INSPQ 🛛

INSTITUT NATIONAL DE SANTÉ PUBLIQUE DU QUÉBEC

Tackling Social Isolation and Loneliness Among Seniors in a Pandemic Context

June 19, 2020

Notice

This document was written in the health emergency context of COVID-19. As it was created within a short time frame and is based on knowledge obtained from a quick and non-exhaustive summary analysis of the available scientific and grey literature, the findings presented in this document may need to be reviewed as the scientific knowledge related to the current pandemic develops.

Summary

Seniors need social interaction and social support networks to have good health and feelings of well-being and satisfaction with life.

Isolation and loneliness are common among seniors and have detrimental consequences on their physical and mental health. A number of social isolation risk factors are exacerbated in a pandemic context.

A systemic approach in partnership with the public, private, and community sectors on provincial, regional, and local levels should be prioritized in the fight against social isolation and loneliness. This approach must involve citizens, including the seniors themselves and their friends and family.

Consistent with this approach, the following actions should be prioritized:

- Increase efforts to reach out to seniors through identification strategies (e.g., through key information providers) and information strategies (e.g., through meaningful spokespeople) and to strengthen ties between the healthcare network and other organizations and stakeholders likely to work with seniors.
- Transform and provide access to individual interventions (e.g., phone support) and group interventions (e.g., walking groups), adapted to pandemic-related constraints. Innovation, creativity, and use of technology play an important role.
- Implement interventions that focus on community resilience and social cohesion (e.g., involving seniors in identifying problems and solutions, highlighting successes and innovations). It is important to promote a positive image of seniors and aging to counter the risk of stigmatization such as ageism.
- Adapt green spaces, parks, public plazas, and indoor areas for seniors' need to socialize, while respecting public health measures.
- Adapt means of transportation and communication to facilitate the mobility and participation of individuals while taking into account constraints related to the pandemic context. Although using technology is encouraged, it is important to ensure that information is communicated through other means to individuals who do not have access to these technologies.



- Ensure that the public policies adopted for the pandemic context cause minimal harm to seniors and conduct ongoing analysis of their impact on seniors' social isolation and opportunities for social participation.
- Take into account the fact that the pandemic hits regions, living environments, and people unequally, in order to reduce such inequalities that can affect seniors.

Background

The current pandemic and consequent protective measures (e.g., physical distancing, isolation, quarantine) produce various effects on society: economic slowdown, job losses, disrupted social ties, and difficulty accessing services (1). These repercussions have a definite impact on the mental health and well-being of populations (2–5), especially seniors (6).

Although not a homogeneous group, seniors are at a higher risk of being negatively impacted by isolation and loneliness due to lockdown since a higher proportion live alone and because they use fewer new communication technologies (1). For this subgroup of the population (6), the more progressive lifting of lockdown will limit opportunities for interactions and the accessibility of resources and gathering places (day centres, community centres, malls, etc.).

In this context, it would be useful to propose measures that promote social connection and fight social isolation and loneliness among seniors (7).

Objectives

This document aims to:

- Serve as a reminder of the importance of interactions and social participation as protective factors for the physical, cognitive, and mental health, and well-being of seniors.
- Describe how social isolation and loneliness of seniors is a public health issue that is exacerbated in the COVID-19 context.
- Suggest actions to tackle the loneliness and isolation of seniors in a pandemic context.

This document is primarily intended for public health authorities and all stakeholders supporting interventions that address seniors. The content (findings and examples of actions) concern seniors who live at home (in a house, apartment, or collective housing including seniors' residences) and are not necessarily appropriate for individuals living in residential facilities (CHSLDs, intermediary and family-type resources [RI-FTR]) even though some example actions can apply to these living environments.

Methodological Approach

Two information source types were consulted:

- The INSPQ's previous information sheets on COVID-19 containing articles from scientific and grey literature.
- Targeted research of the scientific and grey literature using keywords such as: social isolation, loneliness, social connection, social participation of seniors, social cohesion, and resilience. The documents were found using certain search engines like Google Scholar and reference sites (World Health Organization, government and institutional sites).

Main Findings

Social interaction and participation: determinants of seniors' health and well-being

A number of studies show the importance of social interaction for physical and mental health (8, 9) and life satisfaction (10, 11). Quality support networks and mutual support provide emotional and practical resources that protect health and promote a sense of being recognized, loved, and appreciated (12). Being able to count on others when they really need it is a resilience factor strongly associated with a high degree of life satisfaction for seniors (10).

Social interaction and participation¹ take various forms. Seniors can participate in individual interactions (e.g., family, friends, friendly visits) or group interactions (e.g., walking club, museum visits, staging a play, choir, volunteering, community engagement) (14–16).

Too often downplayed, seniors' social and civic participation plays an important role in all areas of society and contributes to the vitality of communities (17). Their voluntary involvement in their families and with loved ones strengthens the social safety net of communities (18, 19). Seniors are an important source of knowledge and wisdom that are mainly communicated through intergenerational interactions (20, 21).

Social isolation and loneliness: a public health issue

Social isolation refers to situations where contact is rare (in occurrence, duration, or frequency) and low in quality (in terms of the fulfilment of social roles or mutual exchanges) (22–24).

Loneliness refers to a distinct perceived gap between the quantity and quality of an individual's relationships and what they would like to have (22–24).

An individual may therefore have little social contact and be socially isolated while not suffering from loneliness, while another may have considerable social contact and not be socially isolated while suffering from loneliness (22–24).

Prevalence and impact of loneliness and social isolation on seniors

Social isolation and loneliness are common among seniors and detrimental to their health and well-being. Canadian studies show that among seniors:

- 19% say they lack companionship and feel left out or isolated from others (25), a percentage that increases with age.
- 24% would like to participate in more social activities and 22% were not participating in any social or community activities (26, 27).
- > 30% are at greater risk of social isolation (28) and 16% sometimes or often feel isolated from others (29).
- 37% of individuals living alone report not having sufficient social support (e.g., do not have or rarely have access to someone who can come and help if they need to be confined to bed, accompanied to see a doctor if required, or helped with household tasks in case of illness [25]).

¹ Social participation refers to an individual's involvement in activities that provide them with interaction with others in society or the community (13).

Among the effects of loneliness and social isolation on seniors are:

- A 50% increase in the risk of mortality for individuals with little social interaction or poor quality interactions (30–32)
- Impacts on cardiovascular health, functional autonomy, cognitive health, mental health (including stress, anxiety, and depression), well-being, and quality of life (8, 33, 34)
- Higher risk of mistreatment (35) and malnutrition among seniors living in the community, which is further increased during periods of isolation due to COVID-19 (36–39)
- Lower propensity to adopt and maintain health-promoting behaviours (good nutrition, physical activity, low alcohol consumption, non-smoking) (40, 41)
- Increased vulnerability and the slower recovery of isolated seniors during natural disasters such as flooding or heat waves (42)
- Reduced contribution to society by isolated seniors

Risk factors exacerbated in the COVID-19 pandemic context

Numerous individual factors (e.g., living alone; having low income; being a sexual minority, immigrant, or family caregiver; having mental health problems, or physical, sensory, or cognitive limitations; grieving) and environmental factors (e.g., ageism, poorly adapted spaces and infrastructure, insecurity) can increase the likelihood of social isolation (24, 40, 43). Often a combination of factors and not one sole factor is associated with social isolation and loneliness.

In the context of the COVID-19 pandemic, a number of factors are exacerbated, including more financial instability (10), increased psychological vulnerability, a decline in health condition or loss of mobility due to lockdown, loss of loved ones, fewer opportunities for social participation, and more overt ageism.

Certain socioeconomic groups are more vulnerable as they are less likely to benefit from significant social support, notably seniors living alone in urban environments, and particularly men (10). Senior immigrants may be more exposed to certain challenges (language or cultural barriers) that reduce their access to social services (10, 44). Asylum seekers and undocumented immigrants have more difficulty accessing support services and programs and many avoid going to institutional organizations for fear of being deported to their country of origin.

Some Guidelines

Supporting seniors in a pandemic context

Under normal circumstances and in times of crisis, two goals must be pursued: combating social isolation and loneliness and establishing conditions that promote the maintenance and creation of social interactions.

To achieve these objectives, a systemic approach is required. Such an approach requires partnerships with the public, private, and community sectors on provincial, regional, and local levels and the involvement of citizens (seniors, families, family caregivers). An improvement to the overall living conditions of seniors through inclusive public policies may be necessary (e.g., transportation, housing, technology and communication, income, healthcare and health services) (12, 40, 43, 45, 46).

The interventions presented in the following section are largely inspired by the systemic approach adopted in the United Kingdom (47) (see Appendix) in 2011, which includes a set of interventions that target individuals (basic services and direct interventions) and physical and social environments (40).

REACHING OUT TO INDIVIDUALS, UNDERSTANDING THEIR NEEDS, AND PROVIDING SUPPORT

The fight against social isolation and loneliness requires first and foremost an appropriate response to people's basic needs. To achieve this, we must **reach out**, **understand** their situation, and **support** them in finding the different resources and services best suited to them. Identifying people experiencing social isolation creates an even more distinct challenge in a pandemic during which the usual forms of communication and social participation are disturbed or disrupted.

It is essential to have a good understanding of each person's situation to find suitable responses to their problems according to their strengths, personal resources, limitations, and preferences. This process is built on respect for each individual's autonomy and ability to act (24, 47). Each situation presents its own set of variables: the traits of the individual, solutions already tried and services already in place, possible levers for resolving issues, obstacles to overcome, etc.

Challenges and example actions in the pandemic context

Various interventions need to be planned so as to maintain a service offering that responds to the basic needs of seniors. These interventions revolve around identification, collaboration, and information.

Identification

Depending on the differing stages of lockdown or lockdown lifting, it may be necessary to:

- Identify and prioritize higher-risk territories according to certain sociodemographic and health characteristics of the population of these territories (e.g., number and proportion of seniors living alone or below the low-income cut-off).
- Adapt door-to-door interventions to ensure their safety for both the workers or volunteers and the individuals visited; greater use of crisis lines, virtual exchanges and phone contact, including regular automated calls, may be made.
- Use key information providers who keep watch or are present at essential businesses such as pharmacies, grocery stores, convenience stores, etc. (40, 47). Stakeholders involved in community action (e.g., community workers, community organizers) who have good knowledge of the population, living environments, and community resources are valuable allies (48–50).
- Determine and utilize validated identification tools to identify situations of both social isolation and loneliness among seniors (40, 51) and assess the pertinence and feasibility of using these identification tools when reaching out to seniors with COVID-19 (epidemiological investigations).

Collaboration

As the healthcare system and social services, including medical clinics, family medicine groups, community pharmacies, and community organizations, may often be the only opportunity to make contact with seniors in situations of social isolation, it is important to:

- Establish strong ties between the healthcare system (front-line medical services including emergency and walk-ins, home support, health integration networks for seniors, support for senior independence) and other organizations and stakeholders likely to be involved with more vulnerable seniors (e.g., community workers, community organizations that work with dispossessed or marginalized people).
- Promote experimentation with social prescribing by doctors and other healthcare professionals. Seniors who, for example, need social interaction or participation can be referred, by mutual agreement, to a community worker to explore suitable avenues and activities that would contribute to their well-being (47, 52).

Create connections with religious, cultural, or artistic organizations to take into consideration the varied needs of seniors for their well-being and social participation.

Information

Information is key to managing any crisis; a number of ways to spread information are suggested:

- > Provide seniors with straightforward, accurate, and complete information.
- Explain the reasons for the measures in place to combat the epidemic.
- Take into account the physical limitations, including sensory limitations (hearing and visual impairments), of a significant proportion of seniors.
- Develop multilingual communication strategies and tools in regions with a higher concentration of immigrants.
- Increase the methods of communication (letters, print media, radio, and TV), especially for those without Internet.
- Suggest recognized and meaningful spokespeople for seniors.
- Distribute a complete list of services available in the community to seniors, volunteers, and other stakeholders; their availability in the pandemic context should be clearly communicated (helplines and crisis lines, e.g., Elder Mistreatment Helpline, the Caregiver Support line, Tel-Aînés, Centre de prévention du suicide de Québec, 811, etc.). 211, available in many regions, is a valuable source of information in this regard.
- Warn seniors and their friends and families about situations that may be brought about or exacerbated by the pandemic (e.g., mistreatment, domestic violence, financial abuse).
- Cautiously explore the relevance of having automated calls provide pertinent information to seniors (be careful of anxiety-inducing messages communicated to people who would afterwards be left to their own devices).

OFFERING INDIVIDUAL AND GROUP INTERVENTIONS

Individual and group interventions allow for the development of personal skills and healthy lifestyles, especially physical activity, a healthy diet, cognitive stimulation, fall prevention, proper use of medications, and social participation.

Individual interventions involve connecting seniors with a professional or volunteer in order to establish a relationship that helps the individual reconnect with their environment (e.g., friendly calls or visits, sponsorship, counselling-type interventions, support with accessing resources available in the community).

Group interventions bring together seniors who are socially isolated or lonely with the goal of establishing connections or improving pre-existing relationships (e.g., psychoeducational-type interventions, participation in recreational or sociocultural activities, or any other type of group based on shared common interests).

Challenges and example actions in the pandemic context

The challenge in a pandemic is to adapt interventions and make them accessible in a way that takes into account the many constraints associated with the measures in place to limit COVID-19 transmission, according to different stages of the epidemic and development of preventative measures (e.g., lockdown/lockdown lifting/lockdown reinstatement). Innovation, creativity, and the harmonization of resources in the living environment are factors of success for interventions. Virtual communal spaces (e.g., webinars, online meet-ups) are alternatives to in-person group interventions. Experts maintain that they are

most successful when moderated and technically supported (by seniors themselves, if possible, or volunteers or other designated individuals.).

Information

Increase the availability of phone lines or websites with information on services available for different needs (e.g., delivery services, transportation).

Support services

- Increase phone services for technology use support.
- Encourage people to use healthcare services when necessary (e.g., to not be afraid if they need to consult a professional, to not forgo essential appointments).
- Make telehealth services available and facilitate access to them.
- Facilitate access to grocery stores and other types of businesses (e.g., with specific hours reserved for seniors) or to delivery services.
- Encourage the accessibility of tools and facilities that promote physical activity² (e.g., walking, biking, physical activities at home).
- Offer support to family caregivers of seniors, especially seniors with cognitive impairment or poor health, to mitigate the risk of experiencing stress or an increased burden due to their role and the context of the COVID-19 pandemic.

Activities that promote social connection, mutual aid, and well-being

- Increase friendly calls to compensate for when friendly visits are not possible. Develop virtual social circles or neighbourly activities.
- Promote the participation of family caregivers as much as possible while taking the necessary safety measures into account.
- Advertise opportunities to volunteer remotely or while respecting physical distancing and other precautions.
- Build remote support groups using information technology. Inform friends, family, and neighbours of the needs of the seniors in their community and encourage them to anticipate these needs.
- Maintain or set up walking groups that respect the health instructions.
- Support the availability of individual and group activities calling on the varied skills, knowledge, and interests of seniors through artistic, spiritual, and cultural activities (e.g., crafting, writing workshops, dance, drawing, group museum visits, cooking workshops, yoga, or meditation).
- Organize more virtual activities like lectures, educational programs, and distance learning (e.g., online lifelong learning university programs).
- Offer seniors concrete and readily available advice to limit the negative impacts of the measures in place, even if they are temporary, for example, for preventing physical deconditioning, anxiety, and stress in situations where the individual has little control.

² <u>https://santemontreal.qc.ca/en/public/advice-and-prevention/physical-activity-for-seniors/.</u>

CREATE SUPPORTIVE SOCIAL AND PHYSICAL ENVIRONMENTS FOR SENIORS

Individual approaches are insufficient for combating loneliness and isolation. Interventions must also target the physical and social environments (neighbourhood, place of residence, green spaces) of seniors.

Support community resilience, social cohesion, and a positive view of seniors

In a health crisis context, prioritize approaches based on community resilience, social cohesion, and a positive view of seniors (53–55). Communities that benefit from higher community resilience and good social cohesion are more resilient when faced with adversity and recover more effectively from major trauma (55).

The actions to take therefore aim to transform the living environment (neighbourhoods, municipalities, housing) of seniors. These practices require the mobilization of communities as a whole: decision-makers, elected officials at all levels of government, stakeholders in various areas of activity (private, institutional, and community), representatives from groups and organizations dedicated to seniors and, more broadly, all citizens.

Community resilience is the capacity of a community's members to adapt to an environment of change, uncertainty, and surprise by mobilizing community resources. Members of resilient communities develop the individual and collective capacity to respond to change, support the community, and develop new avenues to ensure the future and prosperity of their community (56).

Social cohesion is a political objective that a society sets for itself to contribute to the well-being of all members, while being sure to offer equitable access to limited resources that allow everyone to flourish, in a sustainable way. This objective is connected to a commitment to reducing social inequality and preventing polarization while promoting responsible social participation and respecting dignity, diversity, and individual and collective autonomy (57). When a large group of the population, such as seniors, becomes isolated, excluded, or prevented from participating in political, economic, or social activities within the community, social cohesion may be at risk (58).

Challenges and example actions in the pandemic context

Interventions intended to support community resilience, social cohesion, and a positive view of seniors involve participation, sharing successes and innovations, promoting a positive image of seniors, grief support, and reinforcing certain public policies. Below are some actions that make it possible to realize each of these strategies.

Participation of partners and seniors

- Emphasize engagement by local community partners from diverse sectors (municipalities, leaders from Age-Friendly Municipalities and Communities, community organizations, seniors' groups) in planning the most promising strategies to reach seniors and to support them in this period of crisis (55, 56).
- Facilitate collaboration among local resources to establish an effective mutual aid network to support seniors (e.g., exchange of services among neighbours or residents) while also respecting the instructions of public health authorities (59). Actors involved in community actions (e.g., community workers and organizers) are essential allies for promoting and supporting community resilience strategies (48-50).
- Give the floor to senior thought leaders (56, 60) and pool the effort, expertise, and knowledge of community seniors in various social participation venues (61) (community organizations defending seniors' rights, round tables, seniors' groups, municipal councils and bodies for consulting seniors, residents' associations at seniors' residences or housing cooperatives, etc.) (55, 56, 62, 63).
- > Encourage seniors' participation in identifying problems and in finding solutions that work for them (64).

Share and promote successes and innovations

- Make known and visible all citizen and community initiatives that promote community resilience and social cohesion while also contributing to improving the mental health and the well-being of individuals who are able to benefit from these initiatives (7, 65).
- Promote successes won by seniors responding to the crisis, reward their involvement and proactiveness; spread positive messages, and make known innovative initiatives and the adaptability of citizens and organizations in the community (54–56, 62).
- Recognize the essential contributions that seniors make to society (e.g., number of volunteer hours) in an official way.
- Give visibility to the experiences, stories, and life experiences of seniors.

Promoting a positive view of seniors and fighting ageism³

The risk of age-related stigmatization or discrimination is exacerbated in the context of this pandemic. Some stereotypes are reinforced, causing division and contempt for seniors. It is important to condemn these stereotypes and to counter them by promoting a positive image of seniors and of aging:

- Remember the principle of non-maleficence (that is, to do no harm to others) in all enacted measures so that they may be beneficial to the entire population and so that they do not harm any one particular community (67).
- Avoid exacerbating or focusing on generational differences of the illness. Highlight that a complex combination of risk factors have more to do with the deaths of seniors (68) rather than attributing these deaths uniquely to age, while also not minimizing this factor.
- Discuss the future and highlight the better days to come in order to plan future contributions of seniors in the community, and do so while conveying a positive image of this population and their roles as caregivers, creatives, and valued workers, as well as a driving force in the sharing of knowledge (69).
- Make the deaths of seniors more personal, as is more often done for young adults, so that victims of COVID-19 in this upper age bracket are not simply absorbed into the statistics. When the deaths of a whole section of the population are made impersonal and anonymous, seniors may feel neglected and excluded from the community (21).
- Underscore the fact that the pandemic affects the entire population, regardless of age, and that it can only be conquered by a concerted effort on the part of all members of the community (68).

Support the grieving process and rituals

Crisis situations, like the current pandemic, include human loss experienced by seniors. It is essential to consider this in all interventions to respond to the needs expressed. Failing to do so can have repercussions on the physical and mental health of the bereft (70). A lack of social acknowledgement of grief, the inability to perform funeral rites, and a lack of support, touch, and physical comfort can impact people who are grieving.

Collaborate with experts on the subject (e.g., religious representatives, funeral services providers, grieving people) to establish adequate alternative practices that are satisfactory for individuals and that respect public health instructions (71, 50).

³ Ageism refers to attitudes, stereotypes and negative representations of aging and of seniors that can lead to discrimination or implicit or explicit prejudice at micro (individual), meso (social groups) or macro (institutional or cultural) levels (66).

Offer resources and determine strategies to help guide affected people in the grieving process and to facilitate virtual connections and relationships among those bereft by COVID-19.⁴

Strengthen public policies that support seniors

The living conditions of seniors (e.g., income, housing quality, accessibility of transportation) are likewise important factors that affect whether or not the pandemic will be weathered well. Whether at a municipal, provincial, or federal level, the question of public policies should be approached from two angles:

- Ensure that the policies that are adopted (temporarily or not) to reduce the impact of the pandemic cause the least possible prejudice against seniors.
- Continually analyze the impacts of public policies on the isolation of seniors and their options for social participation, regardless of whether these policies specifically target seniors.

The physical environment, layout, and design of the built environment

Physical and built environments should respond to the basic needs of seniors: autonomy, independence, health, well-being, social connection, safety, and resilience (62).

During much of the year, green spaces and public plazas provide multiple services to city residents. For seniors specifically, urban green spaces provide areas to do physical activities and opportunities for social interaction (72, 73). They can facilitate contact among neighbours, social meetings, and participation in the local, cultural, and natural environment (72, 74, 75). They also provide non-negligible opportunities to cool down during very hot weather and heat waves.

Additionally, third spaces (parks, green spaces, public plazas, and indoor spaces such as cafés, malls, community centres, and restaurants) are areas where seniors can meet and socialize (76).

Challenges and example actions in the pandemic context

- Plan to set up new third spaces by creating inclusive, intergenerational spaces, for example outdoors (78-80), to combat inaccessibility or reduced accessibility to certain third spaces frequented by seniors (77).
- > Give preference to interventions that aim to increase safe accessibility to parks and green spaces (81).
- In the summer, focus on community gardens adapted to promote outdoor social interactions while enabling physical distancing (36).

ACT ON MOBILITY, INFORMATION TECHNOLOGY, AND COMMUNICATIONS

Promote senior mobility

Measures targeting physical and economic access to mobility-friendly resources that are available on demand contribute to increasing social participation and breaking isolation (82-84).

Challenges and paths to action in the pandemic context

In the context of the pandemic and physical distancing, access to public transit (bus, metro, taxi, adaptive transit, etc.) can be limited, reducing the mobility of people with no other means of transportation. It is therefore important to:

⁴ Guide for people grieving in the time of a pandemic [in French only]: https://praxis.umontreal.ca/public/FAS/praxis/Documents/Formations_sur_l_accompagnement_des_personnes_endeuillees/Guide_d euil_pandemie.FR.pdf.

- Support, by financial means, public and adaptive transit infrastructure and to ensure that it is accessible (1, 85, 86).
- Plan for a significant public area, as much for recreational purposes as for a practical way of getting around, to compensate for the reduced use of public transit. In major cities, it is expected that public transit use will decrease, which will result in an increase in car travel. This shift will cause an increased need for infrastructure where users will be able to practice active transit (walking, cycling) or to use adaptive transportation (motorized mobility aids), enabling them to better respect physical distancing and not fear falling victim to a collision (85, 87);
- Follow the example of several municipalities worldwide, who were inspired by tactical urban planning to reorganize their streets and make more room for pedestrians and cyclists (88-90). These temporary or permanent street reorganization initiatives can be grouped into three categories which may also be pertinent for seniors:
 - Reclaiming sections of streets for pedestrians and cyclists
 - Organizing shared streets
 - Closing streets to car traffic or full pedestrianization of the street

Communication and access to information technology

Using technology tools (computers, tablets, etc.) can help seniors maintain social interaction (47, 91). Those more familiar with information technology and who have access to equipment are better informed of available services and activities and have a higher likelihood of establishing virtual connections with their social circle. However, some mention the importance of conducting further research on the positive and negative effects of turning to technology, citing the potential risk of increasing social isolation and loneliness for some people. Communication strategies must also be adapted to this target population, which has specific characteristics.

Challenges and example actions in the pandemic context

- Encourage seniors to use technology tools (92) by facilitating access to the Internet and devices, as well as their adoption.
- Because seniors, less educated people, and those with chronic illness or neurocognitive disorders are among those most likely to have low health literacy (93–96), that is, the ability to obtain, process, and understand the information required to make informed decisions and to use healthcare services appropriately (93, 97), messages must be simplified by providing clear explanations and instructions supported by concrete examples and visual aids that facilitate understanding (92–94, 96, 97).
- Do not focus solely on technology tools as some vulnerable populations do not have access to them (55, 98). In these cases, turn to other methods (e.g., in Montréal, trucks with loudspeakers drive up and down streets in some neighbourhoods to provide information in several languages on testing and individual protective measures against COVID-19).

Conclusion

The context of the COVID-19 health crisis has transformed the daily lives and living conditions of seniors, putting them particularly at risk of being socially isolated and lonely. The health implications are reason for concern, even more so considering that the effects of the current pandemic may intensify in the coming months and persist beyond the health crisis (5-7, 99).

Seniors' social interactions are fundamental to their health and well-being, such that public health interventions must focus on reinforcing them. To increase their impact, systemic approaches in partnership with the public, private, and community sectors at the provincial, regional and local levels are to be given preference.

The pandemic has caused several different challenges to emerge, including:

- > Applying constantly- and rapidly-evolving public health recommendations
- Adapting them to seniors' varied living situations
- Community and public organizations operating with resources that have been directly affected by COVID-19 or that are depleting
- The unpredictability and uncertainty around the trajectory of the epidemic (e.g., potential second wave), the duration of the crisis, and its medium- and long-term consequences
- Social inequalities in health that are more acute in a crisis situation and must be taken into consideration when implementing interventions to support all seniors in more vulnerable situations

Seniors who live in private households must rely on family members, friends, neighbours, community organizations, and merchants (e.g., pharmacies, grocery stores) to deliver their groceries, medication, and other essential articles to their homes (10). This crisis is bringing about acts of solidarity and mutual support that are favourable for the well-being and health of populations in general (100) and of seniors. These acts must be recognized and encouraged in the long term.

Appendix

Adaptation of Jopling's model (2015)



References

- 1. Douglas, M., Katikireddi, S.V., Taulbut, M., McKee, M., & McCartney, G. (April 27, 2020). Mitigating the wider health effects of covid-19 pandemic response. *BMJ*; cited May 22, 2020; 369. Online: https://www.bmj.com/content/369/bmj.m1557
- Wang, C., Pan, R., Wan, X., Tan, Y., Xu, L., McIntyre, R. S., Choo, F. N., Tran, B., Ho, R., Sharma, V. K., & Hoe, C. (2020). A longitudinal study on the mental health of general population during the COVID-19 epidemic in China. *Brain, Behavior, and Immunity*, S0889159120305110.
- 3. Huang Y, & Zhao N. (2020). Generalized anxiety disorder, depressive symptoms and sleep quality during COVID-19 outbreak in China: a web-based cross-sectional survey. *Psychiatry Research*, 288:112954.
- Moreira, P.S., Ferreira, S., Couto, B., Machado-Sousa, M., Fernandez, M., Raposo-Lima, C., Sousa, N., Pico-Perez, M, & Morgado, P. (2020). Protective elements of mental health status during the COVID-19 outbreak in the Portuguese population. *Psychiatry and Clinical Psychology*. Online: <u>http://medrxiv.org/lookup/doi/10.1101/2020.04.28.20080671</u>
- 5. United Nations. (May 2020). Policy Brief: COVID-19 and the Need for Action on Mental Health. United Nations. Online: <u>https://www.un.org/sites/un2.un.org/files/un_policy_brief-covid_and_mental_health_final.pdf</u>
- 6. Baker, E. & Clark, L. L. (May 2, 2020). Biopsychopharmacosocial approach to assess impact of social distancing and isolation on mental health in older adults. *British Journal of Community Nursing*, 25(5):231-8.
- Holmes E.A., O'Connor, R.C., Perry, V.H., Tracey, I., Wessely, S., Arseneault, L., Ballard, C. Christensen, H., Cohen Silver, R., Everall, I., Ford, T., John, A., Kabir, T., King, K., Madan, I., Michie, S., Przybylski, A. K., Shafran, R., Sweeney, A., Worthman, C. M., Yardley, L.,... Bullmore, E. (2020). Multidisciplinary research priorities for the COVID-19 pandemic: a call for action for mental health science. *The Lancet Psychiatry*, S2215036620301681.
- 8. Holt-Lunstad, J. (2017). The Potential Public Health Relevance of Social Isolation and Loneliness: Prevalence, Epidemiology, and Risk Factors. *Public Policy & Aging Report*. 27(4):127-30.
- Diener, E., & Seligman, M. E. P. (2009). Beyond Money: Toward an Economy of Well-Being. Editor: Diener E. *The* Science of Well-Being. Dordrecht: Springer Netherlands. Cited May 24, 2020. p. 201–65. Online: <u>http://link.springer.com/10.1007/978-90-481-2350-6_9</u>
- 10. Statistics Canada. (2018). Life satisfaction among Canadian seniors.
- 11. Helliwell, J. F., Aknin, L. B., Shiplett, H., Huang, H., & Wang, S. (2018). Social Capital and Prosocial Behaviour as Sources of Well-Being. *Handbook of well-being*.
- 12. Wilkinson, R. G., & Marmot, M., World Health Organization. (2004). Regional Office for Europe. Social determinants of health: the solid facts. Copenhagen: WHO Regional Office for Europe.
- 13. Levasseur, M., Richard, L., Gauvin, L., & Raymond, E. (December 2010). Inventory and Analysis of Definitions of Social Participation Found in the Aging Literature: Proposed Taxonomy of Social Activities. *Social Science & Medicine*, *71*(12):2141-9.
- 14. Raymond, É., Gagné, D., Sévigny, A., & Tourigny, A. (2008). La participation sociale des ainés dans une perspective de vieillissement en santé : réflexion critique appuyée sur une analyse documentaire. Québec City: Agence de la santé et des services sociaux de la Capitale-Nationale. Cited May 21, 2020. Online: <u>http://deslibris.ca/ID/216238</u>
- Raymond, É., Institut national de santé publique du Québec, Direction du développement des individus et des communautés, & Canadian Electronic Library (Firm). (2015). Interventions évaluées visant la participation sociale des ainés : fiches synthèses et outil d'accompagnement. Cited May 21, 2020. Online: https://www.deslibris.ca/ID/247035
- 16. Lemieux, V., Lebel, P., Staton, Jean M, Dupont S. (2018). Coconstruire un cadre d'analyse sur la participation sociale avec les ainés montréalais. *Vie et vieillissement*, *15*(3):18-24.
- 17. Québec.qc.ca. Government of Québec. (2020). Social inclusion of older adults. Online: <u>https://www.quebec.ca/en/family-and-support-for-individuals/assistance-and-support/social-inclusion-of-older-adults/</u>
- Markon, M. P., Canadian Electronic Library (Firm). (2017). Portrait des ainés de l'île de Montréal 2017. Cited May 20, 2020. Online: <u>https://www.deslibris.ca/ID/10092723</u>

- 19. Ministère de la Famille, Barrette, C. (2018). Un Québec pour tous les âges : le plan d'action 2018-2023. Québec. Cited May 20, 2020. Online: <u>http://collections.bang.gc.ca/ark:/52327/3491238</u>
- 20. Petretto, D. R., & Pili, R. (2020). Ageing and COVID-19: What is the Role for Elderly People? Geriatrics, 5(2):25.
- Fraser, S., Lagacé, M., Bongué, B., Ndeye, N., Guyot, J., Bechard L, Garcia, L., Taler, V., CCNA Social Inclusion and Stigma Working Group, Adam, S., Beaulieu, M., Bergeron, C. D., Boudjemadi, V., Desmette, D., Donizzetti A. R., Éthier, S., Garon, S., Gillis, M., Levasseur, M.,... Touga, F. (2020). Ageism and COVID-19: what does our society's response say about us? *Age and Ageing*, afaa097.
- 22. National Seniors Council. (2014). Scoping Review of the Literature Social Isolation of Seniors 2013-2014. Ottawa: Government of Canada. Cited May 21, 2020. Online: <u>https://central.bac-lac.gc.ca/.item?id=Em12-7-2014-eng&op=pdf&app=Library</u>
- National Seniors Council. (2014). Report on the Social Isolation of Seniors 2013-2014. Ottawa: Government of Canada. Cited May 21, 2020. Online: <u>http://publications.gc.ca/collections/collection_2015/edsc-esdc/Em12-6-</u> <u>2014-eng.pdf</u>
- Bureau, G., Cardinal, L., Côté, M., Gagnon, É., Maurice, A., Paquet, S., Rose-Maltais, J., & Tourigny, A. (2017). Rejoindre, comprendre et accompagner les personnes ainées isolées socialement : Une trousse d'accompagnement. Québec: FADOQ - Régions de Québec et Chaudière-Appalaches (FADOQ-RQCA).
- 25. Statistics Canada. (2009). Canadian Community Health Survey Healthy Aging.
- 26. Statistics Canada. (2012). 2012 Health Report.
- 27. Philibert, M., Raymond, É., & Tourigny, A. (2014). Participation sociale section in Habitudes de vie, poids corporel et participation sociale chez les ainés au Québec. INSPQ.
- 28. Keefe, J., Andrew, M., Fancey, P., & Hall, M. (2006). A Profile of Social Isolation in Canada. Submitted to the Chair of the F/P/T Working Group on Social Isolation.
- 29. National Seniors Council. (2016). Who's at Risk and What Can Be Done About It? A Review of the Literature on the Social Isolation of Different Groups of Seniors Ottawa: Government of Canada. Cited May 21, 2020. Online: https://epe.lac-bac.gc.ca/100/201/301/weekly_acquisitions_list-ef/2017/17-11/publications.gc.ca/collections/collection_2017/edsc-esdc/Em12-26-2017-eng.pdf
- 30. Holt-Lunstad, J., Smith, T. B., & Layton, J. B. (2010). Social Relationships and Mortality Risk: A Meta-analytic Review. Editor: Brayne, C. *PLOS Medicine*, *7*(7):e1000316.
- 31. Holt-Lunstad, J., Smith, T. B., Baker, M., Harris, T., & Stephenson, D. (2015). Loneliness and Social Isolation as Risk Factors for Mortality: A Meta-Analytic Review. *Perspectives on Psychological Science*, *10*(2):227-37.
- 32. Holt-Lunstad, J., & Smith, T. B. (2016). Loneliness and social isolation as risk factors for CVD: implications for evidence-based patient care and scientific inquiry. *Heart*, *102*(13):987-9.
- 33. Courtin, E., & Knapp, M. (2017). Social isolation, loneliness and health in old age: a scoping review. *Health & Social Care in the Community*, 25(3):799-812.
- 34. Valtorta, N. K., Kanaan, M., Gilbody, S., Ronzi, S., & Hanratty, B. (2016). Loneliness and social isolation as risk factors for coronary heart disease and stroke: systematic review and meta-analysis of longitudinal observational studies. *Heart*, 102(13):1009-16.
- 35. INSPQ. (2020). Prévenir la violence et le suicide dans un contexte de pandémie de COVID-19 quelques pistes. Cited May 24, 2020. Online: <u>https://www.inspq.qc.ca/publications/2994-prevenir-violence-suicide-covid19</u>
- Institut national de santé publique du Québec; Authors: Paquette M-C., Plamondon, L., Laberge, C., Lévesque, J., & Montreuil A. (2020). COVID-19: Opening Community Gardens Safely. Montréal, Québec: Institut national de santé publique du Québec. p. 4.
- Volkert, D., Beck, A.M., Cederholm, T., Cereda, E., Cruz-Jentoft, A., Goisser, S., de Groot, L., Großhauser, F., Kiesswetter, E., Norman, K. Pourhassan, M., Reinders, I., Roberts, H. C., Rolland, Y., Schneider, S. M., Sieber, C. C., Thiem, U., Visser, M., Wijnhoven, H. A. H., & Wirth, R. (2019). Management of Malnutrition in Older Patients – Current Approaches, Evidence and Open Questions. *Journal of Clinical Medicine*, 8(7):974. Multidisciplinary Digital Publishing Institute.
- Volkert, D., Visser, M., Corish, C. A., Geisler, C., de Groot, L., Cruz-Jentoft, A. J., Lohrmann, C., O'Connor E. M., Schindler, K., de van der Schueren, M. A. E., & the MaNuEL consortium. (2020). Joint action malnutrition in the elderly (MaNuEL) knowledge hub: summary of project findings. *European Geriatric Medicine*, *11*(1):169–177. Springer.

- 39. Defeat Malnutrition Today. (2020). COVID-19. Defeat Malnutrition Today. Cited June 3, 2020. Online: https://www.defeatmalnutrition.today/covid-19
- 40. National Academies of Sciences, Engineering, and Medicine. (2020). Social Isolation and Loneliness in Older Adults: Opportunities for the Health Care System. Washington, D.C.: National Academies Press. Cited May 21, 2020. Online: <u>https://www.nap.edu/catalog/25663</u>
- 41. Duncan D., & Bell, R. (2015). Local Action on Health Inequalities: Reducing Social Isolation Across the Lifecourse. Public Health England. UCL Institute of Health Equity.
- 42. Griffin J., Mental Health Foundation. (2010). The Lonely Society? London: Mental Health Foundation.
- 43. Cotterell, N., Buffel, T., & Phillipson, C. (2018). Preventing Social Isolation in Older People. *Maturitas*, 113:80-4.
- 44. Stewart, M., Shizha, E., Makwarimba, E., Spitzer, D., Khalema, E. N., & Nsaliwa, C. D. (February 21, 2011). Challenges and barriers to services for immigrant seniors in Canada: "you are among others but you feel alone." International Journal of Migration, Health and Social Care, 7(1):16-32.
- 45. European Commission. (2019). Peer Review on "Strategies for supporting social inclusion at older age", Berlin (Germany), 23-24 September 2019 Employment, Social Affairs & Inclusion. Cited May 24, 2020. Online: https://ec.europa.eu/social/main.jsp?langld=en&catId=1024&furtherNews=yes&newsId=9418
- 46. European Commission. (2019). Peer Review on "Strategies for supporting social inclusion at older age." Cited May 24, 2020. Online: https://ec.europa.eu/social/main.jsp?langld=en&catld=1024&furtherNews=yes&newsld=9418
- 47. Jopling, K. (2015). Promising approaches to reducing loneliness and isolation in later life.
- 48. Chew, Q. H., Wei, K. C., Vasoo, S., Chua, H. C., & Sim, K. (April 3, 2020). Narrative synthesis of psychological and coping responses towards emerging infectious disease outbreaks in the general population: practical considerations for the COVID-19 pandemic. *Scientific Medical Journal*. Cited May 3, 2020. Online: <u>http://www.smj.org.sg/sites/default/files/SMJ-61-350-full.pdf</u>
- 49. World Health Organization, UNICEF, & the International Federation of Red Cross and Red Crescent Societies. (March 2020). Risk Communication and Community Engagement (RCCE) Action Plan Guidance COVID-19 Preparedness and Response. Geneva: World Health Organization (WHO). Online: <u>https://www.who.int/publications-detail/risk-communication-and-community-engagement- (rcce) — action-plan-guidance</u>
- 50. INSPQ. (2020). COVID-19 : la résilience et la cohésion sociale des communautés pour favoriser la santé mentale et le bien-être.
- 51. Berkman L. F., & Syme, S. L. (February 1979). Social networks, host resistance, and mortality: A nine-year followup study of Alameda County residents. *American Journal of Epidemiology*, *109*(2):186-204.
- 52. Drinkwater, C., Wildman, J., & Moffatt, S. (March 28, 2019). Social prescribing. *BMJ*. British Medical Journal Publishing Group; cited May 21, 2020; 364. Online: <u>https://www.bmj.com/content/364/bmj.11285</u>
- 53. Chandra, A., Acosta, J., Stern, S., Uscher-Pines, L., Williams, M. V., Yeung, D., Garnett, J., & Meredith, L. S. (2011). *Building Community Resilience to Disasters: A Way Forward to Enhance National Health Security. Santa Monica, CA: RAND. p.* 78.
- 54. O'Sullivan, T. L., Kuziemsky, C. E., Corneil, W., Lemyre, L., & Franco, Z. (October 2, 2014). The EnRiCH Community Resilience Framework for High-Risk Populations. *PLOS Currents;* 6.
- 55. Institute of Medicine. (2015). Healthy, Resilient, and Sustainable Communities after Disasters: Strategies, Opportunities, and Planning for Recovery. Cited May 15, 2020. Online: <u>https://www.nap.edu/catalog/18996/healthy-resilient-and-sustainable-communities-after-disasters-strategies-opportunities-and</u>
- 56. Magis, K. (2010). Community Resilience: An Indicator of Social Sustainability. *Society & Natural Resources*, 23(5):401-16.
- 57. Council of Europe. (2005). Concerted development of social cohesion indicators: Methodological guide. Strasbourg: Éditions du Conseil de l'Europe.
- 58. Picot, G. (2013). Economic and social objectives of immigration: The evidence that informs immigration levels and education mix. Ottawa: Citizenship and Immigration Canada.
- 59. Aldrich, D. (2012). Building Resilience: Social Capital in Post-Disaster Recovery. Chicago: University of Chicago Press.

- 60. World Health Organization. (2020). Risk communication and community engagement readiness and response to coronavirus disease (COVID-19): interim guidance, 19 March 2020. Cited May 19, 2020. Online: <u>https://www.who.int/publications-detail/risk-communication-and-community-engagement-readiness-and-initial-response-for-novel-coronaviruses</u>
- 61. Bouchard-Bastien, E., Plante, S., & Brisson, G.; Institut national de santé publique du Québec, Direction de la santé environnementale et de la toxicologie. (2016). Cadre de référence pour favoriser le dialogue et la résilience dans le cadre de controverses sanitaires environnementales. Montréal: Institut national de santé publique du Québec.
- 62. Arup. (2019). Cities Alive: Designing for ageing communities. London. Online: <u>https://www.arup.com/en/perspectives/publications/research/section/cities-alive-designing-for-ageing-communities</u>
- 63. Theurer K, Mortenson WB, Stone, R., Suto, M., Timonen, V., & Rozanova, J. (2015). The need for a social revolution in residential care. *Journal of Aging Studies*, 35:201-10.
- 64. World Health Organization. (2020). Risk Communication and Community Engagement (RCCE) Action Plan Guidance COVID-19 Preparedness and Response. Cited May 15, 2020. Online: <u>https://www.who.int/publications/i/item/risk-communication-and-community-engagement-(rcce)-action-plan-guidance</u>
- 65. Fancourt D, & Saoirse F. (2019). What is the evidence on the role of the arts in improving health and well-being. Copenhagen: WHO.
- 66. Iversen, T. N., Larsen, L., & Solem, P. E. (2009). A conceptual analysis of Ageism. *Nordic Psychology*, *61*(3):4–22. Taylor & Francis.
- 67. Désy, M., St-Pierre, J., Leclerc, B., Couture-Ménard, M-È., Cliche, D., & Maclure, J. (2020). Cadre de réflexion sur les enjeux éthiques liés à la pandémie de COVID-19. Montréal: Comité d'éthique de santé publique and Commission de l'éthique en science et en technologie. Online: <u>https://www.inspg.qc.ca/publications/2958</u>
- 68. Ayalon, L. (April 14, 2020). There is nothing new under the sun: Ageism and intergenerational tension in the age of the COVID-19 outbreak. *International Psychogeriatrics*, 1-11.
- 69. Loe, M., Sherry, A., & Chartier, E. (2016). Ageism: Stereotypes, Causes, Effects, and Countermovements. Editors: Harrington Meyer, M, & Daniele, E.A. *Gerontology: Changes, Challenges, and Solutions,* p. 57-82. Praeger. Santa Barbara.
- 70. Zhai Y., & Du, X. (April 2020). Loss and grief amidst COVID-19: A path to adaptation and resilience. *Brain, Behavior, and Immunity*, S0889159120306322.
- 71. IASC MHPSS Reference Group. (March 2020). Interim Briefing Note Addressing Mental Health and Psychosocial Aspects of COVID-19 Outbreak. Geneva: Inter-Agency Standing Committee. Online: <u>https://interagencystandingcommittee.org/iasc-reference-group-mental-health-and-psychosocial-support-emergency-settings/interim-briefing</u>
- 72. Beaudoin, M., & Levasseur, M-È. (2017). *Verdir les villes pour la santé de la population : revue de la littérature*. Montréal: Institut national de santé publique du Québec.
- 73. Editors: Beaudoin, M., Labesse, M. E., Prévost, C., Robitaille, É., Burigusa, G., Gauthier, M. et al. (2019); OPUS. Montréal.
- 74. Enssle, F., & Kabisch, N. (July 1, 2020). Urban green spaces for the social interaction, health and well-being of older people An integrated view of urban ecosystem services and socio-environmental justice. *Environmental Science & Policy*, 109:36-44.
- 75. Kabisch, N., Van den Bosch, M., & Lafortezza, R. (2017). The health benefits of nature-based solutions to urbanization challenges for children and the elderly A systematic review. *Environmental Research*, 159:362–373.
- 76. Oldenburg R., & Brissett, D. (Dec. 1, 1982). The third place. Qualitative Sociology, 5(4):265-84.
- 77. Low, S. (May 6, 2020). Third places define us. COVID-19 threatens to permanently upend them. *Fast Company*. Cited May 22, 2020. Online: <u>https://www.fastcompany.com/90500609/third-places-define-us-covid-19-threatens-to-permanently-upend-them</u>
- 78. arki_lab. A short guide to how to design age integrated urban spaces. issuu. Cited May 20, 2020. Online: https://issuu.com/arki_lab/docs/a_short_guide_to_how_to_design_age_

- 79. Vivre en ville. (2019). Des milieux de vie pour toute la vie. *Vivre en Ville, la voie des collectivités viables.* Cited May 22, 2020. Online: <u>https://vivreenville.org/desmilieuxdeviepourtoutelavie</u>
- 80. Alidoust, S., Bosman, C., & Holden, G. (March 1, 2018). Talking while walking: an investigation of perceived neighbourhood walkability and its implications for the social life of older people. *Journal of Housing and the Built Environment*, *33*(1):133-50.
- 81. Samuelsson, K., Barthel, S., Colding, J., Macassa, G., & Giusti, M. (April 2020). Urban nature as a source of resilience during social distancing amidst the coronavirus pandemic. Online: <u>https://osf.io/3wx5a</u>
- 82. Banister, D., & Bowling, A. (April 1, 2004). Quality of life for the elderly: The transport dimension. *Transport Policy*, *11*(2):105-15.
- 83. Reinhard, E., Courtin, E., van Lenthe, F. J., & Avendano, M. (May 1, 2018). Public transport policy, social engagement and mental health in older age: a quasi-experimental evaluation of free bus passes in England. *Journal of Epidemiology and Community Health*, 72(5):361-8.
- Matsuda, N., Murata, S., Torizawa, K., Isa, T., Ebina, A., Kondo Y, Tsuboi, Y., Fukuta, A., Okumura, M., Shigemoto, C. & Ono, R. (January 1, 2019). Association between Public Transportation Use and Loneliness Among Urban Elderly People Who Stop Driving. *Gerontology and Geriatric Medicine*, 5:2333721419851293.
- Honey-Roses, J., Anguelovski, I., Bohigas, J., Chireh, V., Daher, C., Konijnendijk, C., Litt, J., Mawani, V., McCall, M., Orellana, A., Oscilowicz, E.,Sánchez, U., Senbel, M., Tan, X., Villagomez, E., Zapata, O., & Nieuwenhuijsen, M. (April 2020). The Impact of COVID-19 on Public Space: A Review of the Emerging Questions. Online: <u>https://osf.io/rf7xa</u>
- Capolongo, S., Rebecchi, A., Buffoli, M., Appolloni, L., Signorelli, C., Fara, G. M., & D'Alessandro, D. (2020). COVID-19 and Cities: from Urban Health strategies to the pandemic challenge. A Decalogue of Public Health opportunities.
- 87. Musselwhite, C., Avineri, E., & Susilo, Y. (March 2020). Editorial JTH 16 The Coronavirus Disease COVID-19 and implications for transport and health. *Journal of Transport & Health*, 16:100853.
- 88. Lydon, M. (2020). Tactical Urbanism. issuu. Cited May 13, 2020. Online: https://issuu.com/streetplanscollaborative/docs/tactical urbanism vol 2 final/1
- 89. Yassin, H. H. (March 2019). Livable city: An approach to pedestrianization through tactical urbanism. *Alexandria Engineering Journal*. ⁵⁸(1):251-9.
- 90. Vidalenc, E., & Chassignet, M. (May 12, 2020). S'inspirer de l'urbanisme tactique pour adapter les villes à la distanciation physique. *The Conversation*. Cited May 13, 2020. Online: <u>http://theconversation.com/sinspirer-de-lurbanisme-tactique-pour-adapter-les-villes-a-la-distanciation-physique-136642</u>
- 91. IoTUK. Social isolation and loneliness in the UK: with a focus on the use of technology to tackle these conditions. 2017.
- 92. Gauthier, A., Boivin, M., Gamache, L., Poitras, D., & St-Pierre, J. COVID-19 : Stratégies de communication pour soutenir la promotion et le maintien des comportements désirés dans le contexte de déconfinement graduel. INSPQ. 2020.
- 93. Sun, X., Shi, Y., Zeng, Q., Wang, Y., Du, W., Wei, N., Xie, R., & Chan, C. (March 22, 2013). Determinants of health literacy and health behavior regarding infectious respiratory diseases: a pathway model. *BMC Public Health*, 13:261.
- 94. McDonald, M., & Shenkman, L. (2018). Health Literacy and Health Outcomes of Adults in the United States: Implications for Providers. Cited May 15, 2020. Online: https://purdueglobal.dspacedirect.org/handle/20.500.12264/20
- 95. Jackson, D. N., Trivedi, N., & Baur, C. (April 30, 2020). Re-prioritizing Digital Health and Health Literacy in Healthy People 2030 to Affect Health Equity. *Health Communication*, *0*(0):1-8.
- 96. Wolf, M. S., Serper, M., Opsasnick, L., O'Conor, R. M., Curtis, L. M., Benavente, J. Y., Wismer, G., Batio, S., Eifler, M., Zheng, P., Russell, A., Arvanitis, M., Ladner, D., Kwasny, M., Persell, S. D., Rowe, T., Linder, J. A., & Bailey, S. C. (April 9, 2020). Awareness, Attitudes, and Actions Related to COVID-19 among Adults with Chronic Conditions at the Onset of the U.S. Outbreak. *Annals of Internal Medicine*. Cited May 15, 2020. Online: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7151355/

- 97. Sentell, T., Vamos, S., & Okan, O. (January 2020). Interdisciplinary Perspectives on Health Literacy Research Around the World: More Important Than Ever in a Time of COVID-19. *International Journal of Environmental Research and Public Health*, *17*(9):3010.
- 98. Mesa Vieira, C., Franco, O. H., Gómez Restrepo, C., & Abel, T. (June 1, 2020). COVID-19: The forgotten priorities of the pandemic. *Maturitas*, 136:38-41. Elsevier.
- 99. Brooks SK, Webster RK, Smith LE, Woodland L, Wessely S, Greenberg N, & Ruben, G. J. (March 2020). The psychological impact of quarantine and how to reduce it: rapid review of the evidence. *The Lancet*, *395*(10227):912-20.
- 100. INESSS. COVID-19 et les approches favorisant l'observance des mesures de précaution et de protection auprès des personnes en situation de vulnérabilité. Québec City, Québec: INESSS; 2020 p. 34. Online: https://www.inesss.gc.ca/fileadmin/doc/INESSS/COVID-19/COVID-19_INESSS_Observance.pdf

Fighting Social Isolation and Loneliness Among Seniors in a Pandemic Context

AUTHOR

Comité en prévention et promotion [Disease Prevention and Health Promotion Committee]

Véronique Leclair, Scientific Advisor Julie Lévesque, Scientific Advisor Dave Poitras, Scientific Advisor Éric Robitaille, Scientific Advisor André Tourigny, Medical Advisor Direction du développement des individus et des communautés

UNDER THE COORDINATION OF

Julie Lévesque, Scientific Advisor Direction du développement des individus et des communautés

SCIENTIFIC REVIEWERS

Louise Buzit Beaulieu, National Coordinator for countering in elder abuse in cultural communities Lise Cardinal, Medical Advisor Direction régionale de santé publique de Québec **Barbara Fillion** Direction régionale de santé publique de Montréal Julie Laforest, Scientific Advisor Institut national de santé publique du Québec Paule Lebel Direction régionale de santé publique de Montréal Valérie Lemieux Direction régionale de santé publique de Montréal Mélanie Levasseur Université de Sherbrooke Pierre Maurice, Medical Advisor Institut national de santé publique du Québec Marie-Claude Roberge, Scientific Advisor Institut national de santé publique du Québec LAYOUT

Sophie Michel Institut national de santé publique du Québec

TRANSLATION

Claire Maryniak Emily Wilson

The French version is entitled *Lutter contre l'isolement social et la solitude des personnes aînées en contexte de pandémie* is also available on the website of the Institut national de santé publique du Québec at: www.inspq.qc.ca/publications/3033-isolement-social-solitude-aines-pandemie-covid19

© Gouvernement du Québec (2020)

Publication Nº: 3033 - English version

