general terms, giving them more room to manoeuvre."[97]

Municipalities have various powers to act in these areas of jurisdiction, including the power to adopt regulatory[22] and non-regulatory measures.

- Municipalities have the power to adopt a **by-law** when they wish to make a rule of a general and impersonal nature mandatory[22]. A by-law (regulatory measure) may include a prohibition, the imposition of standards, organizing the exercise of an activity, or prescribing what must or may be done in a particular case[99, 100];
- A **non-regulatory measure** is an administrative decision adopted by resolution, such as the awarding of a contract or the adoption of a charter, directive or policy[101, 102]. A policy is not binding, but it does, for example, enable a municipality to communicate its roles and responsibilities in a given area to its citizens[103]. For each of the eight areas of jurisdiction listed above, the law provides a number of specific levers, some of which are non-regulatory in nature.

Through these powers, local municipalities can implement actions that have the potential to foster the creation and development of environments conducive to health and quality of life. Here are some examples:

- In accordance with its jurisdiction over local economic development, a municipality may "establish and operate a convention centre or an exhibition centre, a public market or a tourist information office"[104];
- The municipality "may organize and promote the establishment of various local services of a cultural nature"[105];
- "In exercising its jurisdiction over transportation, a municipality may adopt any non-regulatory measure (e.g. a transportation policy, an active mobility plan, a snow removal policy)"[106];
- In connection with its jurisdiction over recreation, a municipality can "assist in the organization, on its territory or elsewhere, of recreation centres and public sports and recreational facilities"[105].

Under the MPA, a local municipality may adopt a by-law to ensure peace, order, good government, and the general welfare of its citizens[22]. This regulatory power, which is not associated with one of the eight areas of jurisdiction listed earlier, is of interest in the context of the health and quality of life of citizens.

According to a review of doctrine and case law by Lalonde (2002), the notion of "general well-being" includes, among other things, the immediate needs of the community, the psychological well-being of citizens, their comfort and their sense of collective identity and pride[99, 107].

JURISDICTION AND REGULATORY POWER OF MUNICIPALITIES WITH REGARD TO THE GENERAL WELL-BEING OF THEIR POPULATIONS: AN AVENUE WORTH EXPLORING

According to Couture-Ménard and Rioux-Colin (2019), in Spraytech (2001), the Supreme Court determined that the Town of Hudson had the power to adopt a by-law to limit the use of potentially harmful pesticides in order to protect the health of its residents[99]. No proof of the harmful effects of the product or conduct being regulated was required for the by-law to be valid. In short, the Court confirmed that municipalities can mobilize their "general welfare" powers for public health purposes, without having to look for a specific provision that gives them explicit authority to do so[108]. It also considered that such a legislative provision should be given a broad interpretation, based on permissible municipal objectives, so that municipalities could "quickly meet the new challenges facing local communities without the need to amend the enabling provincial legislation"[110].

Legal framework for civil protection

The occurrence of emergency events or disasters, whether due to natural phenomena or human activity, can cause serious damage to people's health. Natural disasters (e.g. earthquakes and heatwaves) and human-made disasters (e.g. fires, chemical spills) can have serious consequences for the physical and mental health of those affected[111–113]. Municipalities are key players for protecting health and preventing the consequences of emergencies and disasters.

In Québec, various laws governing municipal responsibilities can be invoked in connection with protecting the population or preparing for emergencies and disasters. These include the *Municipal Powers Act* (particularly in the area of safety), the *Act respecting land use planning and development*, the *Fire Safety Act and the Civil Protection Act*.

More specifically, in keeping with the *Fire Safety Act* and the resulting risk coverage plan, the *Civil Protection Act* (CPA) requires municipalities to be prepared to respond to any emergency or disaster that may occur on their territory.

To specify the objectives of the civil protection activities to be carried out in all Québec municipalities, the government adopted the *Regulation respecting warning and mobilization procedures and minimum rescue services required for the protection of persons and property in the event of a disaster*.

In addition, the government has entrusted the Ministère de la Sécurité publique (MSP) with the role of overseeing and supporting activities in the area of civil security. Among other things, this department describes the roles and responsibilities of municipalities in this area. Among the roles entrusted to municipalities by the MSP are the adoption of a civil protection plan, the implementation of measures to prevent disasters and mitigate their consequences, and so forth[114].

The MSP also offers municipalities a risk management approach and tools to help them prevent and prepare for disasters on their territory[114]. These tools enable them to establish measures to cover a range of human-made and natural hazards likely to threaten citizens' health and safety. These include: a spill or leak of hazardous materials, a fire or transportation accident involving hazardous materials, a threat of malicious action (e.g. a suspicious package), flooding, extreme heat or cold, etc.

The preparation of a municipal civil protection plan involves an integrated approach to consultation and coordination between the municipality's various internal and external partners. The latter can mobilize committees (strategic, tactical or operational) involving, depending on the committee's role, municipal representatives and managers from several services (police, fire, transportation, environment, human resources, etc.), as well as representatives from the regional offices of government departments and agencies, as appropriate.

Although municipalities are responsible for civil protection on their territory, in the event of a major disaster requiring additional support, they can count on government support.

Response procedures are already set out in the 15 missions of Québec's national civil protection plan, which are also set out at the regional level in regional civil protection plans. The health mission, which is under the responsibility of the Ministère de la Santé et des Services sociaux (MSSS), includes maintaining the activities of health care components during emergencies or disasters. For example, the MSSS (or integrated health and social services centres [CISSS]/ integrated university health and social services centres [CIUSSS] at the regional level) will provide nursing care pre-hospital care and psychosocial services to disaster victims, conduct a public health survey, provide environmental health consulting expertise, and oversee the implementation of health protection measures, etc.

To that end, civil protection coordination and consultation is carried out through communication channels linking municipal civil protection organizations, regional civil protection organizations and the Organization de sécurité civile du Québec (OSCQ).

Legal framework for urban planning and development

In addition to the *Municipal Powers Act*, other provincial laws authorize municipalities to act in various areas of jurisdiction. These laws include, in particular, the *Act respecting land use planning and development*[23].

The use of several provisions of the *Act respecting land use planning and development* (e.g. land use plans, zoning by-laws) is another useful way for local municipalities to foster the creation and development of environments conducive to health and quality of life[115].

For example, zoning by-laws are a tool that public authorities can use[115]. They offer levers for adapting not only land use and the accessibility of infrastructures and services, but also the commercial offering. Municipalities can also adopt performance zoning (which is intended to be more flexible) by promoting nuisance mitigation measures rather than imposing minimum safety distances[116]. The aim is to ensure that the measures implemented are effective and can be adapted to the evolution of both facilities and communities. However, even if measures can be applied to reduce noise, for example, they may be more difficult or costly to implement if they are not integrated right from the design stage of a project[117].

Zoning also allows municipalities to control certain characteristics of the urban form, such as density, compactness, diversity, design, and connectivity of the built environment. Depending on the criteria used and the degree to which they are applied, these characteristics can promote or reduce pedestrian potential and the accessibility of recreational infrastructure and bicycle paths within the municipal territory, particularly around schools[118]. To encourage active transportation, cities can also use subdivision by-laws[C] on site planning and architectural integration programs[D]; specific construction, alteration or occupancy projects[E]; comprehensive development programs[F]; municipal works agreements and conditional uses[G].

C "Subdivision by-laws make it possible to specify, for each zone concerned, the area and dimensions of the lots or land involved and to determine . . . the manner in which streets are to be laid out, as well as their width."[118]

D "A site planning and architectural integration program (SPAIP) by-law enables a municipality to ensure the quality of a building's layout and its architectural integration, as well as the development of land by means of a qualitative and functional assessment."[118]

E "The purpose of a by-law on specific construction, alteration or occupancy proposals for an immovable (SCAOPI) is to allow a project to be carried out despite the fact that it contravenes one or other of a municipality's planning by-laws. The SCAOPI technique falls under the heading of "project-based zoning" and makes it possible to oversee urban development on a case-by-case basis."[118]

F "By-laws on comprehensive development programs (CDP) enable a municipality to ensure the coherent and sustainable development of the parts of the territory concerned, prior to any modification of urban planning by-laws."[119]

G "The purpose of conditional use by-laws is to allow, under certain conditions, a use to be established or exercised in a zone determined by a zoning by-law."[120]

The adoption of urban planning and zoning by-laws can restrict the number and proximity of establishments selling tobacco or alcohol, by sector, and close to schools, for example[121]. In the United States, the Centers for Disease Control and Prevention (CDC) suggest using zoning by-laws to limit the presence of certain food outlets (e.g. fast-food restaurants, convenience stores) and to create built environments more conducive to a physically active lifestyle[121] [122, 123].

To improve access to quality housing, the *Act respecting land use planning and development* gives municipalities the power to expand the supply of social and affordable housing on their territory. They can set up housing programs targeting specific issues and clienteles (e.g. single-parent families living in poverty, seniors, the disabled, low-income earners or the homeless), while maintaining a certain level of social mix in socioeconomic, ethnocultural and intergenerational terms.

Municipalities can also construct buildings or grant financial or tax assistance for housing purposes[101, 124, 125].

Framework for action in social development

The charters of large cities with a population of 100 000 or more specify that municipalities must prepare a plan relating to the community, economic and social development of their territory[126–128].

To comply with this normative requirement, municipalities adopt social development policies, often accompanied by an action plan and budgets for their implementation. A social development action plan can provide an opportunity to promote and implement actions in favour of accessible housing, sustainable food systems, optimal development of children and youth, support for seniors and new arrivals, personal mobility (e.g. offering transit passes to children to facilitate access to extracurricular activities), solidarity and social cohesion (e.g. volunteer involvement program), inclusive development through increased accessibility to municipal infrastructures, etc.[125]

3 TAKING ACTION ON THE SIX ENVIRONMENTS CONDUCIVE TO HEALTH AND QUALITY OF LIFE

Population health and its determinants

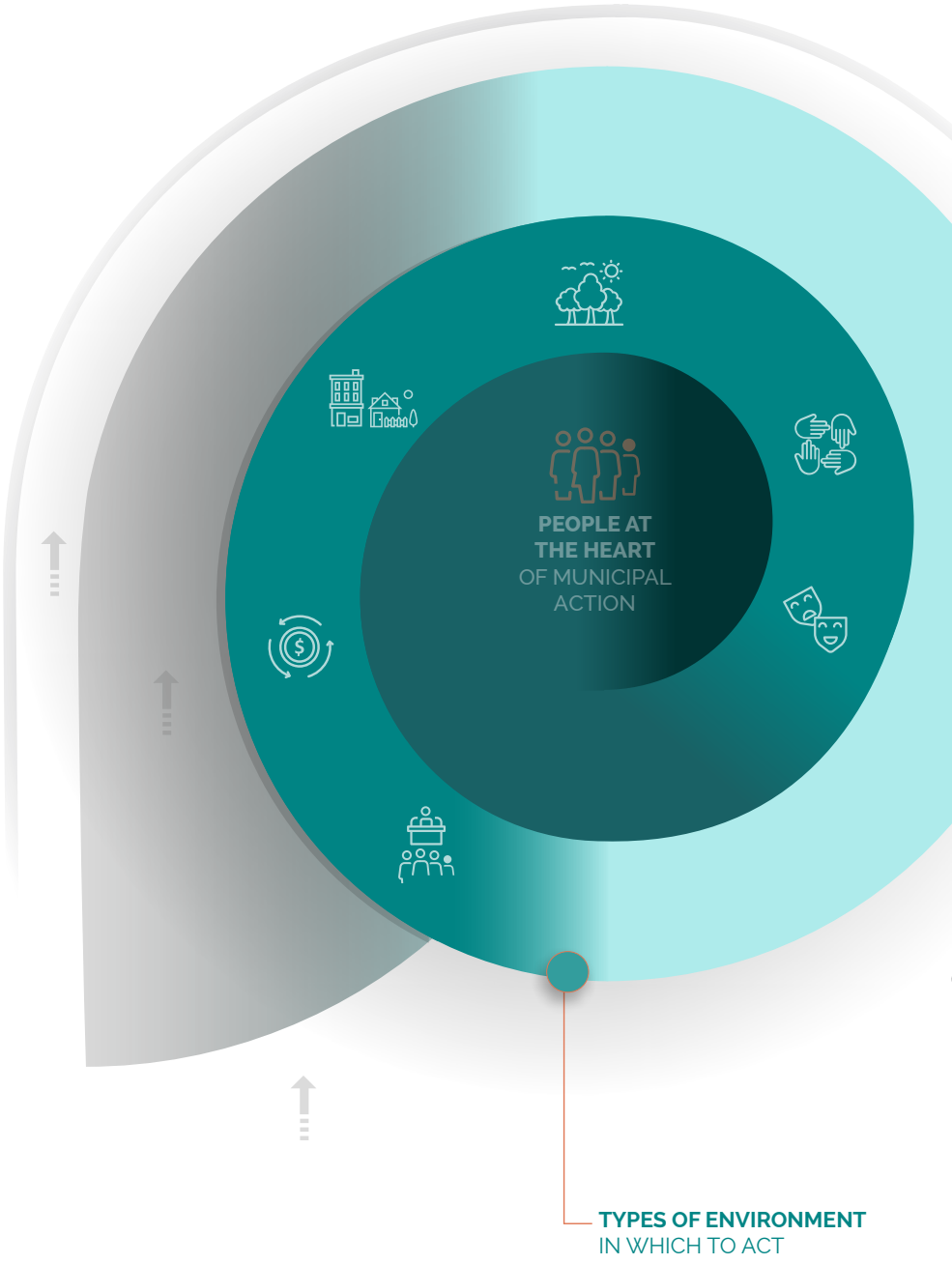
Improving health and quality of life requires a combination of actions from several levels of government, disciplines and partners in society (economic, community, municipal, education, culture, urban planning, transportation, health and social services)[42].

Many conditions and factors, both individual and collective, influence the health status of the population and are known as "health determinants" [129, 130].

All of these factors interact in such a way that human health is influenced by the complex sum of all these dynamic components[131].

Social determinants of health refer to the circumstances and characteristics of the environments in which people are born, grow up, live, work and age[129], and which have an impact on their health.

These living environments are shaped, at the local level, by a wide range of elements belonging to the built, natural, economic, social, cultural and political environments.



QUALITY OF LIFE, HEALTH AND WELL-BEING: DEFINITIONS

Quality of life has several objective and subjective dimensions. Its objective dimensions include material living conditions (income, work, housing, environmental quality or personal safety). Its subjective dimensions refer to people's perceptions of their quality of life. These perceptions are influenced by people's experiences, culture, values, expectations and concerns[132].

Well-being refers to the social, economic, environmental, cultural and political conditions identified by individuals and their communities as essential to their fulfilment and the realization of their potential[133]. Well-being has a number of subjective and objective dimensions, relating as much to physical and mental health as to quality of life.

Health is defined as "a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity"[5]. "**Population health** is an approach to health that aims to improve the health of the entire population and to reduce health inequities among population groups"[134].

Positive mental health is defined as a state of well-being in which a person can realize his or her potential, cope with life's normal difficulties, work successfully and productively, and be able to make a contribution to the community[135]. Mental health is therefore not determined solely by the absence of mental disorders[135].

Environments that influence health and quality of life

The environment is often defined as all the elements that closely or remotely surround a living being[136].

There are various ways of grouping these elements. In this document, we have chosen six environments that have an impact on health and quality of life: namely, the political, economic, built, natural, social and cultural environments.

This grouping into six environments has been adapted from and inspired by several other reference frameworks on environments conducive to health and quality of life[25, 35, 44, 137–139].

Factors that influence environments - a question of scale[24]

Environments, their elements, actions, skills and specific levers at local and regional levels are influenced by decisions at provincial, national and international levels. For example, the adoption of a national policy on sustainable mobility can encourage the implementation of transportation policies at municipal and regional levels.

Reciprocity between collective and individual factors[24]

Environments influence citizens, who in turn influence environments. To increase the effectiveness of interventions aimed at improving population health, we need to consider the reciprocity between individual and collective factors. For example, an intervention linked to the **built environment**, such as the creation of a bicycle path or footpath, the installation of streetlights, sidewalks, etc., can lead local residents to increase their outdoor physical activity. This increase can also strengthen social cohesion and a sense of security, which in turn can reinforce the practice of outdoor physical activities.

The following sections propose:

- a definition of each type of environment;
- a list of the main elements that influence health and quality of life;
- examples of their influence on health and quality of life;
- examples of municipal action.

POLITICAL ENVIRONMENT

The **political environment** refers to political systems and institutions, and to the public policies, laws, regulations, action plans, codes, etc., that structure and guide the conduct of the various players in society[24]. Through its structuring dimension, the political and normative environment developed by a municipality exerts an influence on the other environments (natural, built, economic, social and cultural) of the territory and on all municipal actions that have an impact on health and quality of life[140].

The following table presents the elements of the **political environment** that are related to citizens' health and quality of life.

ELEMENTS OF THE POLITICAL ENVIRONMENT	EXAMPLES OF MUNICIPAL ACTIONS
By-laws	• Adopt by-laws on zoning, waste management, urban planning, sanitation, pesticides[141], site planning and architectural integration, safety and nuisances[142].
Municipal policies and action plans	• Develop policies or action plans targeting certain groups (families, youth, seniors, people with disabilities, immigration) or specific themes (food, cultural, housing, sustainable mobility and environmental policies) or policies that cut across more sectors (social development, public participation, etc.)[143].
Governance processes to encourage public participation and collaboration with organizations in other sectors	• Implement strategies to involve stakeholders (including citizens and organizations from other sectors) in the planning, implementation and evaluation of municipal initiatives or those of partners[140] from other sectors[3, 9,42]. • Implement urban planning and participatory budgeting processes[144].

How can the **political environment** promote citizens' health and quality of life?

- A political and normative environment conducive to health and quality of life underpins greater coherence in the actions taken by various players in these areas, helps to modify social norms and enables the implementation of sound governance to maintain public trust and generate public support for proposed initiatives[145].
- Adopting municipal policies or action plans by resolution guides the actions of the players involved and can ensure greater consistency along with a structuring effect[146].
- Municipal by-laws can be used to, among other things, oversee, prescribe or prohibit certain behaviours or activities, such as free play in the street[147] or to determine conditions for renting out rooms.
- Cross-sectoral action aimed at mobilizing stakeholders (e.g. citizens, representatives of organizations in other sectors) helps increase the impact of interventions[42].

ECONOMIC ENVIRONMENT

The **economic environment** corresponds to the structures and modes of operation associated with the production, consumption, use and distribution of wealth, as well as to the values, motivations and interests that underpin the economic decisions of individuals, local governments and businesses[24].

The following table presents the elements of the **economic environment**[13, 24, 130, 148–167] that are related to the health and quality of life of citizens.

ELEMENTS OF THE ECONOMIC ENVIRONMENT	EXAMPLES OF MUNICIPAL ACTIONS
Job market and working conditions Work organization, unemployment rates, protection of workers with precarious status, access to quality jobs, access to education and training	• Implement an organizational process aimed at obtaining Healthy Enterprise certification[168,169] for the municipality as an employer. • Support the development of social economy enterprises aimed at creating quality jobs for vulnerable populations[170]. • Fund and work with local non-profit organizations to provide technical support to businesses and develop workforce training programs[104].
Income and social inequalities in income Access to sufficient income to meet basic needs, significant income disparities	• Provide direct financial assistance to people in need[164] and create support programs for families, children and seniors. Municipal government subsidies and programs for low-income populations can help mitigate the health impacts of poverty. • Help to redistribute resources equitably and meet basic needs by, for example, supporting food banks and housing in emergency situations[171].

Relative price of goods and services Distribution of goods and services, access to credit, pricing mechanisms	• Modulate the pricing of municipal services that can affect the health and quality of life of populations, based on users' age or ability to pay, e.g. free access to public transit for low-income people, youth or seniors; discounted rates for recreational or sports activities for low-income families[172]. • Offer healthy food at competitive prices in municipal facilities[171, 173, 174]. • Support and finance the development of social and community housing, particularly for people on low incomes.
Local economy	• Adopt a by-law requiring the municipality to promote local purchasing and sustainable products when awarding contracts by mutual agreement[175]. • Develop a specific urban planning program to make a town center or village center more attractive (revitalization, etc.)[176]. • Adopt by-laws providing an investment-friendly environment[177] (financial incentives) and set up tax credit programs to encourage businesses in targeted sectors to locate in the municipality[104]. • Support local business start-ups (e.g. provide support for setting up a public market, food cooperatives, etc.)[178].
Commercial sector practices	• Adopt by-laws governing the sale of certain products that are harmful to health: urban planning and zoning by-laws[179] to restrict the number of gambling establishments[180, 181], vaping outlets, alcohol outlets and junk food outlets around schools, and to restrict their location.

How can the **economic environment** influence citizens' health and quality of life?

- Access to a satisfying, quality job with development prospects and a decent income offers financial security as well as a sense of identity and personal fulfilment[150, 163]. Conversely, job loss or insecure employment can have harmful financial and psychological consequences.
- A person's income has an influence[163] on their overall living conditions and health[163, 182]. Low-income populations generally have less access to healthy food, are more exposed to various sources of pollution, and are more likely to live in poor-quality housing[130].
- Financial constraints also affect social participation, as they can be a barrier to participation in cultural, educational and recreational activities[130].
- When the price of housing represents too large a proportion of household income, the resources available for other essential expenses such as food, clothing and transportation are reduced[130]. The inability to pay housing-related expenses can become a source of anxiety and depression[155–159].
- Some commercial (for-profit) practices promote products (e.g. tobacco, alcohol, junk food) and choices that are detrimental to health[183].

BUILT ENVIRONMENT

The **built environment** is defined as any element of the physical environment built or developed by human beings. It includes, for example, land use planning (e.g. density, land use mix), the configuration of transportation networks, and the supply of housing (e.g. sanitation size, price[25, 160]. A built environment conducive to health fosters the development of an attractive living environment and individual fulfilment.

The following table presents the elements of the **built environment** that are related to citizens' health and quality of life.

ELEMENTS OF THE BUILT ENVIRONMENT	EXAMPLES OF MUNICIPAL ACTIONS
Neighborhood planning Density, mix, connectivity, lighting, street furniture	• Design public spaces to increase connectivity between public areas, together with ridership and safety[184]. • Design public spaces to accommodate people with limitations (universal accessibility)[185]. • Provide adequate lighting to increase[186] visibility and reduce hidden areas[186, 188, 191, 192]. • Install street furniture (e.g. benches) in public spaces to facilitate movement for people with reduced mobility and seniors[193]. • Ensure sufficient density to enable pedestrian mobility and efficient public transit. • Foster a mix of uses to provide local access to essential services, such as daycare and stores offering healthy, affordable, local food.
Transportation Bicycle paths, sidewalks, arterial roads, traffic calming measures	• Make the transition to less polluting municipal vehicles or modes of transport[194]. • Encourage local purchasing to reduce freight transport. • Favour infrastructures that encourage rapid public transit, walking, cycling, and intercity freight and passenger transport[195]. • Encourage safe active travel by developing a network of sidewalks, footpaths and bicycle paths separated from the road, and ensure proper snow removal during the winter season[196]. • Implement traffic calming measures to encourage motorists to reduce speed and share space with other road users. • Design cities to reduce car dependency[197].

Food systems Equitable access to healthy food choices, protection of farmland, local food, access to food banks, community gardens	• Offer healthy, affordable food in municipal settings (e.g. arenas, day camps, community centers) and at municipal activities and events[169, 171, 173, 198]. • Ensure the distribution of quality drinking water (in addition to meeting the standards of the *Regulation respecting the quality of drinking water*). • Install drinking water fountains in municipal public areas[199, 200]. • Provide zoning to encourage the establishment of small, healthy food stores such as fruit shops. • Set quotas on fast-food outlets and prohibit their establishment in areas close to secondary schools[201]. • Adopt an urban agriculture plan to facilitate gardenings. • Adopt by-laws to encourage the development of sustainable and equitable local food systems.
Houses and apartments Affordable housing, housing quality, sufficient housing supply, emergency assistance	• Support and finance the development of social and community housing[204]. • Adjust by-laws to require developers of housing complexes to include affordable, social and family housing in their residential offerings[204]. • Acquire land or buildings and transfer them free of charge, or at a discount to market value, to social and community housing developers. • Increase housing density while maintaining a human scale[203]. • Participate in renovation programs, such as Rénovation Québec, which provide financial support to municipalities that set up programs to improve housing in run-down residential areas[205]. • Raise awareness about the importance of indoor air quality, inform the public of local specificities concerning indoor air (e.g. radon)[206] and remind people of the need for adequate ventilation and good indoor air quality in general.

How can the **built environment** influence citizens' health and quality of life?

- Elements of the built environment have an impact on decisions regarding the choice of transport modes and mobility[207]. Significant links exist between neighborhood layout and active transportation[208]. Compact environments with a connected road network are conducive to active transportation. This type of development must also include safe infrastructures favouring pedestrians and cyclists[209].
- The configuration of the road network, if not properly planned, and traffic flows also generate nuisances such as noise, in addition to promoting the creation of heat islands and the emission of atmospheric pollutants with an impact on people's health[94, 210–213].
- Physical access to certain junk food stores may contribute to a higher prevalence of obesity[214].
- Housing influences health and quality of life. Access to housing (e.g. cost, affordability), its location (e.g. exposure to pollutants, access to local services) and its characteristics (e.g. sanitation, size) can be associated with the health and well-being of populations[215–220].
- The health of children depends on the establishment of, and access to, supportive and stimulating environments for them and their families. Lack of play space or educational activities, as well as problems with housing or access to services, can directly or indirectly hinder children's development[221]. The proportion of children with developmental vulnerabilities is higher among those living in neighbourhoods considered to be less safe[222].

NATURAL ENVIRONMENT

The **natural environment** designates natural components, such as green spaces, air, water, soil, natural resources, plant and animal life and their interrelations with human beings[26]. These components are no longer considered as inexhaustible resources, but as resources essential to the health of humans and ecosystems.

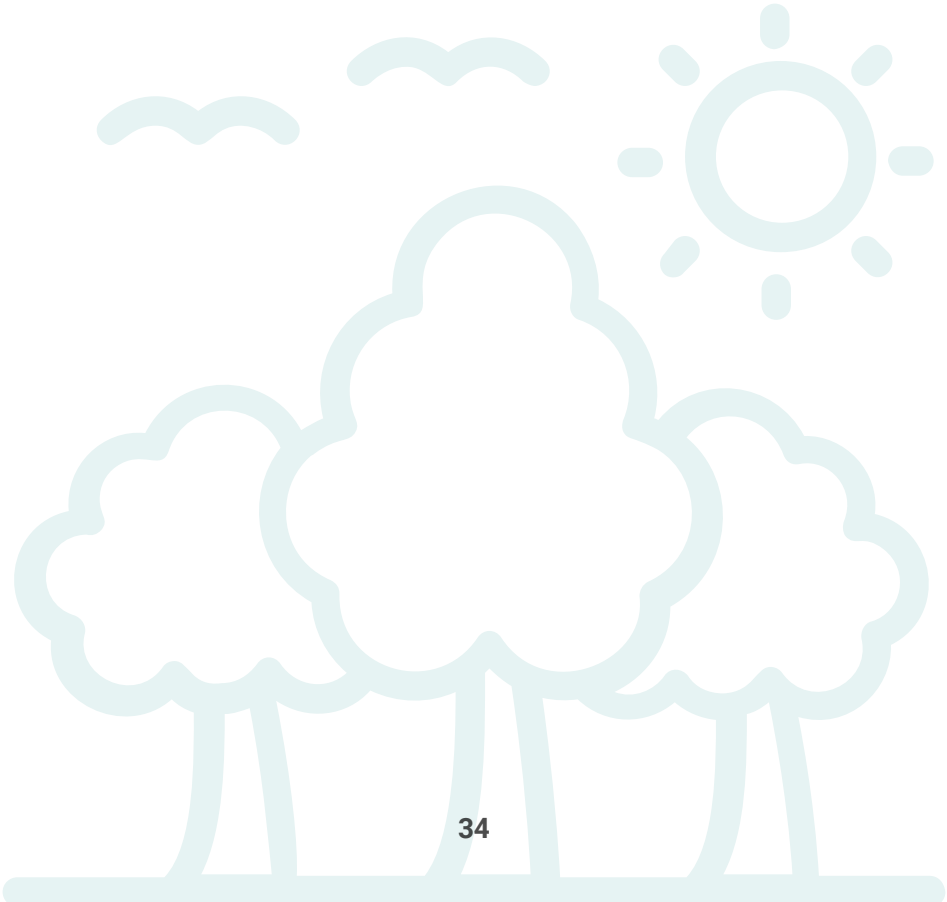
The following table shows the elements of the **natural environment** that are linked to citizens' health and quality of life.

ELEMENTS OF THE NATURAL ENVIRONMENT	EXAMPLES OF MUNICIPAL ACTIONS
Green spaces Natural spaces, plant and animal life, forests, parks, gardens, national parks, regional parks, street planting, biodiversity	• Set targets for the development of green spaces in residential, infrastructure or urban revitalization projects[223]. • Promote and support urban greening and protect existing trees and green spaces[224, 225]. • Green vacant spaces, rooftops and building facades, giving priority to usability[192].
Air Climate, temperatures, radiation, air quality, odours	• Promote and favour the use of low-emission fuels and renewable energy sources that do not require combustion (e.g. solar, wind and hydroelectric sources)[226]. • Promote the use of permeable materials with high solar reflectance[227]. • Implement waste reduction, separation, recycling, reuse and reprocessing strategies[228]. • Promote alternatives to solid waste incineration (e.g. improved biological waste management methods, including anaerobic digestion of waste to produce biogas)[229].

Water Bathing water, lakes, rivers, beaches, biodiversity, groundwater, watersheds	• Limit or eliminate wastewater discharges or overflows into natural environments (e.g. through wastewater retention structures, better sewer system design, optimization of wastewater treatment, etc.)[230]. • Protect natural recreational water sources and properly maintain artificial pools to reduce the risk of waterborne disease outbreaks associated with recreational water contaminants[231, 232]. • Protect and make available quality drinking water by optimizing drinking water treatment processes under municipal responsibility. • Protect water resources on municipal territory[233] (e.g. maintain riparian buffer strips; ensure optimal maintenance of ditches under municipal management, monitor septic tank maintenance)[230]. • Optimize stormwater management. • Adopt a by-law banning the use or sale of certain pesticides[141] (or all pesticides for public green spaces) within the municipality, and participate in an appropriate awareness campaign on health and environmental risks, alternative methods and less harmful products such as biopesticides[234].
Soil Soil quality, geology, geomorphology, pedology, pesticides, contaminants	• Promote and support the rehabilitation of contaminated land. • Issue requirements to developers through permits for work undertaken so as to ensure that rehabilitation work is carried out in an optimal manner. • Promote optimal management of residual materials and wastewater.
Noise Environmental noise	• Reduce the volume or speed of traffic on the local road network (promote active transportation and public transit or traffic calming)[93, 94]. • Reduce noise propagation with noise barriers at the edges of residential neighbourhoods[93, 94]. • Use sound-absorbing materials when repairing roads in dense urban areas[93, 94]. • Establish separating distances between a noise source and sensitive areas (residential neighbourhoods, schools, etc.)[93, 94].

How can the **natural environment** influence citizens' health and quality of life?

- Access and proximity to green spaces influences both the physical and mental health of citizens. It provides an environment conducive to physical activity, recreational activities and social interaction. Green spaces also reduce stress and help improve children's concentration in the classroom[224, 225].
- Access to quality drinking water is a health necessity[235]. Biodiversity is essential to the health of water ecosystems, as it supports the ecosystem functions that supply, regulate and purify freshwater.
- Soil contamination can affect health when contaminants reach drinking water sources or are released into the air in the form of gases, vapors or dust. They can infiltrate buildings and affect the health of occupants[236, 237].
- Pesticides all have some degree of toxicity, and can be toxic to humans. The magnitude and probability of occurrence, in exposed individuals, of the toxic effects associated with these products depend on the extent of exposure incurred by the oral, cutaneous or respiratory route. The *Pesticides Management Code* and municipal by-laws on this subject are aimed at the population's well-being and the protection of health, particularly that of the most sensitive groups (children, pregnant women, etc.)[96].
- Although outdoor air quality is better in Québec than in many other parts of the world, air pollution has considerable effects on health, especially in urban environments[238]. It can cause adverse health effects even at low concentrations; consequently, all reductions in emissions and concentrations of pollutants in ambient air generate benefits for public health. In Québec, industry, transportation, fireplaces and wood-burning stoves are the main sources of outdoor air pollution[239].



SOCIAL ENVIRONMENT

The **social environment** refers to the social context in which people live and interact. It includes the social norms, shared values, structures and modes of operation that guide individual and collective actions and interactions. This social context is shaped by sociodemographic make-up (e.g. age, household composition, ethnic origin, education, etc.), traditions, historical events, the presence of formal and informal networks, the presence of organizations and institutions, etc.[24, 27, 34, 240].

The following table presents the elements of the **social environment** that are related to citizens' health and quality of life.

ELEMENTS OF THE SOCIAL ENVIRONMENT[8, 10, 13, 44, 131, 241–245]	EXAMPLES OF MUNICIPAL ACTIONS
Social relationships Demographics, forms of social diversity (ethnocultural background, age, family structures, etc.), positive social interactions[152, 246], forms of discrimination and stigmatization (racism, sexism, prejudice), links of solidarity and reciprocity[28, 61, 247, 248], social climate, social stratification, living together	• Promote and support mutual aid and caring initiatives that strengthen social support and participation[249]. • Create plazas or small public squares that offer opportunities to break isolation, socialize, enjoy a recreational activity or simply relax[250]. • Take into account the needs of vulnerable groups when planning and implementing actions, particularly to aim for greater equity, and support disadvantaged or marginalized people[251]. • Set up collective activities (e.g. block parties, collective ceremonies) that strengthen community ties and sense of belonging to a place[252].
Sense of security Level of trust, peace and social cohesion, level of violence and crime	• Involve and mobilize residents around neighbourhood development projects that promote a sense of security[253]. • Design areas such as public transit stations, parking lots and pedestrian walkways to ensure good visibility[190] and encourage informal surveillance of public places. • Increase the visibility of neighbourhood safety initiatives[254].

Civic and community participation[255] Volunteerism, consultation, involvement of citizens and organizations in projects and policies, inclusion, sense of belonging	• Adopt a participation policy[143]. • Ensure that the views and needs of the entire population of the municipality (gender, age, socioeconomic status, etc.) are represented in the implementation of actions[256]. • Reach out to the most vulnerable populations[9, 256, 257] and develop mechanisms to facilitate their participation[258] (e.g. simplify communication formats, adapt meeting times and locations, collaborate with and support neighbourhood organizations and coalitions). • Provide for mechanisms to facilitate the participation of populations directly affected by an action, at every stage of its application (planning, implementation, evaluation, etc.)[9, 256, 258–260].
Social norms and conventions Attitudes, values, beliefs, social movements, etc.	• Organize citizen awareness campaigns to promote behaviours and initiatives conducive to positive social interaction (e.g., Neighbours' Day[261], green alleys, temporary pedestrian streets), as well as to combat prejudice against certain population groups[262].

How can the **social environment** promote citizens' health and quality of life?

- Positive social relationships enhance health, well-being[149, 263] and satisfaction with life[264]. Social relationships characterized by solidarity and reciprocity have multiple individual and collective benefits[247]. Social support networks offer emotional and practical resources that protect physical and mental health, and provide a sense of being recognized, loved and appreciated[151]. Loneliness and isolation reduce life expectancy and are associated with physical and mental health problems[246, 265].
- Security is an indispensable resource for everyday life and for enabling individuals and communities to fulfil their aspirations. A sense of security is intrinsically linked to feelings of well-being, and it influences people's choices and behaviours. Perceived insecurity can restrict the practice of physical activities (walking and cycling)[188, 267, 268] and lead parents to apply significant restrictions on their children's activities[188]. It can also contribute to the adoption of an attitude of constant vigilance among women[269] or become an obstacle to the use of public transit or parks and green spaces[270, 271], i.e. places offering the possibility of engaging in various physical and social activities[272, 273].
- Discrimination and stigmatization create and reinforce inequalities and affect people's health and quality of life[33]. Forms of exclusion or barriers to social participation based on criteria such as gender identity, ethnicity (visible minority), sexual orientation, age, religious beliefs, nationality, physical appearance and disability have the potential to seriously compromise the well-being and health of citizens[60, 61, 248].
- Social and community participation have multiple benefits for human health and well-being[274]. Having a mission and contributing to something bigger than oneself is said to have a positive impact on people's resilience, by helping them to cope with negative events and reduce the harmful effects of stress and trauma on their own health[275].

CULTURAL ENVIRONMENT

The **cultural environment** designates all elements related to culture that have an impact on individuals and the community. Culture is defined as "the set of distinctive spiritual, material, intellectual and emotional features that characterize a society or social group. It includes not only the arts and letters, but also lifestyles, the fundamental rights of the human being, value systems, traditions and beliefs." Culture manifests itself through the arts, literature and artistic creation; tangible and intangible heritage; handicrafts, fine crafts and know-how; language; beliefs and lifestyles; public art, design and architecture; relationship with the land, local products and the landscape[29, 30].

Manifestations of culture take diverse forms across time and space. They are embodied in the originality of the plural, varied and dynamic identities that make up populations. Culture can also be defined as a system of meaning, i.e. "a system of meanings, conceptions, interpretations and symbolic resources used by people to make sense of the world around them"[276].

The following table presents the elements of the **cultural environment** that are linked to citizens' health and quality of life.

ELEMENTS OF THE CULTURAL ENVIRONMENT	EXAMPLES OF MUNICIPAL ACTIONS
Local context and cultural rights Customs, traditions, religious practices, language, lifestyles, cultural rights, diversity of cultures and people	• Celebrate the diversity of cultures and people in a municipality by offering municipal and community programming that highlights this diversity and creates opportunities for learning from one other[277, 278, 279].
Accessible arts and fine crafts Art forms (visual, electronic, music, theatre, literature)	• Make opportunities for artistic creation using different art forms accessible to people of all generations (seniors, young people, toddlers), including those in the most vulnerable situations[277]. • Integrate a wide variety of artworks, visual images and media into the local landscape[280] and ensure that the diversity of people and cultures is represented[279].

Diversity of forms of expression by citizens Folk art, popular and community cultural and artistic expressions	• Invest in facilities and organizations that enable people to engage with art, culture and heritage (cultural centres, museums, galleries, libraries, and cultural mediation organizations and initiatives)[279]. • Make community cultural and artistic events (festivals, shows, theatre, exhibitions, etc.) accessible to the general public.)[172]. • Establish policies that prioritize accessibility to the arts and cultural expression in the community (e.g. cultural policy)[55, 279].
Tangible and intangible heritage	• Enhance, preserve and celebrate heritage through historic sites, heritage districts, monuments, public art and heritage centres[280].

How can the **cultural environment** promote citizens' health and quality of life?

- An approach that takes into account the local cultural, historical (e.g. traditions) and religious context in the implementation of municipal actions and policies contributes to better internalization, support and social acceptability by the populations concerned.
- Accessibility and the presence of appropriate cultural and artistic activities for different target audiences are associated with good mental health[31, 277].
- In situations of adversity, the arts and culture facilitate individual and collective resilience. For example, when a population is affected by a crisis (pandemic, natural disaster, etc.), community interventions that use the arts as an alternative and complementary means of expression contribute to recovery. The creation of community artworks facilitates self-expression and can help to strengthen community goodwill[281].
- Group projects based on artistic expression in various forms (photography, music, dance, theatre, writing) can contribute to creating a sense of belonging and social cohesion within a community[277, 281].

4 PRINCIPLES TO GUIDE MUNICIPAL ACTIONS AND POLICIES

Municipal actions and policies should be guided by certain principles if they are to act on the determinants of health and contribute to the creation of municipal environments conducive to health and quality of life[2-4]. These principles, which encompass inclusion, equity, safety, resilience and sustainability, have been identified by the United Nations in its 2030 Agenda for Sustainable Development, the New Urban Agenda[282] and the WHO Healthy Cities strategy[4]. They also apply to interventions carried out by municipal partners as a whole.

Inclusion implies that all of a municipality's partners (community organizations, merchants, citizens, etc.) are heard, take part in decisions that concern them and contribute to the development of a shared vision of municipal actions to be carried out and maintained for better health and quality of life[8, 32]. All citizens feel welcome, respected, safe and supported in their daily activities, regardless of their origin, identity, abilities or sociodemographic characteristics[8, 41].

Equity implies that municipalities take action to prevent or mitigate the negative impacts of social inequalities and increase access to diverse resources and opportunities for all citizens. They protect and promote people's rights, paying particular attention to the most vulnerable or disadvantaged people[33–35]. They contribute to health equity (e.g. access to food, parks and green spaces, quality jobs and housing, etc.).

Safety is defined as: "a state in which hazards and conditions leading to physical, psychological or material harm are controlled in order to preserve the health and well-being of individuals and the community"[36]. Safety-conscious municipalities work with their partners and citizens to foster a climate of cohesion, social peace and equity, and to protect rights and freedoms. The control of environmental hazards and access to effective means of care and rehabilitation are also conditions conducive to safety[36].

Resilience means putting in place the conditions to cope with environmental, economic, social and health crises and emergencies that might arise, including those linked to climate change[37]. Resilient municipalities take steps to increase the capacity of community members to adapt to an environment characterized by change, uncertainty and surprise, by mobilizing community resources. This enables them to carry out their primary mission despite possible crises. Members of resilient communities develop individual and collective capacities to respond to change, sustain their community, and develop new avenues to ensure its future and prosperity[283].

Sustainability consists in meeting the needs of today's populations without compromising the ability of future generations or the populations of another territory to meet their own needs. Sustainable municipalities act to increase well-being, equity and justice for current and future generations, while taking ecosystem limits into account[32,35]. They implement actions in favour of development combining economic growth, social development and environmental protection[38]. In the Shanghai Declaration, of 2016, the WHO stated that "health is one of the best indicators of success for the sustainable development of municipalities"[2].

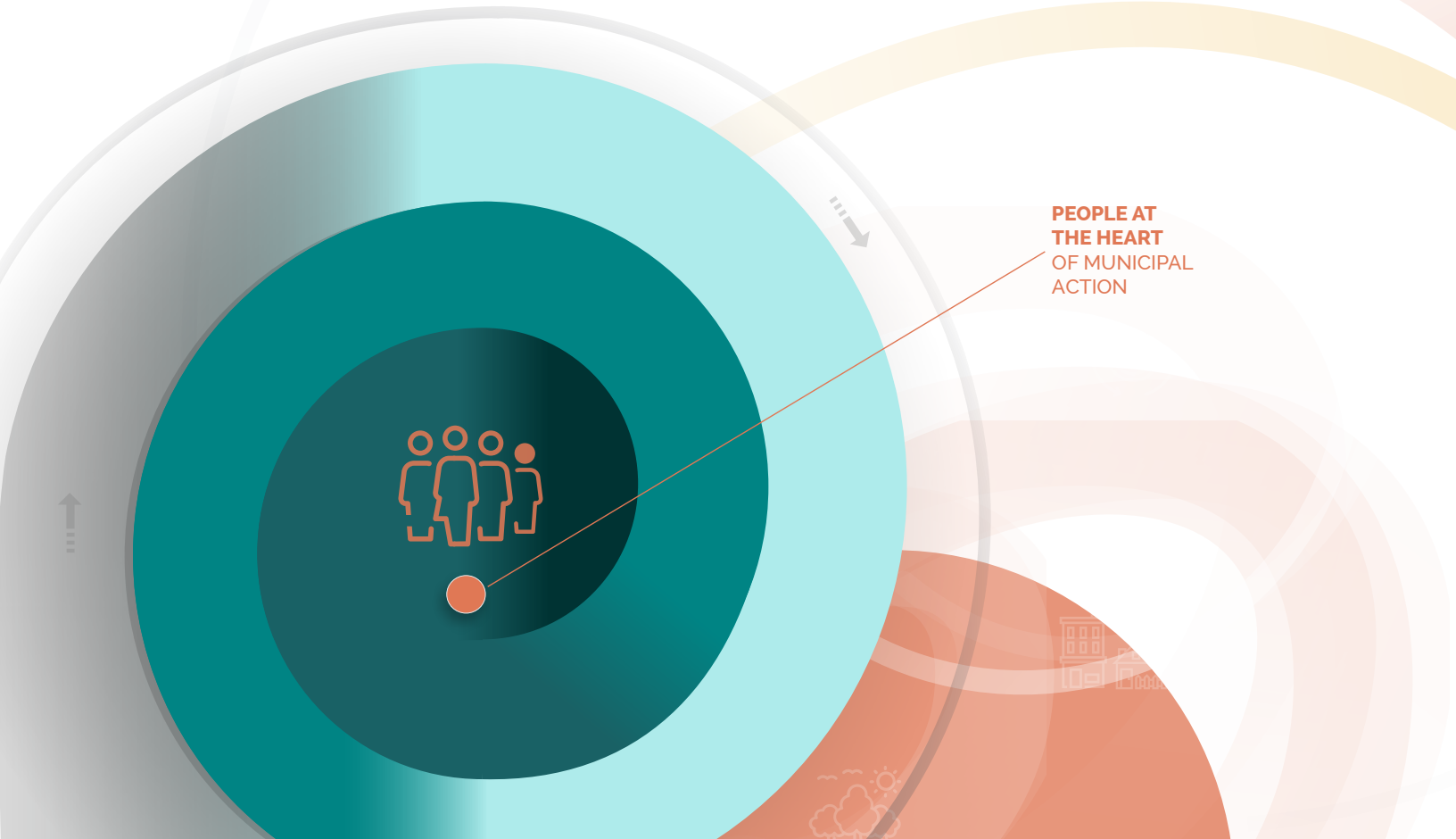
5 FROM ISSUES TO PEOPLE, MUNICIPAL ACTION

Improving the health and quality of life of Québec's municipalities is based on the implementation of strategies developed within the municipal sector, which includes regional county municipalities (RCMs), metropolitan communities, urban agglomerations, local municipalities and boroughs. To be relevant, these strategies must address issues that have an impact on the quality of life and health of citizens.

By putting people at the heart of its actions, the municipal sector can help create environments conducive to quality of life and health. In addition to elected municipal officials and those in charge of the various municipal services, the municipal community includes local partners such as community organizations operating within the territory of a municipality, and the various regional offices of government departments.

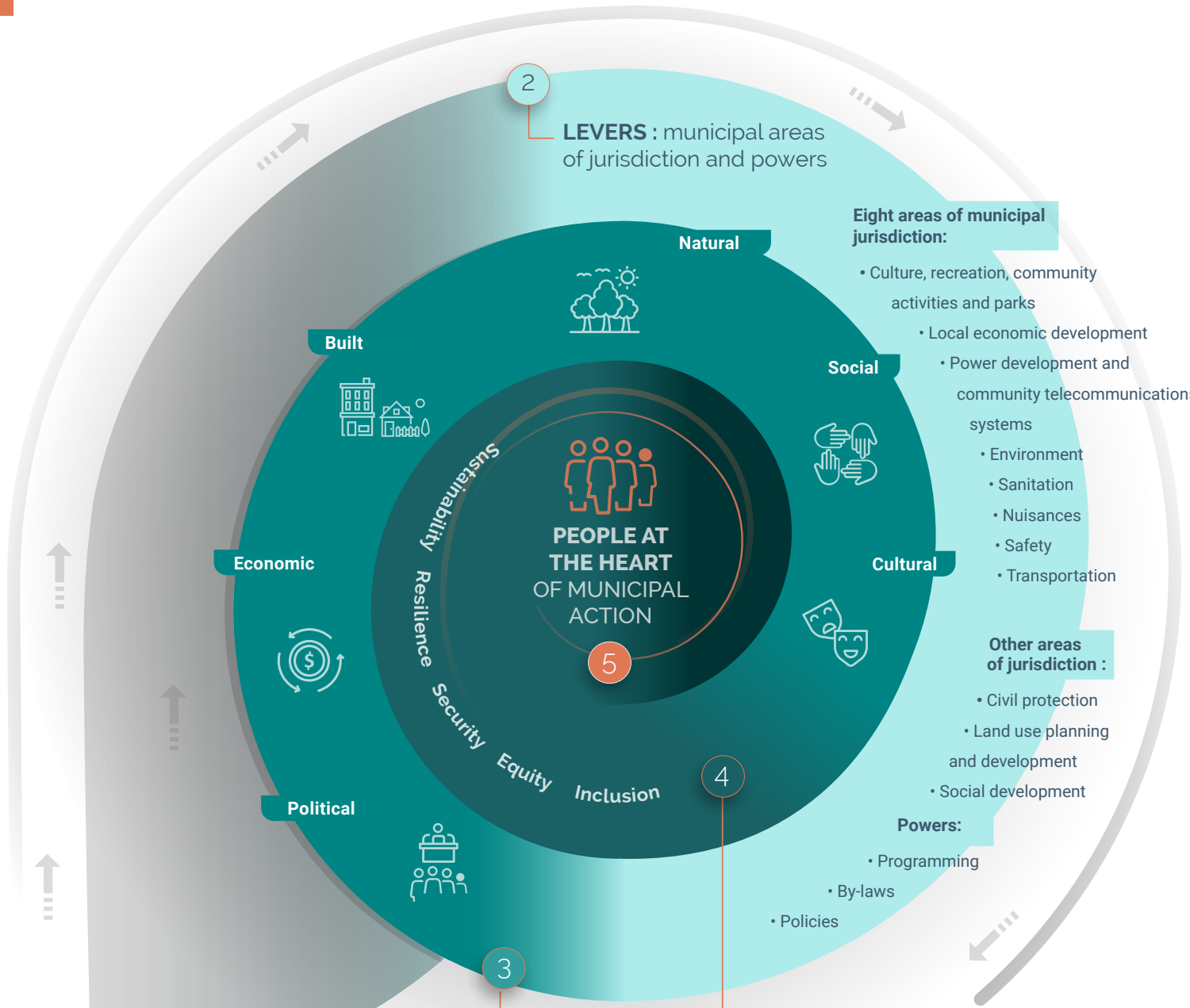
A systemic perspective including principles, environments and levers for action

The various municipal actions that promote health and quality of life take into account the principles of equity, sustainability, safety, inclusiveness and resilience. They can target elements of the political, economic, built, natural, social and cultural environments, taking into account the areas of jurisdiction, powers and levers available to local municipalities.



SCHEMATIC SUMMARY

The following diagram illustrates the main components of the analytical framework presented, and highlights its systemic perspective.



EXAMPLES OF THE INTERDEPENDENCE OF ENVIRONMENTS, HEALTH AND MUNICIPAL LEVERS

All the environments and elements discussed in the previous sections are interrelated, making it difficult to isolate the influence of a single action or element on people's health.

Municipal actions to promote health and quality of life can target elements of the political, economic, built, natural, social and cultural environments, taking into account the principles of equity, sustainability, safety, inclusiveness and resilience. These actions are made possible by the areas of jurisdiction, powers and levers available to local municipalities.

The following two examples are just a few of the many municipal actions that are possible and necessary to tackle, for example, climate change and food issues. Others can be added for different issues to demonstrate the interrelation of actions and their cumulative impact on citizens' health and quality of life.

Climate change [284]

Since the industrial revolution, the concentration of greenhouse gases (GHGs) in the earth's atmosphere has been rising steadily. This sharp increase, which is responsible for climate change, is mainly caused by human activities, such as the combustion of coal, oil and natural gas, industrial processes and land use operations (intensive agriculture, deforestation and cattle farming, etc.)[285].

In Québec, the average temperature has warmed by 1°C since the 1950s and could rise by a further 1 to 2°C by 2050[286]. Extreme heat events, as well as average and extreme precipitation, are expected to increase, both in Québec and in Canada as a whole[286].

Mitigating climate change and implementing adaptation measures, in particular to reduce its impact on the health and well-being of the population, are among the major current challenges facing Québec municipalities. In this context, concrete actions to improve municipal resilience are gradually being put in place and should be strengthened in the future.

Examples of municipal actions in different environments

Political environment

- Adopt municipal by-laws concerning the reflective power of roof coverings and the integration of green roofs, where possible. Integrating green roofs combats urban heat islands and diverts stormwater from sewers[227].
- Modify parking lot by-laws in order to reduce the number of spaces and integrate greenery into parking areas[288].
- Implement an emergency measures plan that determines who does what in the event of a disaster and according to the various risks identified on the municipal territory (floods, forest fires, heat waves), as well as a plan to combat climate change.

Built environment

- Limit urban sprawl to reduce the use of polluting modes of transport[203, 289].
- Provide safe, well-connected pedestrian and bicycle paths to encourage active travel.
- Map the territory covered by the canopy and the risks and vulnerabilities present in a given area (e.g. presence of ticks carrying Lyme disease, flood zones, urban heat islands, etc.).
- Create shaded areas at municipal sites (parks, pools, etc.) to reduce heat and UV exposure[290].

Natural environment

- Control ragweed on municipal property with timely mowing[291].
- Densify the canopy: the presence of green spaces in urban environments helps to reduce ambient temperatures in extreme heat[224].

Social environment

- Plant community and collective gardens: from a climate change perspective, this action helps combat urban heat islands, limits GHG emissions through local food production[224] and strengthens community resilience.
- Implement support programs for people experiencing homelessness during extreme weather events (heat, cold, flooding, etc.)[292].

Healthy eating and food security[64, 66, 79, 174, 178, 293–298]

Healthy eating is not just a matter of individual choices. A number of factors linked to the characteristics of living environments and various other settings influence these choices. Geographical and physical accessibility to food outlets, the price and quality of available food, and the availability of nutritional support when needed are just a few examples[171, 178, 293, 294]. Therefore, adopting a healthy diet is influenced by the characteristics of the physical, economic, political, social and cultural environments.

Promising interventions can be broken down into a number of complementary and interdependent categories, such as introducing conventional sources of supply (e.g. supermarkets) or alternatives (e.g. solidarity grocery stores, public markets and mobile markets) in areas where such services are lacking, modifying in-store supply (e.g. convenience stores), using land use planning tools (e.g. zoning) to restrict young people's access to junk food, and supporting collective and active mobility (transportation infrastructure) to improve access to food stores or facilitate economic access to food.

Examples of municipal actions in different environments

Political environment

- To guide, define and coordinate possible actions, municipalities can introduce policies, plans or reference frameworks (municipal food policy, food community plan[H], etc.)[171, 174, 178].
- Mobilize, consult and develop a joint action plan with local stakeholders (e.g. participate in roundtables, set up a food council, draft a food plan or policy)[171, 178].
- Adjust existing by-laws to support the implementation of various initiatives related to urban agriculture and promote the protection and enhancement of local productive land (e.g. allow urban agriculture on different sites, support the creation of community and collective gardens)[173, 174, 178, 298].
- Integrate interventions that promote food security into other municipal policies (e.g. social or family development policies)[171, 178].
- Adjust municipal by-laws to support improvements in the quality and diversity of the food offering in existing stores (e.g. allow the sale of fruit and vegetables on outdoor storefront displays)[174, 178].

H Preparing a food community development plan involves drawing up a portrait of the local food system in consultation with local stakeholders, and defining objectives and a common vision.

Examples of municipal actions in different environments

Economic environment

- Provide financial and technical support to local community organizations offering food assistance (e.g. food banks, collective kitchens, food buying groups, etc.)[171].
- Support projects to set up solidarity grocery stores and food cooperatives[178].

Social environment

- Support the creation of community facilities dedicated to food (e.g. food security services)[178].
- Include in municipal programming various activities for the development of culinary skills and their intergenerational transmission, at an affordable cost and for people of all ages, and promote them (e.g. workshops, courses, activities)[171, 174].
- Promote, encourage and raise awareness about favourable behaviours through various campaigns (e.g. healthy eating, buying local, responsible consumption of drinking water, ending food waste)[161].

Built environment

- Offer healthy, affordable food in municipal settings (e.g. arenas, day camps, community centers) and at municipal activities and events[161, 173, 174].
- Ensure the distribution of quality drinking water throughout the municipality and install drinking water fountains in municipal public areas[171].

CONDITIONS CONDUCIVE TO MUNCIPAL ACTIONS SUPPORTING HEALTH AND QUALITY OF LIFE

Internal and external collaboration

Municipalities have a number of levers at their disposal to help create environments that are more conducive to health and quality of life. However, their financial and human resources are sometimes limited, so intersectoral collaboration[42] is needed to increase the synergy and impact of municipal actions and those of partners.

Among other things, the Caring for our World approach recognizes and supports sustainable collaborative practices from all sectors for the purpose of creating municipal environments that are conducive to health and quality of life[299].

The success and sustainability of such actions depend on taking into account the local context and assessing needs. The conditions for success in implementing and sustaining such collaborative practices include the importance of the following[9, 11, 258, 260,300]:

- remaining attentive to the needs and views expressed by stakeholders, including citizens;
- developing a shared vision of action;
- basing action on strong leadership from players with legitimacy for all stakeholders;
- putting in place mechanisms to facilitate communication and teamwork (e.g. sharing of responsibilities, expertise, time, etc.);
- promoting and enhancing the collective work accomplished[8–12].

Coordination between different departments, teams and areas of expertise within the municipal administration[256, 301] is another condition for optimizing the effectiveness of interventions[260, 302].

Health impact assessments

Health impact assessments are a way of integrating health, equity and quality of life into municipal action planning.

Health impact assessment (HIA) is a process designed to anticipate and document the potential impacts - both positive and negative, direct and indirect - of a policy or project under development on all factors influencing the health of the population. HIA also makes it possible to assess the distribution of these impacts within the population, in order to avoid producing or increasing social inequalities in health. This type of prospective assessment provides useful knowledge for decision-makers, and thus enables them to make more health-friendly decisions[303].

In Québec, municipalities and regional public health departments carry out and support HIAs in a municipal context, mainly as part of land use planning and development projects (downtown revitalization, special urban plan, TOD [transit-oriented development] area), sustainable mobility plan, development of outdoor recreational infrastructure, street or neighborhood development, etc.)[303].

In addition to improving the impact of projects on citizens' health, HIA strengthens collaboration between municipal and public health players, as well as with other relevant partners. The development of a common language facilitates further collaboration and the inclusion of health considerations in other decisions[303].

CONCLUSION

This analytical framework is first and foremost a tool for better conceptualizing and defining integrated, coherent and complementary municipal actions to improve the health and quality of life of citizens.

It provides an overview of the factors that influence people's health and quality of life in a municipal context, along with examples of interventions and levers available to municipalities for taking action.

Municipalities carry out a variety of actions (policies, by-laws, action plans, infrastructures, etc.) that have an impact on health and quality of life. These actions can target elements of the political, economic, built, natural, social and cultural environments, while taking into account the principles of equity, sustainability, safety, inclusion and resilience.

These actions respond to current issues and contribute to the development of environments conducive to health and quality of life[13].

REFERENCES

(1) Organisation mondiale de la santé, Centre OMS pour le développement sanitaire de Kobe et Programme des Nations unies pour les établissements humains (ONU-Habitat) (2010). « La Face cachée des villes, Mettre au jour et vaincre les inégalités en santé en milieu urbain — French Language Version | UN-Habitat » (Hidden Cities , Unmasking and Overcoming Health Inequities in Urban Settings), https://unhabitat.org/la-face-cach%C3%A9e-des-villes-mettre-au-jour-et-vaincre-les-in%C3%A9galit%C3%A9s-en-sant%C3%A9-en-milieu-urbain-french, (consulté le 23 février 2022).

(2) Giles-Corti, B., M. Lowe et J. Arundel (7 mars 2019). « Achieving the SDGs: Evaluating indicators to be used to benchmark and monitor progress towards creating healthy and sustainable cities. », *Health Policy (Amsterdam, Netherlands)*.

(3) United Nations Human Settlements Programme (UN-Habitat) (2020). *The New Urban Agenda Illustrated | UN-Habitat*, [en ligne], https://unhabitat.org/the-new-urban-agenda-illustrated, (consulté le 2 juin 2021).

(4) Organisation mondiale de la santé (OMS) (2018). *Une meilleure santé et plus de bonheur dans les villes, pour tous et toutes : une démarche transformatrice pour des sociétés sûres, inclusives, durables et résilientes. Consensus de Copenhague entre les maires.*, [en ligne], https://apps.who.int/iris/bitstream/handle/10665/345939/WHO-EURO-2018-3356-43115-60352-fre.pdf?sequence=1&isAllowed=y, (consulté le 2 juin 2021).

(5) Conférence internationale sur la Santé (1946). *Constitution de l'Organisation mondiale de la santé,* [en ligne], New York, https://www.who.int/fr/about/governance/constitution, (consulté le 15 février 2022).

(6) Gouvernement du Québec (2017). *Projet de loi nº 122 Loi visant principalement à reconnaître que les municipalités sont des gouvernements de proximité et à augmenter à ce titre leur autonomie et leurs pouvoirs*.

(7) Gouvernement du Québec, ministère des Affaires municipales et des Régions (2006). *La Loi sur les compétences municipales commentée article par article*, [en ligne], https://www.mamh.gouv.qc.ca/fileadmin/publications/ministere/legislation/loi_competences_municipales_commentee.pdf (consulté le 15 février 2022).

(8) Gehl Institute (2018). *Inclusive Healthy Places. A guide to inclusion and health in public space: Learning globally to transform locally*, [en ligne], https://gehlpeople.com/wp-content/uploads/2020/02/Inclusive-Healthy-Places_Gehl-Institute.pdf, (consulté le 15 février 2022).

(9) Organisation mondiale de la santé, bureau régional de l'Europe (2016). *Creating age-friendly environments in Europe. A tool for local policy-makers and planners*, [en ligne], https://www.who.int/publications/i/item/9789289052122, (consulté le 10 septembre 2021).

(10) Markovich, J., M. S. D'Angelo et T. Dinh (2018). *Community Wellbeing: A Framework for the Design Professions*, [en ligne], https://www.conferenceboard.ca/e-library/abstract.aspx?did=9787, (consulté le 30 septembre 2021).

(11) Badland, H., C. Whitzman, M. Lowe, M. Davern, L. Aye, I. Butterworth, D. Hes et B. Giles-Corti (2014). « Urban liveability: emerging lessons from Australia for exploring the potential for indicators to measure the social determinants of health », *Social science & medicine*, vol. 111, p. 64-73.

(12) Lemire, M. (2020). *Création d'environnements favorables à la santé et à la qualité de vie en milieux municipaux : analyse des pratiques et facteurs de succès : démarche prendre soin de notre monde*.

(13) Badland, H., C. Whitzman, M. Lowe, M. Davern, L. Aye, I. Butterworth, D. Hes et B. Giles-Corti (2014). « Urban liveability: Emerging lessons from Australia for exploring the potential for indicators to measure the social determinants of health. », *Social Science & Medicine*, vol. 111, p. 64-73.

(14) Observatoire estrien du développement des communautés (2021). *Portrait régional — Étude de cas pratique : La réponse des territoires de l'Estrie à la crise COVID-19. Facteurs de résilience collective et apprentissages*, [en ligne], https://workdrive.zohoexternal.com/file/o9vce0b83dd6340864217bd2344ab44fe36b7, (consulté le 15 février 2022).

(15) Bergeron, Pascale et Ades, Josefina (à venir). *Le rôle des municipalités en temps de rétablissement collectif : des stratégies pour mitiger les impacts collatéraux de la pandémie et favoriser la qualité de vie*.

(16) World Health Organization (2020). *Strengthening Preparedness for COVID-19 in Cities and Urban Settings*, [en ligne], Genève, World Health Organization, https://www.who.int/publications/i/item/strengthening-preparedness-for-covid-19-in-cities-and-urban-settings, (consulté le 26 juin 2020).

(17) Ministère de Santé et des Services sociaux (2016). *Politique gouvernementale de prévention en santé*, [en ligne], Québec, https://www.msss.gouv.qc.ca/ministere/politique-prevention-sante/, (consulté le 23 février 2022).

(18) Gouvernement du Québec (2015). *Programme national de santé publique 2015-2025 — Publications du ministère de la Santé et des Services sociaux*, [en ligne], Québec, Direction des communications du ministère de la Santé et des Services sociaux, https://publications.msss.gouv.qc.ca/msss/document-001565/, (consulté le 23 février 2022).

(19) Fédération canadienne des municipalités « Enjeux prioritaires », https://fcm.ca/fr/enjeux-prioritaires, (consulté le 8 juillet 2022).

(20) *Regard sur les priorités municipales*, dans Union des municipalités du Québec, [en ligne], https://umq.qc.ca/publication/regard-sur-les-priorites-municipales/, (consulté le 8 juillet 2022).

(21) World Health Organization (2020). « Strengthening Preparedness for COVID-19 in Cities and Urban Settings », https://www.who.int/publications-detail-redirect/WHO-2019-nCoV-Urban_preparedness-2020.1, (consulté le 8 juillet 2022).

(22) Gouvernement du Québec (1er mars 2006). *Loi sur les compétences municipales*, [en ligne], https://www.legisquebec.gouv.qc.ca/fr/pdf/cs/C-47.1.pdf, (consulté le 15 février 2022).

(23) Gouvernement du Québec (2022). « Loi sur l'aménagement et l'urbanisme », https://www.legisquebec.gouv.qc.ca/fr/document/lc/a-19.1, (consulté le 8 juillet 2022).

(24) Ministère de la Santé et des Services sociaux (2012). *Pour une vision commune des environnements favorables à la saine alimentation, à un mode de vie physiquement actif et à la prévention des problèmes reliés au poids*, [en ligne], Gouvernement du Québec, « Document rédigé en collaboration avec Québec en Forme et l'Institut national de santé publique du Québec », https://publications.msss.gouv.qc.ca/msss/fichiers/2012/12-289-03.pdf, (consulté le 15 février 2022).

(25) BC Centre for Disease Control (2018). *Healthy Built Environment Linkages Toolkit: making the links between design, planning and health, Version 2.0 (French)*, [en ligne], Vancouver, C.-B., Canada, Provincial Health Services Authority, Population and Public Health, http://www.bccdc.ca/pop-public-health/Documents/HBE_linkages_toolkit_2018FR.pdf, (consulté le 15 février 2022).

(26) Renaud, A. (2015). « Introduction », dans *Management et contrôle de gestion environnementale*, [en ligne], p. 11-13, https://doi.org/10.3917/ems.renau.2015.01, (consulté le 15 février 2022).

(27) Yen, I. H., et S. L. Syme (1999). « The social environment and health: a discussion of the epidemiologic literature », *Annual Review of Public Health*, vol. 20, p. 287-308.

(28) Kawachi, I., S. V. Subramanian et D. Kim (2008). « Social Capital and Health », dans I. Kawachi, S. V. Subramanian et D. Kim (dir.), *Social Capital and Health*, [en ligne], New York, NY, Springer, p. 1-26, https://doi.org/10.1007/978-0-387-71311-3_1, (consulté le 25 février 2022).

(29) Guibert, A. (2017). *Petit guide d'appropriation de l'Agenda 21 de la culture*.

(30) UNESCO (1982). « Déclaration de Mexico sur les politiques culturelles — Conférence mondiale sur les politiques culturelles », https://unesdoc.unesco.org/ark:/48223/pf0000052505_fre, (consulté le 1er mars 2022).

(31) Gehl Institute (2018). *Inclusive Healthy Places. A guide to inclusion and health in public space: learning globally to transform locally*.

(32) Pineo, H. (2020). « Towards healthy urbanism: inclusive, equitable and sustainable (THRIVES)—an urban design and planning framework from theory to praxis », *Cities & health*, p. 1-19.

(33) Organisation mondiale de la santé (2019). *Implementation framework for Phase VII (2019–2024) of the WHO European Healthy Cities Network: goals, requirements and strategic approaches (2019)*, [en ligne], https://apps.who.int/iris/handle/10665/346087, (consulté le 3 juin 2021).

(34) Sones, M., C. L. Firth, D. Fuller, M. Holden, Y. Kestens et M. Winters (2021). « Situating social connectedness in healthy cities: a conceptual primer for research and policy », *Cities & Health*, p. 1-14.

(35) BC Centre for Disease Control (2020). *Healthy Social Environments Framework—Core Values*, [en ligne], BC Centre for Disease Control et BC Healthy Communities, http://bchealthycommunities.ca/a-new-tool-for-socially-connected-and-resilient-communities-the-healthy-social-environments-framework-soft-launch-dec-1/, (consulté le 15 novembre 2021).

(36) Maurice, P., M. Lavoie, R. Levaque, A. Chapdelaine, H. Bélanger Bonneau, L. Svanström, L. Laflamme, R. Andersson et C. Romer (1998). *Sécurité et promotion de la sécurité : aspects conceptuels et opérationnels*, Beauport, Centre collaborateur OMS du Québec pour la promotion de la sécurité et la prévention des traumatismes.

(37) Nieuwenhuijsen, M., et H. Khreis (2019). « Urban and transport planning, environment and health », dans *Integrating human health into urban and transport planning*, Springer, p. 3-16.

(38) Kahn-Jochimek, A. (2022). *Le programme de développement durable*, [en ligne], *Développement durable*, https://www.un.org/sustainabledevelopment/fr/development-agenda/, (consulté le 1er avril 2022).

(39) Gaumer, B., G. Desrosiers, O. Keel et C. Déziel (1994). « Le service de santé de Montréal de l'établissement au démantèlement (1865-1975) », *Les Cahiers du Centre de recherches historiques. Archives*, [en ligne], no 12, https://doi.org/10.4000/ccrh.2748, (consulté le 15 février 2022).

(40) Giles-Corti, B., A. Vernez-Moudon, R. Reis, G. Turrell, A. L. Dannenberg, H. Badland, S. Foster, M. Lowe, J. F. Sallis, M. Stevenson et N. Owen (10 décembre 2016). « City planning and population health: a global challenge », *Lancet (London, England)*, vol. 388, nº 10062, p. 2912-2924.

(41) Pineo, H. (2020). « Towards healthy urbanism: inclusive, equitable and sustainable (THRIVES)—an urban design and planning framework from theory to praxis », *Cities & Health*, p. 1-19.

(42) Ministère de la Santé et des Services sociaux (2017). *Le soutien à l'action intersectorielle favorable à la santé : Stratégie ministérielle*, [en ligne], https://publications.msss.gouv.qc.ca/msss/fichiers/2017/17-216-01W.pdf, (consulté le 15 février 2022).

(43) World Health Organization (janvier 2014). *Health in All Policies (HiAP) Framework for Country Action*, [en ligne], https://www.paho.org/hq/dmdocuments/2014/2014.01-WHO-HiAP-FrameworkCountryAction.pdf, (consulté le 15 février 2022).

(44) Ramirez-Rubio, O., C. Daher, G. Fanjul, M. Gascon, N. Mueller, L. Pajín, A. Plasencia, D. Rojas-Rueda, M. Thondoo et M. J. Nieuwenhuijsen (2019). « Urban health: an example of a "health in all policies" approach in the context of SDGs implementation », *Globalization and health*, vol. 15, nº 1, p. 1-21.

(45) Gouvernement du Québec *Plan d'action interministériel 2017-2021 de la Politique gouvernementale de prévention en santé*, Québec, Direction des communications du ministère de la Santé et des Services sociaux.

(46) Gouvernement du Québec (2016). *Politique gouvernementale de prévention en santé : un projet d'envergure pour améliorer la santé et la qualité de vie de la population*, Québec, Direction des communications du Ministère de la Santé et des Services sociaux.

(47) Gouvernement du Québec (dir.) (2015). *Programme national de santé publique 2015-2025 : pour améliorer la santé de la population du Québec*, Québec, Ministère de la Santé et des Services sociaux, Direction des communications.

(48) Gouvernement du Québec (2018). *Plan d'action interministériel 2017-2021 de la Politique gouvernementale de prévention en santé — Publications du ministère de la Santé et des Services sociaux*, [en ligne], Québec, Direction des communications du ministère de la Santé et des Services sociaux, https://publications.msss.gouv.qc.ca/msss/document-002035/, (consulté le 23 février 2022).

(49) Union des municipalités du Québec (2017). *Livre blanc municipal — L'avenir a un lieu*, [en ligne], Montréal, https://umq.qc.ca/publications/livre-blanc-municipal/, (consulté le 23 février 2022).

(50) Ministère de la Santé et des Services sociaux et Québec en Forme (2022). « Prendre soin de notre monde », dans *Prendre soin de notre monde*, [en ligne], https://prendresoindenotremonde.com/, (consulté le 8 juillet 2022).

(51) Gouvernement du Québec, Ministère des Affaires municipales et de l'Habitation (2020). *Stratégie gouvernementale pour assurer l'occupation et la vitalité des territoires 2018-2022*.

(52) Gouvernement du Québec (2022). *Politique nationale de l'architecture et de l'aménagement du territoire*.

(53) Gouvernement du Québec (2022). *Politique-cadre d'électrification et de changements climatiques du Québec.*, Québec, Gouvernement du Québec.

(54) Bernier, N. F. (2021). *Réduire les vulnérabilités et les inégalités sociales : tous ensemble pour la santé et le bien-être*, [en ligne], https://www.inspq.qc.ca/publications/2781, (consulté le 2 juin 2021).

(55) Ministère de la Culture et des Communications (2021). *Guide d'élaboration d'une politique culturelle municipale : pour une démarche et une mise en œuvre réussies*, [en ligne], https://cdn-contenu.quebec.ca/cdn-contenu/adm/min/culture-communications/publications-adm/Guides/Guide-Municipalite-2021.pdf?1629845361, (consulté le 15 février 2022).

(56) Ministère de la Santé et des Services sociaux (2020). « Guide d'accompagnement pour la réalisation de la démarche Municipalité amie des aînés – 2e édition », p. 72.

(57) Institut de la statistique du Québec (ISQ) (2016). « Quelques constats sur la population des municipalités du Québec au 1er juillet 2015 », *Coup d'œil sociodémographique*, p. 8.

(58) Institut national de santé publique du Québec (2018). *Les inégalités sociales de santé au Québec — L'espérance de vie en bonne santé*, Québec.

(59) Agence de la santé publique du Canada (2019). *Rapport de l'administratrice en chef de la santé publique sur l'état de la santé publique au Canada, 2019 : Lutte contre la stigmatisation — Vers un système de santé plus inclusif*, [en ligne], Ottawa, Agence de la santé publique du Canada, https://www.canada.ca/fr/sante-publique/organisation/publications/rapports-etat-sante-publique-canada-administrateur-chef-sante-publique/lutte-contre-stigmatisation-vers-systeme-sante-plus-inclusif.html, (consulté le 23 février 2022).

(60) Poitras, D., B. Louise Marie, P. Maurice et D. Gagné (2019). *La cohésion sociale comme condition essentielle à la sécurité : définition, composantes et indicateurs*, [en ligne], Institut national de santé publique du Québec, https://www.inspq.qc.ca/sites/default/files/publications/2595_cohesion_sociale_essentielle_securite.pdf, (consulté le 15 février 2022).

(61) Manca, A. R. (2014). « Social Cohesion », dans A. C. Michalos (dir.), *Encyclopedia of Quality of Life and Well-Being Research*, [en ligne], Dordrecht, Springer Netherlands, p. 6026-6028, https://doi.org/10.1007/978-94-007-0753-5_2739, (consulté le 25 février 2022).

(62) Statistique Canada (27 juillet 2021). « Le Quotidien — Après cinq années de hausses, le nombre de crimes déclarés par la police au Canada a diminué en 2020, mais le nombre d'affaires de crimes haineux a fortement augmenté », https://www150.statcan.gc.ca/n1/daily-quotidien/210727/dq210727a-fra.htm, (consulté le 25 février 2022).

(63) Institut de la statistique du Québec (2019). « Taux de faible revenu selon la Mesure du panier de consommation (MPC) de l'année de base 2018, particuliers, Québec, 2015-2019 », dans Institut de la Statistique du Québec, [en ligne], https://statistique.quebec.ca/fr/document/faible-revenu-a-lechelle-du-quebec-selon-la-mesure-du-panier-de-consommation-mpc/tableau/taux-de-faible-revenu-selon-la-mesure-du-panier-de-consommation-mpc-de-lannee-de-base-2018-particuliers-quebec-2015-2018, (consulté le 1er avril 2022).

(64) Dubé, E., D. Hamel, L. Rochette, M. Dionne et M. Tessier (2020). *COVID-19 — Pandémie et inégalités face à la détresse psychologique et l'insécurité alimentaire, Sondages sur les attitudes et comportements de la population québécoise, résultats du 16 juillet 2020*, Institut national de santé publique Québec.

(65) Gouvernement du Canada, S. C. (2022). « Insécurité alimentaire selon le groupe d'âge et le sexe », https://www150.statcan.gc.ca/t1/tbl1/fr/tv.action?pid=1310083501, (consulté le 25 mai 2022).

(66) Dionne, M., E. Dubé, D. Hamel, L. Rochette, M. Tessier, C. Plante et M.-C. Paquette (2021). *COVID-19 — Sondages sur les attitudes et comportements des adultes québécois — Résultats du 19 octobre 2021, Pandémie et insécurité alimentaire*, [en ligne], Institut national de santé publique Québec, https://www.inspq.qc.ca/covid-19/sondages-attitudes-comportements-quebecois/insecurite-alimentaire-octobre-2021, (consulté le 7 novembre 2021).

(67) Institut national de santé publique du Québec (2022). *Pandémie et insécurité alimentaire*, Québec, Institut national de santé publique du Québec.

(68) Ministère de la Santé et des Services sociaux (2019). *Dénombrement des personnes en situation d'itinérance au Québec le 24 avril 2018*, Québec.

(69) Institut de la statistique du Québec (2020). « Le bilan démographique du Québec », dans *Institut de la Statistique du Québec*, [en ligne], https://statistique.quebec.ca/fr/document/le-bilan-demographique-du-quebec, (consulté le 23 février 2022).

(70) Observatoire des tout-petits (2021). *Portrait 2021 : Comment se portent les tout-petits au Québec?* [En ligne], Québec, https://tout-petits.org/publications/portraits-annuels/portrait-2021/, (consulté le 1er mars 2022).

(71) Shonkoff, J. P., A. S. Garner, Committee on Psychosocial Aspects of Child and Family Health, Committee on Early Childhood, Adoption, and Dependent Care et Section on Developmental and Behavioral Pediatrics (2012). "The lifelong effects of early childhood adversity and toxic stress", *Pediatrics*, vol. 129, no 1, p. e232-e246.

(72) Institut national de santé publique du Québec (2016). *Analyse contextualisée sur le développement des enfants à la maternelle*, [en ligne], Institut national de santé publique du Québec, https://www.inspq.qc.ca/publications/2124, (consulté le 28 février 2022).

(73) Statistique Canada (2017). « Population totale, selon l'identité autochtone et le statut d'Indien inscrit ou d'Indien des traités au Québec, Recensement de 2016 », dans *Statistique Canada*, [en ligne], https://www12.statcan.gc.ca/census-recensement/2016/as-sa/fogs-spg/Facts-pr-fra.cfm?LANG=Fra&GK=PR&GC=24&TOPIC=9, (consulté le 15 février 2022).

(74) Gouvernement du Canada, S. C. (2017). « Le Quotidien — Immigration et diversité ethnoculturelle : faits saillants du Recensement de 2016 », https://www150.statcan.gc.ca/n1/daily-quotidien/171025/dq171025b-fra.htm?indid=14428-1&indgeo=0, (consulté le 1er avril 2022).

(75) Gouvernement du Canada, S. C. (2019). « Vivre seul au Canada », https://www150.statcan.gc.ca/n1/pub/75-006-x/2019001/article/00003-fra.htm, (consulté le 1er avril 2022).

(76) Institut de la statistique du Québec (2015). *Les compétences en littératie, en numératie et en résolution de problèmes dans des environnements technologiques : des clefs pour relever les défis du XXIe siècle*. Rapport québécois du Programme pour l'évaluation internationale des compétences des adultes (PEICA)

(77) Organisation mondiale de la santé (2020). « Physical activity », https://www.who.int/news-room/fact-sheets/detail/physical-activity, (consulté le 28 février 2022).

(78) Statistique Canada (2017). « Activité physique, autodéclaré chez les adultes, selon le groupe d'âge », dans *Statistique Canada*, [en ligne], https://www150.statcan.gc.ca/t1/tbl1/fr/tv.action?pid=1310009613, (consulté le 25 février 2022).

(79) Plante, C., C. Blanchet et L. Rochette (2019). *La consommation des aliments chez les Québécois selon les recommandations du Guide alimentaire canadien*, Montréal, Institut national de santé publique du Québec.

(80) Plante, C., C. Blanchet et L. Rochette (2019). *La consommation des aliments chez les Québécois selon les recommandations du* Guide alimentaire canadien, [en ligne], Montréal, Institut national de santé publique du Québec, « Regard sur l'alimentation des Québécois », https://www.inspq.qc.ca/sites/default/files/publications/2616_consommation_aliments_quebecois_guide_alimentaire.pdf, (consulté le 15 février 2022).

(81) Gaulin, M., M. Simard, C. Mbuya-Bienge, B. Candas, A. Lesage et C. Sirois (2020). *L'effet combiné de la multimorbidité et des troubles mentaux sur les admissions fréquentes à l'urgence chez les adultes québécois*, Montréal, Québec, Institut national de santé publique du Québec, « Surveillance des maladies chroniques », nº 30.

(82) Shields, M., L. Tonmyr, A. Gonzalez, M. Weeks, S.-B. Park, A.-M. Robert, D.-L. Blair et H. L. MacMillan (novembre 2021). « Original quantitative research—Symptoms of major depressive disorder during the COVID-19 pandemic: results from a representative sample of the Canadian population », *Health Promotion and Chronic Disease Prevention in Canada: Research, Policy and Practice*, vol. 41, nº 11, p. 340-358.

(83) Capaldi, C. A., L. Liu et R. L. Dopko (2021). « Original quantitative research—Positive mental health and perceived change in mental health among adults in Canada during the second wave of the COVID-19 pandemic », *Health Promotion and Chronic Disease Prevention in Canada: Research, Policy and Practice*, vol. 41, nº 11, p. 359-377.

(84) Groarke, J. M., E. Berry, L. Graham-Wisener, P. E. McKenna-Plumley, E. McGlinchey et C. Armour (24 septembre 2020). « Loneliness in the UK during the COVID-19 pandemic: Cross-sectional results from the COVID-19 Psychological Wellbeing Study », *PLOS ONE*, vol. 15, nº 9, p. e0239698.

(85) Bu, F., A. Steptoe et D. Fancourt (1er septembre 2020). « Who is lonely in lockdown? Cross-cohort analyses of predictors of loneliness before and during the COVID-19 pandemic », *Public Health*, vol. 186, p. 31-34.

(86) Huynh, C., L. Rochette, E. Pelletier, D. Jutras-Aswad, M.-J. Fleury, S. Kisely et A. Lesage (2020). *Portrait des troubles liés aux substances psychoactives : troubles mentaux concomitants et utilisation des services médicaux en santé mentale*, [en ligne], https://www.inspq.qc.ca/publications/2663, (consulté le 28 février 2022).

(87) Kairouz, S., L. Nadeau et C. Robillard (2014). *Enquête ENHJEU-Québec, Portrait du jeu au Québec : Prévalence, incidence et trajectoires sur quatre ans*, Concordia.

(88) Traoré, I., M. Simard, H. Camirand, F. Conus et G. Contreras (2021). *Enquête québécoise sur le tabac, l'alcool, la drogue et le jeu chez les élèves du secondaire 2019 : principaux résultats de l'enquête et évolution des phénomènes*, [en ligne], Québec : Institut de la statistique du Québec, 2021, https://cap.banq.qc.ca/notice?id=p%3A%3Ausmarcdef_0006566518&queryId=82c076af-ab8a-494a-b5d3-141fdb7beb9c&posInSet=2, (consulté le 1er avril 2022).

(89) *Le Collectif | La communauté de pratique — Collectif sur le jeu et ses impacts*, https://collectif-jeu.ca/content/le-collectif, (consulté le 28 février 2022).

(90) Ouranos (2015). *Synthèse des connaissances sur les changements climatiques au Québec — Édition 2015*, [en ligne], Montréal, Ouranos, https://www.ouranos.ca/wp-content/uploads/SyntheseRapportfinal.pdf, (consulté le 18 juillet 2022).

(91) Généreux, M., A.-L. Lansard, D. Maltais et P. Gachon (2020). « Impacts des inondations sur la santé mentale des Québécois : pourquoi certains citoyens sont-ils plus affectés que d'autres? », http://www.monclimatmasante.qc.ca/impacts-des-inondations-sur-la-sante-mentale-des-quebecois, (consulté le 15 février 2022).

(92) Institut national de santé publique du Québec (2021). « Résultats annuels de surveillance de la maladie de Lyme », dans *INSPQ*, [en ligne], https://www.inspq.qc.ca/zoonoses/maladie-de-lyme/resultats-de-surveillance, (consulté le 23 février 2022).

(93) Richard Martin et Mathieu Gauthier (2018). *Meilleures pratiques d'aménagement pour prévenir les effets du bruit environnemental sur la santé et la qualité de vie*, [en ligne], Institut national de santé publique du Québec, https://www.inspq.qc.ca/sites/default/files/publications/2450_meilleures_pratiques_amenagement_effets_bruit_environnemental.pdf, (consulté le 15 février 2022).

(94) Martin, R., P. Deshaies, M. Poulin, et Institut national de santé publique du Québec (2015). *Avis sur une politique québécoise de lutte au bruit environnemental : pour des environnements sonores sains : avis scientifique*, Montréal, Institut national de santé publique du Québec.

(95) Gouvernement du Québec *Effets de la pollution de l'air sur la santé*, [en ligne], https://www.quebec.ca/sante/conseils-et-prevention/sante-et-environnement/effets-de-la-pollution-de-l-air-sur-la-sante, (consulté le 11 juillet 2022).

(96) Gouvernement du Québec *À savoir sur les pesticides*, [en ligne], https://www.quebec.ca/agriculture-environnement-et-ressources-naturelles/protection-de-lenvironnement/pesticides/savoir-pesticides, (consulté le 1er juillet 2022).

(97) Ministère des Affaires municipales et de l'Habitation (2022). « Régime municipal général », https://www.mamh.gouv.qc.ca/organisation-municipale/organisation-territoriale/organisation-territoriale-municipale/regime-municipal-general/, (consulté le 8 juin 2022).

(98) Reid, H. (2015). *Dictionnaire de droit québécois et canadien « compétence »*, 5e édition., Montréal, Wilson & Lafleur.

(99) Couture Ménard, M.-È., et J. Rioux Collin (2019). *Les compétences et les pouvoirs des municipalités pour créer des environnements favorables à la saine alimentation et au mode de vie physiquement actif*, Montréal, Institut national de santé publique du Québec.

(100) *Courses automobiles Mont-Tremblant inc. c. Iredale, 2013 QCCA 1348, par. 42.*

(101) Gouvernement du Québec, ministère des Affaires municipales et des Régions (2006). *La Loi sur les compétences municipales commentée article par article*, [en ligne], https://www.mamh.gouv.qc.ca/fileadmin/publications/ministere/legislation/loi_competences_municipales_commentee.pdf, (consulté le 15 février 2022).

(102) Ministère des Affaires municipales et de l'Habitation (2005). *Une loi attendue du milieu municipal : la Loi sur les compétences municipales*.

(103) Gouvernement du Québec, ministère des Affaires municipales et de l'Occupation du territoire (5 septembre 2007). « Rôle et pouvoirs des municipalités concernant l'installation de fosses septiques », *Bulletin Muni-Express*, [en ligne], www.mamot.gouv.qc.ca/publications/bulletin-muni-express/2007/n-4-5-septembre-2007/, (consulté le 15 février 2022).

(104) Ministère des Affaires municipales et de l'Habitation (2021). « Guide *La prise de décision en urbanisme : Soutien au développement économique* », https://www.mamh.gouv.qc.ca/amenagement-du-territoire/guide-la-prise-de-decision-en-urbanisme/financement-et-maitrise-fonciere/soutien-au-developpement-economique/, (consulté le 9 novembre 2021).

(105) Ministère des Affaires municipales et de l'Habitation (2010). « Guide *La prise de décision en urbanisme* », dans *Équipements et services à caractère culturel, récréatif et social*, [en ligne], https://www.mamh.gouv.qc.ca/amenagement-du-territoire/guide-la-prise-de-decision-en-urbanisme/intervention/equipements-et-services-a-caractere-culturel-recreatif-et-social/, (consulté le 13 juin 2022).

(106) Ministère des Affaires municipales et de l'Habitation (2010). « Guide *La prise de décision en urbanisme* », dans *Voirie municipale*, [en ligne], https://www.mamh.gouv.qc.ca/amenagement-du-territoire/guide-la-prise-de-decision-en-urbanisme/intervention/version-imprimable/, (consulté le 13 juin 2022).

(107) Lalonde, M. (2002). « Paix, ordre et bon gouvernement : les pouvoirs municipaux et l'arrêt Ville de Hudson », dans *Service de la formation permanente*.

(108) *114957 Canada Ltée (Spraytech, Société d'arrosage) c. Hudson (Ville de), 2001 CSC 40*,

(109) *114957 Canada Ltée (Spraytech, Société d'arrosage) c. Hudson (Ville de), 2001 CSC 40, par. 26.*

(110) Association pour la santé publique du Québec (2011). *La zone-école et l'alimentation : des pistes d'action pour le monde municipal*, [en ligne], Montréal, https://www.aspq.org/outils/municipalites/?annee=2011, (consulté le 15 février 2022).

(111) Nomura, S., A. J. Q. Parsons, M. Hirabayashi, R. Kinoshita, Y. Liao et S. Hodgson (2016). « Social determinants of mid- to long-term disaster impacts on health: A systematic review », *International Journal of Disaster Risk Reduction*, vol. 16, p. 53-67.

(112) Shoaf, K. I., et S. J. Rotiman « Public Health Impact of Disasters », *The Australian Journal of Emergency Management*, vol. 15, nº 3, p. 58-63.

(113) Leppold, C., L. Gibbs, K. Block, L. Reifels et P. Quinn (2022). « Public health implications of multiple disaster exposures », *The Lancet Public Health*, vol. 7, nº 3, p. e274-e286.

(114) Gouvernement du Québec (2021). « Rôles et responsabilités en sécurité civile », https://www.quebec.ca/securite-situations-urgence/securite-civile/fonctionnement/roles-responsabilites, (consulté le 1er avril 2022).

(115) Couture-Ménard, M.-È., et J. Rioux-Collin (2019). *Les compétences et les pouvoirs des municipalités pour créer des environnements favorables à la saine alimentation et au mode de vie physiquement actif*, Institut national de santé publique du Québec.

(116) Conseil canadien des accidents industriels majeurs (1995). *Lignes directrices sur l'urbanisme et l'aménagement du territoire en fonction des risques*.

(117) Institut national de santé publique du Québec (2018). *Meilleures pratiques d'aménagement pour prévenir les effets du bruit environnemental sur la santé et la qualité de vie*.

(118) Boucher, I., et N. Fontaine (2011). *L'aménagement et l'écomobilité — Guide de bonnes pratiques sur la planification territoriale et le développement durable*.

(119) Ministère des Affaires municipales, des Régions et de l'Occupation du territoire (2014). « Règlement sur les plans d'aménagement d'ensemble », https://www.mamh.gouv.qc.ca/amenagement-du-territoire/guide-la-prise-de-decision-en-urbanisme/reglementation/reglement-sur-les-plans-damenagement-densemble/,(consulté le 11 février 2014).

(120) Ministère des Affaires municipales, des Régions et de l'Occupation du territoire (2012). « Règlement sur les usages conditionnels », https://www.mamh.gouv.qc.ca/amenagement-du-territoire/guide-la-prise-de-decision-en-urbanisme/reglementation/reglement-sur-les-usages-conditionnels/, (consulté le 2 août 2022).

(121) Ministère de la Santé et des Services sociaux (2017). *Rapport du directeur national de santé publique 2017 — Le tabagisme chez les jeunes adultes : Agir ensemble pour diminuer la prévalence*.

(122) Centers for Disease Control and Prevention (2014). « CDC—Winnable Battles—Zoning to Encourage Physical Activity—Public Health Law », http://medbox.iiab.me/modules/en-cdc/www.cdc.gov/phlp/publications/winnable/zoning_physical_activity.html, (consulté le 7 février 2014).

(123) Centers for Disease Control and Prevention (2014). « CDC—Zoning to Encourage Healthy Eating—Winnable Battles—Public Health Law », http://medbox.iiab.me/modules/en-cdc/www.cdc.gov/phlp/publications/winnable/zoning_obesity.html, (consulté le 7 février 2014).

(124) Ministère des Affaires municipales et de l'Habitation (2017). « Aménagement du territoire », https://www.mamh.gouv.qc.ca/publications/bulletin-muni-express/2017/n-6-26-juin-2017/amenagement-du-territoire/, (consulté le 13 juin 2022).

(125) Ministère des Affaires municipales et de l'Habitation (2020). *Pour des milieux de vie durables*, Québec, « Guide de bonnes pratiques sur la planification territoriale et le développement durable ».

(126) Gouvernement du Québec (2022). « Lois », https://www.quebec.ca/gouvernement/ministere/affaires-municipales/lois-et-reglements/, (consulté le 11 juillet 2022).

(127) Ministère des Affaires municipales et de l'Habitation. *Régime municipal général*, https://www.mamh.gouv.qc.ca/organisation-municipale/organisation-territoriale/organisation-territoriale-municipale/regime-municipal-general/, (consulté le 11 juillet 2022).

(128) Assemblée nationale du Québec (2000). *Projet de loi nº 170 — Loi portant réforme de l'organisation territoriale municipale des régions métropolitaines de Montréal, de Québec et de l'Outaouais*.

(129) Wilkinson, P., et M. Marmot (2003). *Social Determinants of Health: The Solid Facts*, WHO.

(130) Raphael, D., T. Byant, J. Mikkonen et A. Raphael (2020). *Social Determinants of Health: The Canadian Facts*, Ontario Tech University Faculty of Health Sciences, York University School of Health Policy and Management.

(131) Bouchard-Bastien, E., G. Brisson et D. Gagné (2013). *Guide de soutien destiné au réseau de la santé : l'évaluation des impacts sociaux en environnement*, Montréal, Institut national de santé publique du Québec.

(132) Organisation for Economic Co-operation and Development (2020). *Comment va la vie? 2020 : Mesurer le bien-être*, [en ligne], https://www.oecd.org/fr/sdd/Comment-va-la-vie-2020-r%C3%A9sum%C3%A9.pdf, (consulté le 23 février 2022).

(133) Wiseman, J., et K. Brasher (2008). « Community wellbeing in an unwell world: trends, challenges, and possibilities », *Journal of Public Health Policy*, vol. 29, nº 3, p. 353-366.

(134) Agence de la santé publique du Canada (2001). « Qu'est-ce que l'approche axée sur la santé de la population? », https://www.canada.ca/fr/sante-publique/services/promotion-sante/sante-population/approche-axee-sur-la-sante-de-population.html, (consulté le 25 février 2022).

(135) Organisation mondiale de la santé (2018). « Santé mentale : renforcer notre action », https://www.who.int/fr/news-room/fact-sheets/detail/mental-health-strengthening-our-response, (consulté le 23 février 2022).

(136) Technoscience.net « Environnement — Définition et Explications », https://www.techno-science.net/?onglet=glossaire&definition=3469, (consulté le 15 février 2022).

(137) Dahlgren, G., et M. Whitehead (2021). « The Dahlgren-Whitehead model of health determinants: 30 years on and still chasing rainbows », *Public Health*, vol. 199, p. 20-24.

(138) Tulve, N., J. D. C Ruiz, K. Lichtveld, S. P. Darney, J. J. Quackenboss (14 octobre 2016). « Development of a Conceptual Framework Depicting a Childs Total (Built, Natural, Social) Environment in Order to Optimize Health and Well-Being », *Journal of Environment and Health Science*, vol. 2, nº 2, p. 1-8.

(139) Welsh Government (2015). *Well-being of Future Generations (Wales) Act 2015*.

(140) Rudolph, L., Caplan, J., Ben-Moshe, K., & Dillon, L. (2013). *Health in All Policies: A Guide for State and Local Governments*.

(141) Ministère du Développement durable, et de l'Environnement et de la Lutte contre les changements climatiques (2016). *Municipalités du Québec qui réglementent en matière de pesticides*.

(142) *Règlements sur l'environnement, la salubrité, la sécurité et les nuisances*, https://www.mamh.gouv.qc.ca/amenagement-du-territoire/guide-la-prise-de-decision-en-urbanisme/protection-de-lenvironnement/reglements-sur-lenvironnement-la-salubrite-la-securite-et-les-nuisances/, (consulté le 11 juillet 2022).

(143) Ministère des Affaires municipales et de l'Habitation « Guide d'élaboration d'une politique de participation publique », https://www.mamh.gouv.qc.ca/amenagement-du-territoire/guide-delaboration-dune-politique-de-participation-publique, (consulté le 1er avril 2022).

(144) Centre d'écologie urbaine de Montréal « Pourquoi faire un budget participatif? », https://www.budgetparticipatifquebec.ca/fr/infos-bp/pourquoi-faire-un-bp, (consulté le 15 février 2022).

(145) Réseau francophone international pour la promotion de la santé, Section des Amériques (REFIPS). *Guide d'implantation de l'approche de la Santé dans toutes les politiques au palier local*.

(146) Gouvernement du Québec (2021). *Guide d'élaboration d'une politique culturelle municipale pour une démarche et une mise en œuvre réussies*. https://www.quebec.ca/nouvelles/actualites/details/guide-delaboration-dune-politique-culturelle-municipale-nouvelle-edition-34493, (consulté le 2 août 2022)

(147) Association pour la santé publique du Québec, *Un modèle de résolution pour les municipalités — Permettre aux enfants de jouer dans les rues résidentielles et les ruelles en toute sécurité*. https://www.cqpp.qc.ca/app/uploads/2016/07/R%C3%A9solution_Permettre_jeu_libre_dans_la_rue.pdf, (consulté le 2 août 2022)

(148) Statistique Canada (2021). « Vers une mise à jour du panier de consommation », https://www150.statcan.gc.ca/n1/pub/75f0002m/75f0002m2019013-fra.htm, (consulté le 9 novembre 2021).

(149) Prevention Institute (2017). *Back to Our Roots-Catalyzing Community Action for Mental Health and Wellbeing*.

(150) The Marmot Review (2020). *Strategic review of health inequalities in England post-2010*.

(151) Wilkinson, R., M. Marmot et Organisation mondiale de la santé bureau régional de l'Europe (2004). *Les déterminants sociaux de la santé : les faits*, [en ligne], Organisation mondiale de la santé. Bureau régional de l'Europe, https://apps.who.int/iris/handle/10665/107343, (consulté le 23 février 2022).

(152) Roy, B., C. Riley, J. Herrin, E. S. Spatz, A. Arora, K. P. Kell, J. Welsh, E. Y. Rula et H. M. Krumholz (2018). « Identifying county characteristics associated with resident well-being: A population based study. », *Plos One*, vol. 13, nº 5, p. e0196720-e0196720.

(153) Wilkinson, R., et K. Pickett (2009). *The Spirit Level: Why More Equal Societies Almost Always Do Better*, Allen Lane, Londres.

(154) Gaygisiz, E. (2010). « Economic and cultural correlates of subjective wellbeing in countries using data from the Organisation for Economic Co-operation and Development (OECD) », *Psychol Rep.*, vol. 3, nº 106.

(155) Marmot, M., J. Allen, P. Goldblatt, E. Herd et J. Morrison (2020). *Build Back Fairer: The COVID-19 Marmot Review*, Institute of Health Equity.

(156) Benfer, E. A., D. Vlahov, M. Y. Long, E. Walker-Wells, J. L. Pottenger Jr, G. Gonsalves et D. E. Keene (2021). « Eviction, Health Inequity, and the Spread of COVID-19: Housing Policy as a Primary Pandemic Mitigation Strategy », *Journal of Urban Health: Bulletin of the New York Academy of Medicine*.

(157) Organisation mondiale de la santé, bureau régional de l'Europe (septembre 2016). *Santé 2020 : Protection sociale, logement et santé*, Organisation mondiale de la santé.

(158) Mehdipanah, R. (2021). « Housing as a Determinant of COVID-19 Inequities », *American Journal of Public Health*, vol. 110, nº 9, p. 1369-1370.

(159) Swope, C. B., et D. Hernandez (décembre 2019). « Housing as a determinant of health equity: A conceptual model », *Soc Sci Med*, vol. 243, nº 112571.

(160) Levasseur, M.-E., M. Beaudoin, M. Gauthier, P. Poulin, C. Prisca Samba et E. Robitaille (juillet 2020). *Logement de qualité*, [en ligne], https://www.inspq.qc.ca/publications/2655, (consulté le 29 mai 2021).

(161) Allard, S. W., R. M. Tolman et D. Rosen (2003). « Proximity to service providers and service utilization among welfare recipients: The interaction of place and race », *Journal of Policy Analysis and Management*, vol. 22, no 4, p. 599-613.

(162) Allard, S. W., D. Rosen et R. M. Tolman (2003). « Access to Mental Health and Substance Abuse Services among Women Receiving Welfare in Detroit », *Urban Affairs Review*, vol. 38, no 6, p. 787-807.

(163) Institut national de santé publique (2021). « Principaux déterminants de la santé — Environnement économique », https://www.inspq.qc.ca/exercer-la-responsabilite-populationnelle/determinants-de-la-sante/principaux-determinants-de-la-sante-environnement-economique, (consulté le 9 novembre 2021).

(164) Ministère des Affaires municipales et de l'Habitation (2021). « Guide *La prise de décision en urbanisme* : Assistance financière aux personnes et aux organismes », https://www.mamh.gouv.qc.ca/amenagement-du-territoire/guide-la-prise-de-decision-en-urbanisme/financement-et-maitrise-fonciere/assistance-financiere-aux-personnes-et-aux-organismes/, (consulté le 9 novembre 2021).

(165) Ministère des Affaires municipales et de l'Habitation (2021). « Guide *La prise de décision en urbanisme* : Règlement de zonage », https://www.mamh.gouv.qc.ca/amenagement-du-territoire/guide-la-prise-de-decision-en-urbanisme/reglementation/reglement-de-zonage/, (consulté le 9 novembre 2021).

(166) Ministère des Affaires municipales et de l'Habitation (2021). « Guide *La prise de décision en urbanisme* : Habitation et rénovation résidentielle », https://www.mamh.gouv.qc.ca/amenagement-du-territoire/guide-la-prise-de-decision-en-urbanisme/intervention/habitation-et-renovation-residentielle/, (consulté le 9 novembre 2021).

(167) Ministère des Affaires municipales et de l'Habitation (2021). « Guide La prise de décision en urbanisme : Assistance financière aux personnes et aux organismes», https://www.mamh.gouv.qc.ca/amenagement-du-territoire/guide-la-prise-de-decision-en-urbanisme/financement-et-maitrise-fonciere/assistance-financiere-aux-personnes-et-aux-organismes/, (consulté le 9 novembre 2021).

(168) Bureau de normalisation du Québec. *Entreprise en santé*, https://www.bnq.qc.ca/fr/normalisation/sante-au-travail/entreprise-en-sante.html, (consulté le 28 février 2022).

(169) L'Express (2019). *La Ville de Drummondville certifiée Entreprise en santé*, (23 août 2019), http://www.journalexpress.ca/2019/08/23/la-ville-de-drummondville-certifiee-entreprise-en-sante/, (consulté le 28 février 2022).

(170) Ville de Montréal (2021). *Plan de relance économique 2021*.

(171) Cloutier, K., A. Leblond et H. Gagnon (2015). *La saine alimentation en milieu municipal — Document de réflexion destiné aux acteurs de soutien*, Ministère de la Santé et des Services sociaux.

(172) Ville de Québec (2022). *Guichet ouvert : des sorties culturelles accessibles à une clientèle différente*.

(173) Paquin, S., et M. Laurin (2016). *Guide sur les environnements favorables aux saines habitudes de vie (SHV) dans les municipalités*, Direction régionale de santé publique du CIUSSS du Centre-Sud-de-l'Île-de-Montréal et Québec en Forme.

(174) Table inter-sectorielle régionale de la Montérégie sur les saines habitudes de vie et Centre intégré de santé et de services sociaux de la Montérégie-Centre, Direction de santé publique (2020). *Intégrer les environnements favorables aux SHV dans les outils d'aménagements et d'urbanisme*.

(175) Ville de Blainville (2019). *Politique d'approvisionnement et de disposition des biens*.

(176) Ville de Montréal (2022). *En route vers une stratégie renouvelée pour le centre-ville 2022-2030*.

(177) Fournier, A. « Les pouvoirs économiques », https://www.fqm.ca/wp-content/uploads/2018/09/Pouvoirs_economiques_municipalites_locales_regionales_PFD_Avocats_RDJ.pdf, (consulté le 15 février 2022).

(178) Chénier, G. (2019). *Accroître l'impact populationnel des actions en sécurité alimentaire : Agir là où ça compte! Chantier sur les déterminants sociaux de la santé*, Centre intégré de santé et de services sociaux de la Montérégie-Centre, Direction de santé publique.

(179) Ministère des Affaires municipales et de l'Habitation. Guide La prise de décision en urbanisme — « Règlement de zonage », https://www.mamh.gouv.qc.ca/amenagement-du-territoire/guide-la-prise-de-decision-en-urbanisme/reglementation/reglement-de-zonage/, (consulté le 11 juillet 2022).

(180) Gouvernement du Québec (2006). *Comité interministériel chargé de l'évaluation du projet de relocalisation du casino de Montréal — Le rapport*.

(181) Journal des Alternatives (2006). « Une victoire populaire inspirante ».

(182) Organisation mondiale de la santé (2007). *Guide mondial des villes-amies des aînées*, [en ligne], https://apps.who.int/iris/bitstream/handle/10665/43753/9789242547306_fre.pdf;sequence=1, (consulté le 15 février 2022).

(183) Lee, K., et N. Freudenberg (juin 2020). « Aborder les déterminants commerciaux de la santé commence par une définition et une mesure de ces déterminants plus claires », *Global Health Promotion*, vol. 27, nº 2, p. 128-130.

(184) Hedayati Marzbali, M., A. Abdullah et M. J. Maghsoodi Tilaki (2016). « The effectiveness of interventions in the built environment for improving health by addressing fear of crime », *International Journal of Law, Crime and Justice*, vol. 45, p. 120-140.

(185) Institut national de santé publique du Québec (2021). *Accessibilité universelle : la conception d'environnements pour tous*.

(186) Paquin, S. (2002). *Ma ville en toute confiance. Guide des meilleures pratiques pour un aménagement sécuritaire destiné aux municipalités et à leurs partenaires*, [en ligne], Santé publique de Montréal, https://bel.uqtr.ca/id/eprint/3142/, (consulté le 25 février 2022).

(187) Lorenc, T., M. Petticrew, M. Whitehead, D. Neary, S. Clayton, K. Wright, H. Thomson, S. Cummins, A. Sowden et A. Renton (2013). « Environmental interventions to reduce fear of crime: systematic review of effectiveness », *Systematic reviews*, vol. 2, p. 30.

(188) Lorenc, T., M. Petticrew, M. Whitehead, D. Neary, S. Clayton, K. Wright, H. Thomson, S. Cummins, A. Sowden et A. Renton (2013). « Fear of crime and the environment: systematic review of UK qualitative evidence », *BMC Public Health*, vol. 13, nº 1, p. 1-8.

(189) Foster, S., L. Wood, H. Christian, M. Knuiman et B. Giles-Corti (2013). « Planning safer suburbs: Do changes in the built environment influence residents' perceptions of crime risk? », *Social Science and Medicine*, vol. 97, p. 87-94.

(190) Paquin, S. (2009). *Ma ville en toute confiance. Guide des meilleures pratiques pour un aménagement sécuritaire dans les municipalités*, Montréal, Union des municipalités du Québec.

(191) Foster, S., L. Wood, H. Christian, M. Knuiman et B. Giles-Corti (2013). « Planning safer suburbs: Do changes in the built environment influence residents' perceptions of crime risk? », *Social Science & Medicine*, vol. 97, p. 87-94.

(192) Vivre en ville « Densification verte : Des fiches de bonnes pratiques pour des milieux de vie en santé — Les aménagements extérieurs », https://vivreenville.org/media/543640/venv_densificationverte_ficheS2.pdf, (consulté le 25 février 2022).

(193) Institut national de santé publique (2022). *Des lieux pour vieillir en bonne santé*.

(194) Gouvernement du Québec (2021). *Le Québec franchit le cap des 100 000 véhicules électriques et hybrides rechargeables*.

(195) Rancourt, G. (2019). *En route vers des environnements bâtis favorables à la mobilité durable : Actes de la journée thématique tenue dans le cadre des 22es Journées annuelles de santé publique (JASP)*.

(196) Bergeron, P., G. Burigusa, E. Robitaille, M. E. Labesse et A. St-Louis (2020). *COVID-19 et saison hivernale : favoriser le transport actif et la pratique d'activités extérieures*.

(197) Institut national de santé publique du Québec (2020). *Mieux partager la rue*.

(198) Table inter-sectorielle régionale de la Montérégie sur les saines habitudes de vie et Centre intégré de santé et de services sociaux de la Montérégie-Centre, Direction de santé publique (2020). *Intégrer les environnements favorables aux SHV dans les outils d'aménagements et d'urbanisme*.

(199) Association de santé publique du Québec. *Faciliter l'accès à l'eau potable gratuite dans les lieux publics*.

(200) Ministère des Affaires municipales et de l'Habitation. « Municipalité axée sur le développement durable », https://www.mamh.gouv.qc.ca/municipalite-durable/municipalite-axee-sur-le-developpement-durable/, (consulté le 11 juillet 2022).

(201) Robitaille, E., B. Lalonde, L. Cazale, I. Traoré, H. Camirand, M.-C. Paquette et N. Cutumisu (2015). *L'environnement alimentaire autour des écoles publiques et la consommation de malbouffe le midi par des élèves québécois du secondaire*.

(202) Ministère des Affaires municipales et de l'Habitation (2020). *Agriculture urbaine*.

(203) Vivre en Ville (2014). *Retisser la ville : [Ré]articuler urbanisation, densification et transport en commun — Vivre en Ville — la voie des collectivités viables*.

(204) Labesse, M. E., A. St-Louis, J. Ades, E. Robitaille et P. Bergeron (2021). *Logement et inégalités sociales de santé en temps de COVID-19 : des stratégies pour des logements abordables et de qualité*, Institut national de santé publique du Québec.

(205) Société d'habitation du Québec. *Programme Rénovation Québec*, http://www.habitation.gouv.qc.ca/espacepartenaires/municipalites/accueslogis_quebec/programmes/accueslogis_quebec/participation_financiere_optionnelle/programme_renovation_quebec.html, (consulté le 25 février 2022).

(206) Réseau d'information municipale (2020). *Plus de 80 villes & municipalités québécoises mobilisées contre le radon*, [en ligne], https://rimq.qc.ca/social/hd5t/article/municipal/categorie/Sante/77/810209/Plus-de-80-villes-municipalites-quebecoises-mobilisees-contre-le-radon.htm, (consulté le 25 février 2022).

(207) Boucher, I., et N. Fontaine (2011). *L'aménagement et l'écomobilité : guide de bonnes pratiques sur la planification territoriale et le développement durable*.

(208) Frank, L. D. (2003). *Health and community design: the impact of the built environment on physical activity*, Washington, DC, Island Press.

(209) Robitaille, E., F. Bellingeri et E. Nauroy (2016). *Liens entre les caractéristiques de l'environnement bâti et la pratique sécuritaire du vélo : synthèse de connaissances*, Montréal, INSPQ.

(210) Public Health England (2017). *Spatial Planning for Health: An evidence resource for planning and designing healthier places*, London, Public Health England.

(211) Giguère, M. (2009). *Mesures de lutte aux îlots de chaleur urbains : revue de littérature*, Montréal, Institut national de santé publique du Québec.

(212) American Public Health Association (2009). « At the intersection of public health and transportation: Promoting healthy transportation policy », p. 16.

(213) Bergeron, P., et S. Reyburn (2010). *L'impact de l'environnement bâti sur l'activité physique, l'alimentation et le poids*, [en ligne], Québec, Institut national de santé publique, Direction du développement des individus et des communautés, http://site.ebrary.com/id/10418706, (consulté le 15 janvier 2013).

(214) Atanasova, P., D. Kusuma, E. Pineda, G. Frost, F. Sassi et M. Miraldo (2022). « The impact of the consumer and neighbourhood food environment on dietary intake and obesity-related outcomes: A systematic review of causal impact studies », *Social Science & Medicine*, vol. 299, p. 114879.

(215) Organisation mondiale de la santé (2018). « WHO Housing and health guidelines », https://www.who.int/publications-detail-redirect/9789241550376, (consulté le 10 mai 2021).

(216) Centers for Disease Control and Prevention, et U.S. Department of Housing and Urban Development. Healthy housing (2006). *Home Page | Healthy Housing Reference Manual | NCEH*, [en ligne], Washington, DC, CDC, https://www.cdc.gov/nceh/publications/books/housing/housing.htm, (consulté le 10 mai 2021).

(217) Raynault, M.-F., F. Thérien et S. Tessier (2015). *Pour des logements salubres et abordables : Rapport du directeur de santé publique de Montréal 2015*, [en ligne], Montréal, Direction régionale de santé publique, Centre intégré universitaire de santé et de services sociaux du Centre-Sud-de-l'Île-de-Montréal, https://santemontreal.qc.ca/fileadmin/fichiers/professionnels/DRSP/Directeur/Rapports/Rap_Logements_2015_FR.pdf, (consulté le 25 avril 2022).

(218) Krieger, J., et D. L. Higgins (2002). « Housing and Health: Time Again for Public Health Action », *American Journal of Public Health*, vol. 92, nº 5, p. 758-768.

(219) Marmot, M. (2013). « Fair society, healthy lives », *Fair society, healthy lives*, p. 1-74.

(220) Marmot, M. (2020). « Health equity in England: The Marmot review 10 years on », *BMJ*, vol. 368, p. m693.

(221) Lori G. Irwin, Arjumand Siddiqi, et Clyde Hertzman (2007). *Le développement de la petite enfance : un puissant égalisateur | Centre de collaboration nationale des déterminants de la santé*, [en ligne], Commission des déterminants sociaux de la santé de l'Organisation mondiale de la santé, https://nccdh.ca/fr/resources/entry/early-child-development-powerful-equalizer, (consulté le 28 février 2022).

(222) Lavoie, A., Gingras, L., et Audet, N. (2019). *Enquête québécoise sur le parcours préscolaire des enfants de maternelle 2017. Portrait statistique pour le Québec et ses régions administratives*, Institut de la statistique du Québec, Tome 1.

(223) Beaudoin, M., M. E. Labesse, C. Prévost et E. Robitaille (2019). *Des actions pour une utilisation et une conception optimale des espaces verts*, Montréal, Institut national de santé publique du Québec.

(224) Beaudoin, M., et M.-E. Levasseur (2017). *Verdir les villes pour la santé de la population : revue de la littérature*, Montréal, Institut national de santé publique du Québec.

(225) Organisation mondiale de la santé (2017). *Espaces verts urbains : un plaidoyer pour agir*, Genève, OMS.

(226) Gouvernement du Québec (2015). *Politique énergétique 2016-2025*.

(227) Institut national de santé publique du Québec (2021). *Mesures de lutte contre les îlots de chaleur urbains : mise à jour 2021*.

(228) Recyc-Québec (2019). *Politique québécoise de gestion des matières résiduelles — Plan d'action 2019-2024*.

(229) Ministère de l'Environnement et de la Lutte contre les changements climatiques (11 juillet 2022). *Programme de traitement des matières organiques par biométhanisation et compostage (PTMOBC)*.

(230) Ministère de l'Environnement et de la Lutte contre les changements climatiques (2020c). *Rapport synthèse sur les problématiques prioritaires des bassins versants du Québec : État de situation 2019-2020*.

(231) Institut national de santé publique du Québec (2019b). *La qualité des eaux récréatives au Québec et les stratégies de prévention des risques à la santé*.

(232) Publications du Québec (2021c). *Règlement sur la qualité de l'eau des piscines et autres bassins artificiels*.

(233) Ministère de l'Environnement et de la Lutte contre les changements climatiques (2020). *Rapport synthèse sur les problématiques prioritaires des bassins versants du Québec : État de situation 2019-2020*, Gouvernement du Québec.

(234) Gouvernement du Québec. *Municipalités du Québec qui réglementent l'usage des pesticides*, [en ligne], https://www.donneesquebec.ca/recherche/dataset/municipalites-pesticides, (consulté le 11 juillet 2022).

(235) World Health Organization (2019). « Drinking-water », https://www.who.int/news-room/fact-sheets/detail/drinking-water, (consulté le 15 février 2022).

(236) Beaulieu, M (2021). *Guide d'intervention — Protection des sols et réhabilitation des terrains contaminés*. https://www.environnement.gouv.qc.ca/sol/terrains/guide-intervention/guide-intervention-protection-rehab.pdf, (consulté le 2 août 2022)

(237) Ministère de l'environnement et de la lutte contre les changements climatiques (2020a). *La migration des contaminants organiques volatils chlorés d'un terrain vers l'air intérieur d'un bâtiment*.

(238) Loomis, D., Y. Grosse, B. Lauby-Secretan, F. E. Ghissassi, V. Bouvard, L. Benbrahim-Tallaa, N. Guha, R. Baan, H. Mattock et K. Straif (2013). « The carcinogenicity of outdoor air pollution », *The Lancet Oncology*, vol. 14, nº 13, p. 1262-1263.

(239) Gouvernement du Québec *Origine et impacts des contaminants atmosphériques*, [en ligne], https://www.environnement.gouv.qc.ca/air/reseau-surveillance/contaminants-origines.pdf, (consulté le 11 juillet 2022).

(240) Barnett, E., et M. Casper (2001). « A definition of "social environment" », *American Journal of Public Health*, vol. 91, nº 3, p. 465.

(241) Stegeman, I., A. Godfrey, M. Romeo-Velilla, R. Bell, B. Staatsen, N. van der Vliet, H. Kruize, G. Morris, T. Taylor et R. Strube (2020). « Encouraging and enabling lifestyles and behaviours to simultaneously promote environmental sustainability, health and equity: key policy messages from INHERIT », *International Journal of Environmental Research and Public Health*, vol. 17, nº 19, p. 7166.

(242) Morestin, F. (2020). *Comment collaborer avec les municipalités? Un guide pratique pour les acteurs de la santé publique*, Montréal, Québec, Centre de collaboration nationale sur les politiques publiques et de la santé Institut national de santé publique du Québec.

(243) St-Pierre, L. (2011). *Qu'est-ce que l'évaluation d'impact sur la santé (ÉIS)? Fiche d'information*, Montréal, Centre de collaboration nationale sur les politiques publiques et la santé : Institut national de santé publique du Québec, « Pour des connaissances en matière de politiques publiques favorables à la santé ».

(244) St-Pierre, L. (2017). *Quelques outils pour faciliter l'intégration de la santé dans toutes les politiques publiques*, Montréal, Institut national de santé publique du Québec.

(245) St-Pierre, L. *Les évaluations d'impact en contextes autochtones : pistes prometteuses de réflexion et d'amélioration pour les évaluations d'impact sur la santé : rapport 2021*, Montréal, Québec, Centre de collaboration nationale sur les politiques publiques et la santé.

(246) Holt-Lunstad, J., T. B. Smith et J. B. Layton (2010). « Social Relationships and Mortality Risk: A Meta-analytic Review », *PLOS Medicine*, vol. 7, nº 7, p. e1000316.

(247) Alvarez, E. C., I. Kawachi et J. R. Romani (2017). « Family social capital and health—a systematic review and redirection », *Sociology of Health & Illness*, vol. 39, no 1, p. 5-29.

(248) Carrillo Álvarez, E., et J. Riera Romaní (2017). « Measuring social capital: further insights », *Gaceta Sanitaria*, vol. 31, no 1, p. 57-61.

(249) Vandal, G., M. Généreux et J.-P. Goupil (2020). « Impacts collatéraux de la pandémie COVID-19 : de la surveillance au rétablissement », *Vision santé publique — Bulletin d'information de la Direction de santé publique de l'Estrie*, nº 57, p. 1-9.

(250) Gehl, J., et N. Calvé (2012). *Pour des villes à échelle humaine*, Montréal, Éditions Écosociété, « Guides pratiques (Montréal, Québec) ».

(251) Ville de Montréal (2020). *ADS+ 101*, *Ensemble, nous formons toutes et tous la diversité*.

(252) Max Raynaud (2019). « Sécurité urbaine et immobilière : de la sécurisation de l'espace à la sécurisation par l'espace », dans *Nouveau traité de sécurité : sécurité intérieure et sécurité urbaine*, Montréal.

(253) BC Center for Disease Control et BC Healthy Communities. *Healthy Social Environments Framework—Summary*, [en ligne], http://bchealthycommunities.ca/a-new-tool-for-socially-connected-and-resilient-communities-the-healthy-social-environments-framework-soft-launch-dec-1/, (consulté le 3 juin 2021).

(254) Aisha Bin Bishr *Happy Cities Agenda*, [en ligne], Global Happiness and Wellbeing Policy Report 2019, https://s3.amazonaws.com/ghwbpr-2019/UAE/GH19_Ch7.pdf, (consulté le 25 février 2022).

(255) Wood, L., L. D. Frank et B. Giles-Corti (2010). « Sense of community and its relationship with walking and neighborhood design », *Social Science & Medicine*, vol. 70, nº 9, p. 1381-1390.

(256) Organisation mondiale de la santé, bureau régional de l'Europe (2019). *Implementation framework for Phase VII (2019–2024) of the WHO European Healthy Cities Network: goals, requirements and strategic approaches*, [en ligne], https://www.euro.who.int/en/health-topics/environment-and-health/urban-health/publications/2019/implementation-framework-for-phase-vii-20192024-of-the-who-european-healthy-cities-network-goals,-requirements-and-strategic-approaches-2019, (consulté le 30 septembre 2021).

(257) Ramirez-Rubio, O., C. Daher, G. Fanjul, M. Gascon, N. Mueller, L. Pajín, A. Plasencia, D. Rojas-Rueda, M. Thondoo et M. J. Nieuwenhuijsen (2019). « Urban health: an example of a "health in all policies" approach in the context of SDGs implementation », *Globalization and health*, vol. 15, nº 1, p. 1-21.

(258) Markovich, J., M. S. D'Angelo et T. Dinh (2018). *Community Wellbeing: A Framework for the Design Professions*, [en ligne], https://www.conferenceboard.ca/e-library/abstract.aspx?did=9787, (consulté le 30 septembre 2021).

(259) Stegeman, I., A. Godfrey, M. Romeo-Velilla, R. Bell, B. Staatsen, N. van der Vliet, H. Kruize, G. Morris, T. Taylor et R. Strube (2020). « Encouraging and enabling lifestyles and behaviours to simultaneously promote environmental sustainability, health and equity: key policy messages from INHERIT », *International journal of environmental research and public health*, vol. 17, nº 19, p. 7166.

(260) Lemire, M. (2020). *Création d'environnements favorables à la santé et à la qualité de vie en milieux municipaux : analyse des pratiques et facteurs de succès : démarche prendre soin de notre monde*.

(261) Espace MUNI (2022). *La fête des voisins*, [en ligne], https://espacemuni.org/programmes/participation-citoyenne/fete-des-voisins/inscription/, (consulté le 11 juillet 2022).

(262) BC Centre for Disease Control et BC Healthy Communities (2020). *Healthy Social Environments Framework—Core Values*, [en ligne], http://bchealthycommunities.ca/wp-content/uploads/2020/11/SE-Core-Values-V1-Dec2020.pdf, (consulté le 15 novembre 2021).

(263) Holt-Lunstad, J. (2017). « The Potential Public Health Relevance of Social Isolation and Loneliness: Prevalence, Epidemiology, and Risk Factors », *Public Policy & Aging Report*, vol. 27, nº 4, p. 127-130.

(264) Helliwell, J., L. Aknin, H. Shiplett, H. Huang et S. Wang (2018). « Social Capital and Prosocial Behaviour as Sources of Well-Being ».

(265) Holt-Lunstad, J., T. B. Smith, M. Baker, T. Harris et D. Stephenson (2015). « Loneliness and social isolation as risk factors for mortality: a meta-analytic review », *Perspectives on Psychological Science: A Journal of the Association for Psychological Science*, vol. 10, nº 2, p. 227-237.

(266) Perreault, S. (2017). *Les perceptions des Canadiens à l'égard de la sécurité personnelle et de la criminalité, 2014*, Ottawa, Statistique Canada, « Juristat ».

(267) Pearson, A., et G. Breetzke (2014). « The Association Between the Fear of Crime, and Mental and Physical Wellbeing in New Zealand », *Social Indicators Research*, vol. 119, nº 1, p. 281-294.

(268) Foster, S., M. Knuiman, P. Hooper, H. Christian et B. Giles-Corti (2014). « Do changes in residents' fear of crime impact their walking? Longitudinal results from RESIDE », *Preventive medicine*, vol. 62, p. 161-166.

(269) Lorenc, T., S. Clayton, D. Neary, M. Whitehead, M. Petticrew, H. Thomson, S. Cummins, A. Sowden et A. Renton (2012). « Crime, fear of crime, environment, and mental health and wellbeing: mapping review of theories and causal pathways », *Health and place*, vol. 18, nº 4, p. 757-765.

(270) Fleming, C. M., M. Manning et C. L. Ambrey (2016). « Crime, greenspace and life satisfaction: An evaluation of the New Zealand experience », *Landscape and Urban Planning*, vol. 149, p. 1-10.

(271) Marquet, O., S. S. Ogletree, J. A. Hipp, L. J. Suau, C. B. Horvath, A. Sinykin et M. F. Floyd (2020). « Effects of Crime Type and Location on Park Use Behavior », *Preventing chronic disease*, vol. 17, p. E73.

(272) Beaudoin, M., P. Bergeron, G. Désilets, M. E. Labesse, E. Robitaille et A. St-Louis (2020). *COVID-19 : utilisation sécuritaire des parcs et espaces verts urbains en contexte de déconfinement graduel*, Montréal, Institut national de santé publique du Québec.

(273) Burigusa, G., A. Gauthier, C. Maheu, E. Pigeon et E. Robitaille (2020). *Mesures pour soutenir la pratique d'activités physiques en contexte de pandémie COVID-19*, Québec, Institut national de santé publique du Québec.

(274) Armstrong, D. (décembre 2000). « A survey of community gardens in upstate New York: implications for health promotion and community development », *Health & Place*, vol. 6, nº 4, p. 319-327.

(275) Schaefer, S. M., J. M. Boylan, C. M. Van Reekum, R. C. Lapate, C. J. Norris, C. D. Ryff et R. J. Davidson (2013). « Purpose in Life Predicts Better Emotional Recovery from Negative Stimuli », *PLOS ONE*, vol. 8, nº 11, p. e80329.

(276) Conseil de l'Europe (2007). *Recondita armonia — Réflexions sur la fonction de la culture dans la construction de la citoyenneté (Note politique nº 10)*, https://book.coe.int/fr/politiques-culturelles/3814-recondita-armonia-reflexions-sur-la-fonction-de-la-culture-dans-la-construction-de-la-citoyennete-note-politique-n10.html, (consulté le 25 février 2022).

(277) Fancourt, D., et S. Finn (2019). *What is the evidence on the role of the arts in improving health and well-being? A scoping review*, [en ligne], Copenhagen, WHO Regional Office for Europe, « WHO Health Evidence Network Synthesis Reports », http://www.ncbi.nlm.nih.gov/books/NBK553773/, (consulté le 28 février 2022).

(278) UNESCO (2022). « Re|penser les politiques en faveur de la créativité : la culture, un bien public mondial », UNESCO Digital Library, https://unesdoc.unesco.org/ark:/48223/pf0000380477.locale=en, (consulté le 1er avril 2022).

(279) UNESCO (2022). *Re|penser les politiques en faveur de la créativité : la culture, un bien public mondial*.

(280) Les Arts et la Ville (2014). *La valise culturelle de l'élu municipal*.

(281) Généreux, M., M. Roy, C. Paré et J. Lévesque (2020). *Renforcer les capacités d'adaptation des individus et des communautés en contexte de pandémie : le rôle clé du sentiment de cohérence*.

(282) United Nations Human Settlements Programme (UN-Habitat) (2020). *The New Urban Agenda Illustrated | UN-Habitat*, [en ligne], https://unhabitat.org/the-new-urban-agenda-illustrated, (consulté le 2 juin 2021).

(283) Institut national de santé publique du Québec, V. Leclair, J. Lévesque, D. Poitras, E. Robitaille, A. Tourigny et Institut national de santé publique du Québec (dir.) (2020). *Lutter contre l'isolement social et la solitude des personnes ainées en contexte de pandémie*, Montréal, Québec, Institut national de santé publique du Québec.

(284) Demers-Bouffard, D. « Les aléas affectés par les changements climatiques : effets sur la santé, vulnérabilités et mesures d'adaptation », p. 368.

(285) Masson-Delmotte, V., P. Zhai, A. Pirani, S. L. Connors, C. Péan, S. Berger, N. Caud, Y. Chen, L. Goldfarb, M. I. Gomis, M. Huang, K. Leitzell, E. Lonnoy, J. B. R. Matthews, T. K. Maycock, T. Waterfield, Ö. Yelekçi, R. Yu et B. Zhou (dir.) (2021). *Climate Change 2021: The Physical Science Basis. Contribution of Working Group I to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change*, Cambridge University Press.

(286) Zhang, X., G. Flato, M. Kirchmeler, L. Vincent, H. Wan, X. Wang, R. Rong, J. Fyfe, G. Li et V. V. Kharin (2019). *Les changements de température et de précipitations au Canada*, [en ligne], https://doi.org/10.4095/327812, (consulté le 25 février 2022).

(287) Gouvernement du Québec « Effets des changements climatiques sur la santé », https://www.quebec.ca/sante/conseils-et-prevention/sante-et-environnement/effets-des-changements-climatiques-sur-la-sante, (consulté le 1er mars 2022).

(288) Bureau de normalisation du Québec (2013). « Lutte aux îlots de chaleur urbains — aménagement des aires de stationnement — guide à l'intention des concepteurs. », https://www.bnq.qc.ca/fr/normalisation/environnement/lutte-aux-ilots-de-chaleur-urbains.html, (consulté le 25 février 2022).

(289) Feng, Q., et P. Gauthier (2021). « Untangling Urban Sprawl and Climate Change: A Review of the Literature on Physical Planning and Transportation Drivers », *Atmosphere*, vol. 12, no 5, p. 547.

(290) Institut national de santé publique du Québec (2022). « Mesures de lutte contre les îlots de chaleur urbains : mise à jour 2021 », dans *Institut national de santé publique du Québec*, [en ligne], https://www.inspq.qc.ca/publications/2839, (consulté le 1er avril 2022).

(291) Ministère de la Santé et des Services sociaux « Stratégie québécoise de réduction de l'herbe à poux et des autres pollens allergènes (SQRPA) 2015-2017 », https://www.msss.gouv.qc.ca/professionnels/sante-environnementale/pollens/strategie-quebecoise-de-reduction-de-l-herbe-a-poux-et-des-autres-pollens-allergenes-sqrpa/, (consulté le 25 février 2022).

(292) Gouvernement du Québec (2021). *S'allier devant l'itinérance plan d'action interministériel en itinérance 2021-2026*.

(293) Agence de la santé publique du Canada (2017). Rapport de l'administrateur en chef de la santé publique sur l'état de la santé publique au Canada, 2017 — Concevoir un mode de vie sain, [en ligne], https://www.canada.ca/fr/sante-publique/services/publications/rapport-administrateur-en-chef-sante-publique-sur-etat-sante-publique-au-canada/2017-concevoir-mode-vie-sain.html, (consulté le 5 novembre 2021).

(294) Durette, G., et M.-C. Paquette (2021). *Liens entre l'environnement alimentaire communautaire et l'alimentation*, [en ligne], Institut national de santé publique du Québec, https://www.inspq.qc.ca/publications/2812, (consulté le 5 novembre 2021).

(295) Cloutier, K., A. Leblond et H. Gagnon (2015). *La saine alimentation en milieu municipal — Document de réflexion destiné aux acteurs de soutien*, Ministère de la Santé et des Services sociaux.

(296) Robitaille, J. (2021). « Prix des aliments : contextes international et québécois », *BioClips actualité bioalimentaire — MAPAQ*, [en ligne], vol. 29, nº 25, https://www.mapaq.gouv.qc.ca/SiteCollectionDocuments/Bioclips/BioClips2021/Volume_29_no25.pdf, (consulté le 5 novembre 2021).

(297) Paquin, S., et M. Laurin (2016). *Guide sur les environnements favorables aux saines habitudes de vie (SHV) dans les municipalités*.

(298) Fontaine, N., S. Jouis, A. Martin et F. Otis (2020). *L'agriculture urbaine, Guide de bonnes pratiques sur la planification territoriale et le développement durable.*, « Planification territoriale et développement durable ».

(299) *Démarche Prendre soin de notre monde* (2022), https://prendresoindenotremonde.com

(300) Gehl Institute (2018). *Inclusive Healthy Places. A guide to inclusion and health in public space: learning globally to transform locally*.

(301) Artmann, M., M. Kohler, G. Meinel, J. Gan et I.-C. Ioja (2019). « How smart growth and green infrastructure can mutually support each other—A conceptual framework for compact and green cities », *Ecological Indicators*, vol. 96, p. 10-22.

(302) Morestin, F. (2020). *Comment collaborer avec les municipalités? Un guide pratique pour les acteurs de la santé publique*, Montréal, Québec, Centre de collaboration nationale sur les politiques publiques et de la santé Institut national de santé publique du Québec.

(303) Institut national de santé publique du Québec (2022). *Guide pour soutenir la réalisation d'évaluations d'impact sur la santé en milieu municipal*.

APPENDIX 1 DESCRIPTION OF THE METHODOLOGICAL APPROACH

Four complementary steps were required to meet the project's objective:

- A literature search and analysis;
- Consultation with scientific and academic experts;
- Consultation with potential users;
- Contributions from scientific experts (a scientific advisor and INSPQ physicians) to the drafting of the content.

The preliminary literature search was carried out in 2019, but additional documents were subsequently considered and included.

Literature search and analysis

Scientific literature

A preliminary, non-systematic and non-exhaustive search of scientific articles was carried out in summer 2019 in several EbscoHost databases using two categories of keywords (see keywords in the search strategy below). A total of 20 scientific articles were selected for analysis. New references were subsequently added from the publications examined. The scientific experts consulted also suggested additional references to enhance the corpus. No assessment of the methodological quality of the selected publications was carried out.

Search strategy

DATABASES

Via EBSCO: Medline, Environment Complete, Health Policy Reference Center and Socindex.

CONCEPTS

A two-stage strategy for more accurate results:

- Municipalities AND *framework*
- Healthy Cities (targeted in the title) and date range: 2009-2019

EBSCO search strategy

#	QUERY	RESULTS
S1	TI(((healthy OR wellbeing OR «well-being» OR wellness OR «well-ness» OR flourish* OR liveab* OR sustainab*) N2 (urban* OR rural OR suburban OR metropolitan OR city OR cities OR municipalities OR municipal OR municipality OR town OR community OR communities OR Neighbourhood OR neighborhood OR «local governance» OR «local government» OR area OR residen* OR (environment N2 (social OR local)) OR «local level» OR «local context») OR «urban health» OR «healthy living» OR «urban agenda» OR «supportive environment») OR AB(((healthy OR wellbeing OR «well-being» OR wellness OR «well-ness» OR flourish* OR liveab* OR sustainab*) N2 (urban* OR rural OR suburban OR metropolitan OR city OR cities OR municipalities OR municipal OR municipality OR town OR community OR communities OR Neighbourhood OR neighborhood OR «local governance» OR «local government» OR area OR residen* OR (environment N2 (social OR local)) OR «local level» OR «local context») OR «urban health» OR «healthy living» OR «urban agenda» OR «supportive environment»)	
S2	TI(framework OR conceptuali* OR «pathway diagram» OR (model N2 (conceptual or theoretical)))	
S3	S1 AND S2	

RESULTS

- **The query returned:** 266 results (with dates 2009 to 2019, 350 before the date restriction).
- After removing duplicates (in Zotero, automatically): 235.
- After a first sort based on titles only: 105.
- After a second sort based on abstracts: 17.

EBSCO search strategy

HEALTHY CITIES (TARGETED IN THE TITLE)

#	QUERY	RESULTS
S1	TI(((healthy OR wellbeing OR «well-being» OR wellness OR «well-ness» OR flourish* OR liveab*) N2 (urban* OR rural OR suburban OR metropolitan OR city OR cities OR municipalities OR municipal OR municipality OR town OR community OR communities OR Neighbourhood OR neighborhood OR «local governance» OR «local government» OR area OR residen* OR (environment N2 (social OR local)) OR «local level» OR «local context») OR «urban health» OR «healthy living» OR «urban agenda» OR «supportive environment» OR «sustainable city» OR «sustainable cities»)	

RESULTS

- **The query returned:** 2429 results with the date restriction.
- **After removing duplicates** (automatically when imported with Zotero): 2167.
- After a first sort based on titles only: 777 selected.

INTERNATIONAL GREY LITERATURE

An initial search of international grey literature was carried out in summer 2019 to identify reference documents produced by Canadian or international (United Nations, WHO) public health or municipal organizations. The documents sought had to meet the following criteria: 1) be from a credible organization; 2) address a relevant theme in line with the project's objective; and 3) include a municipal action perspective on physical, social, economic, political, and cultural environments. These three criteria guided our search of the organizations' websites using the Google search engine. Twenty documents were identified and ten were selected for analysis using a framework developed in Access software to extract information on: 1) the definition provided for a municipality conducive to health and quality of life; 2) the types of environments discussed and their dimensions; 3) the characteristics of a municipality conducive to health and the various indicators; and 4) the processes recommended for developing municipalities conducive to health and quality of life.

GREY LITERATURE FROM QUÉBEC

At the same time, an exploratory search of Québec's grey literature was carried out to identify reference documents already in existence in Québec that met the following criteria: 1) were from a credible organization; 2) addressed a relevant theme in line with the research question ; and 3) included a municipal action perspective on physical, social, economic, political and cultural environments. This grey literature from Québec, which was identified on an ongoing, non-systematic basis, made it possible to meet the objective of preparing a publication anchored in the Québec context. The search was carried out directly on the websites of Québec organizations with expertise on municipalities, as well as on Québec government websites. Consultation of the experts identified below also helped to identify important documents.

Consultation of scientific experts

A scientific committee made up of scientific experts from the INSPQ was set up. A meeting was held in fall 2019 to establish guidelines for constructing the document, validating the methodological choices and identifying certain relevant documentary sources.

The pandemic forced a halt to the work that had been underway for almost a year. When the work resumed in spring 2021, the initial planning of the expert consultation sequence had to be rethought. The scientific committee members were consulted in the summer and fall of 2021 on a preliminary proposal for a table of contents.

In addition, four experts from the academic sector were invited to act as scientific reviewers.

Scientific reviewers from the academic sector

Carole Clavier, Université du Québec à Montréal
Marie-Soleil Cloutier, Institut national de recherche scientifique
Evelyne de Leeuw, University of New South Wales
Jean Simos, Université de Genève

Composition of the INSPQ scientific committee — fall 2019

Marc Lemire, INSPQ
Nadine Maltais, INSPQ
Florence Morestin (National Collaborating Centre for Healthy Public Policy)
Julie Lévesque, INSPQ
Éric Robitaille, INSPQ
Marie-Claude Roberge, INSPQ
Dominique Gagné, INSPQ
André Tourigny, INSPQ
Chantal Blouin, INSPQ
Maud-Emmanuelle Labesse, INSPQ
Geneviève Lapointe, INSPQPQ

Consultation of potential knowledge users

Potential knowledge users were consulted at key stages in the development of the document to ensure that its content and format were adapted to the Québec context,.

Potential users were chosen for their knowledge of the Québec municipal context in both rural and urban areas and were consulted on a preliminary table of contents proposal in the summer and fall of 2021.

Focus groups

Once a preliminary version of the document had been completed, two focus groups were held in February and March 2022 to validate the proposed content and format.

The first focus group was made up of stakeholders from large Québec cities with a population of over 100 000, together with representatives from public health departments. The second group consisted of elected officials from small - and medium-sized Québec municipalities.

Potential knowldge users consulted

PUBLIC HEALTH DEPARTMENTS

Gabrielle Bureau, Brigitte Camden, Nathalie Guerra, Marie-Eve Thériault

Direction de santé publique
des Laurentides

Josée Charlebois, Véronique Juneau, Marcella Kafka, Marie Poirier

Direction de santé publique
de l'Outaouais

Kathleeen Pelletier

Direction de santé publique
du Saguenay–Lac-Saint-Jean

MUNICIPAL STAKEHOLDERS

Maryse Drolet, Union des municipalités du Québec

Marielle Fecteau, retired warden,
Municipalité régionale de comté
du Granit

Kim Kornellisen, former director,
Réseau des femmes élues
de la Montérégie

Denise Lavallée, retired city councillor,
Ville de Rouyn-Noranda

Denis Lapointe, retired mayor,
Ville de Salaberry-de-Valleyfield

Audrey Lefebvre, Ville de Saguenay

Isabelle Lizée, Espace MUNI

Denis Marion, Agence Gestion
Alter Ego

Alexandre Pirsch, Ville de Gatineau

Caroline Proulx, Ville de Sherbrooke

Nathalie Roussel, Ville de Victoriaville and
Réseau Municipalités accessibles

Christian Sénécal, Les Arts et la Ville

Michel Vallée, Culture pour tous

Contribution of INSPQ scientific experts to the drafting of the content

INSPQ experts (scientific advisors, physicians and jurists) helped to draft specific sections related to their fields of scientific expertise. They provided texts on targeted themes, along with scientific references that were grafted onto the publication's common core. These collaborating experts were invited to provide their own bibliographical references.

INSPQ collaborators involved in the drafting of certain sections

Mélanie Beaudoin,
Odile Bergeron,
Marie-Eve Dupuis
Dominique Gagné,
Lise Laplante,
Pierre Maurice,
Andréane Melançon,
Annie Montreuil,
Réal Morin,
Élisabeth Papineau,
Marie-Claude Paquette,
Daria Pereg,
Patrick Poulin
Philippe Robert,
Louis St-Laurent,
Mathieu Valcke

Peer review

In accordance with the reference framework for the peer review of scientific publications from the INSPQ, a pre-final version of the document was submitted to external scientific reviewers. The reviewers were asked to use this institutional framework (Institut national de santé publique du Québec, 2020) to validate the accuracy of the report's content, the relevance of the methods used, and the appropriateness of the conclusions and proposed courses of action.

Scientific reviewers from the academic sector

Carole Clavier, Université du Québec à Montréal
Marie-Soleil Cloutier, Institut national de recherche scientifique
Evelyne de Leeuw, University of New South Wales
Jean Simos, Université de Genève

Limitations and caveats

Among the limitations related to the methodological choices made, time constraints required restricting the number of publications selected from the scientific and grey literature. The number of potential users consulted was also reduced for the same reason.

Among the limitations of this publication, its content does not present:

- a demonstration of the magnitude of the health burden of all the issues discussed;
- an exhaustive list of all the factors that influence health (determinants of health);
- an exhaustive list of all the levers available to municipalities;
- a synthesis of scientific knowledge on effective municipal actions on the determinants of health.

Although regional county municipalities (RCMs) and metropolitan communities (MCs) are named as municipal partners with their own powers and levers, the content of this document focuses more on the possible actions and levers of local municipalities.

Institut national
de santé publique
Québec

www.inspq.qc.ca