

# Evolution of psychosocial impacts during the 2nd wave of the COVID-19 pandemic

## A Quebec survey

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# Research Team

## Universities

- Université de Sherbrooke
- Université d'Ottawa
- Université de Neuchâtel
- Université de Genève
- Université catholique de Louvain
- Centro Universitário de Brasília
- University of the Philippines
- Chinese University of Hong Kong
- University of Canterbury

## Health Organizations

- Direction de la santé publique de l'Estrie
- Ministère de la Santé et des Services sociaux du Québec
- Public Health Agency of Canada
- National Collaborating Center for Infectious Diseases
- Department of Health (Philippines)
- Public Health England
- World Health Organization



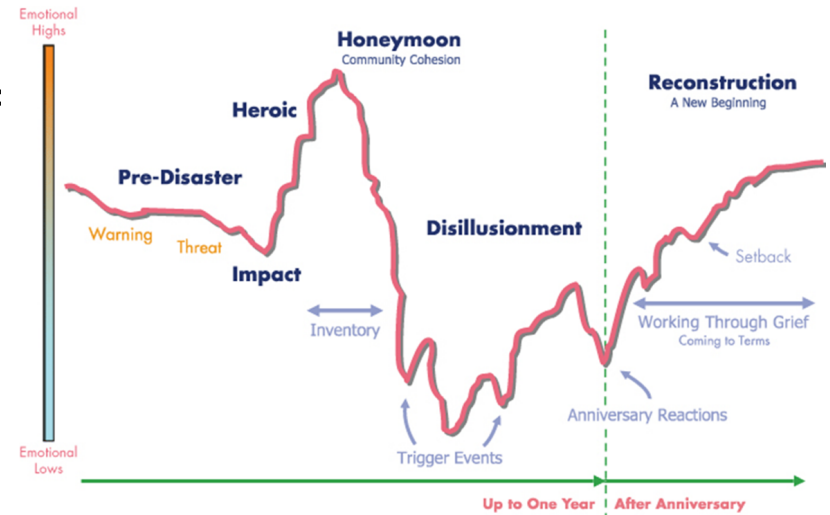
# The pandemic : a disaster

- A disaster is a disturbance in the human environment that exceeds the capacity of the community to function normally.
- Various disasters have hit Canada in recent years, including:
  - 2013 Lac-Mégantic rail tragedy
  - 2016 Fort McMurray wildfires
  - 2017 and 2019 spring floods
  - And now the COVID-19 pandemic



# Psychosocial impacts

The pandemic, like other types of disasters, is likely to cause psychological sequelae in the short, medium and long terms for the population.



In order to support decision making and public health interventions, it is important to understand:

1. The nature, extent, distribution and evolution of the psychosocial impacts of the pandemic
2. The risk or protective factors associated with these impacts



# Our study

- Two-year project funded by the CIHR of an interdisciplinary and international team
- **Title: The Influence of Communication Strategies and Media Discourse on the Psychological and Behavioral Response to the COVID-19 Pandemic: An International Study**
- 3 axes:
  1. Population based surveys to examine the psychosocial impacts and their associated factors
  2. Qualitative and quantitative analysis of media discourse and social networks
  3. Network analysis to assess how information flows through levels of governance



# Our study: Axe 1

- Population based surveys in 3 phases:
  - Pilot survey from **April 8-11** in Canada (n = 600 adults)
  - 1st international survey from **May 29-June 12** in 8 countries (n = 8,806 adults, including 1,501 in Canada)
  - 2nd international survey from **November 6-18** in 8 countries (n = 9,029 adults, including 2004 in Canada)
- In addition:
  - 1st survey from **September 4-14** in 7 regions of Quebec (n = 6,261 adults)
  - 2nd survey from **November 6-18** in all regions of Quebec (n = 8,518 adults)



# Phase 2 of Quebec survey

## (November 6-18, 2020)

- Funded by regional public health departments and the CIHR
- Carried out in all health regions of Quebec
- Non-probability sample of adults recruited by web panel
- Weighted for age, gender, language and region

Regions	n
Capitale-Nationale	500
Mauricie-CDQ	777
Estrie	758
Montréal	1040
Laval	759
Lanaudière	1017
Laurentides	1032
Montérégie	1026
5 small regions*	1053
Other regions in Quebec	556
<b>All of Quebec</b>	<b>8518</b>

\*Bas-Saint-Laurent, Saguenay-Lac-Saint-Jean, Abitibi-Témiscamingue, Côte-Nord, Gaspésie-Île-de-la-Madeleine



# Results

## Psychological response by region (November 6-18, 2020)

	Probable anxiety (GAD-7 ≥ 10)	Probable depression (PHQ-9 ≥ 10)	Probable anxiety or depression	Serious suicidal ideation
<b>Capitale-Nationale</b>	11.6% (-)	16.2% (-)	19.8% (-)	3.6% (-)
<b>Mauricie-CDQ</b>	12.6% (-)	16.6%	21.0%	5.2%
<b>Estrie</b>	13.9%	16.4%	19.7%	6.5%
<b>Montréal</b>	23.4% (+)	28.1% (+)	32.0% (+)	7.9% (+)
<b>Laval</b>	14.9%	21.2%	24.1%	5.7%
<b>Lanaudière</b>	13.0%	14.6% (-)	19.0% (-)	4.4%
<b>Laurentides</b>	13.6%	18.3%	20.5%	6.0%
<b>Montérégie</b>	16.4%	18.8%	22.5%	5.6%
<b>5 small regions</b>	10.7% (-)	12.9% (-)	16.4% (-)	4.2%
<b>All of Quebec</b>	15.9%	19.6%	23.3%	5.8%





# Results

## Evolution of psychological response (7 regions)

	Probable anxiety		Probable depression		Probable anxiety or depression	
	September 4-14	November 6-18	September 4-14	November 6-18	September 4-14	November 6-18
<b>Mauricie-CDQ</b>	10.1%	12.6%	13.0%	16.6% (+)	15.3%	21.0% (+)
<b>Estrie</b>	14.5%	13.9%	15.3%	16.4%	20.3%	19.7%
<b>Montréal</b>	17.8%	23.4% (+)	21.5%	28.1% (+)	26.5%	32.0% (+)
<b>Laval</b>	16.9%	14.9%	19.3%	21.2%	24.0%	24.1%
<b>Lanaudière</b>	11.9%	13.0%	12.7%	14.6%	16.2%	19.0%
<b>Laurentides</b>	10.2%	13.6% (+)	13.8%	18.3% (+)	17.2%	20.5%
<b>Montérégie</b>	13.9%	16.4%	16.3%	18.8%	21.1%	22.5%
<b>Total (7 regions)</b>	14.6%	17.5% (+)	17.4%	21.3% (+)	21.8%	25.0% (+)



# Results

## Evolution of psychological response (7 regions)

### Pre-pandemic

Probable anxiety<sup>1</sup>: **3%**  
Probable depression<sup>2</sup>: **7%**

### September 2020 (7 régions)

Probable anxiety: **15%**  
Probable depression: **17%** (-)  
Probable anxiety/depression: **22%** (-)

Probable anxiety: **16%**  
Probable depression: **23%**  
Probable anxiety/depression: **27%**

### June 2020 (7 regions)

Probable anxiety: **18%** (+)  
Probable depression: **21%** (+)  
Probable anxiety/depression: **25%** (+)

### November 2020 (7 regions)



# Results

## Comparison with other disasters

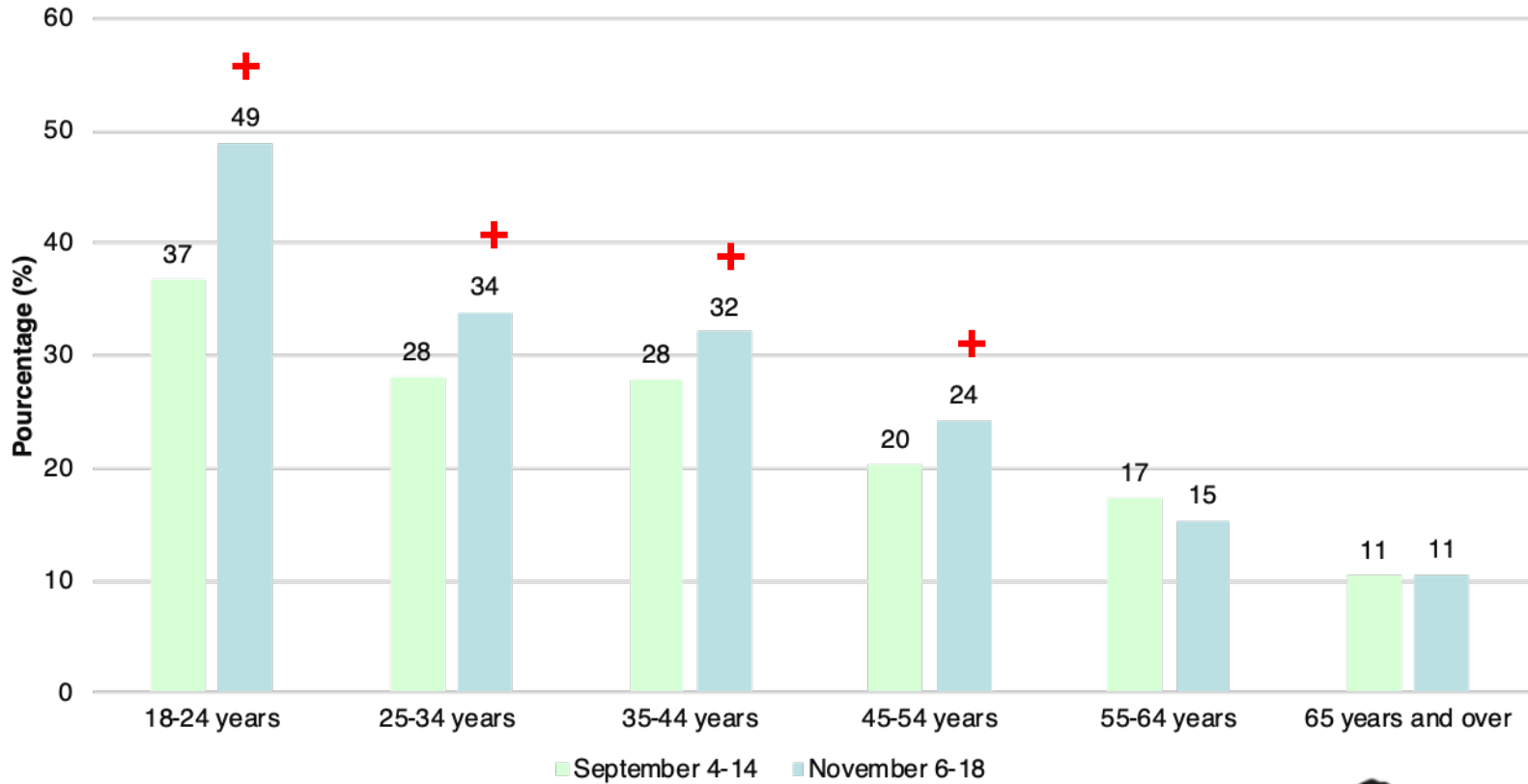
- Current levels of anxiety and depression are similar to levels seen in the community of Fort McMurray, 6 months after the devastating wildfires of 2016
  - Probable generalized anxiety (GAD-7): 20%<sup>3</sup>
  - Probable major depression (PHQ-9): 15%<sup>4</sup>



# Results

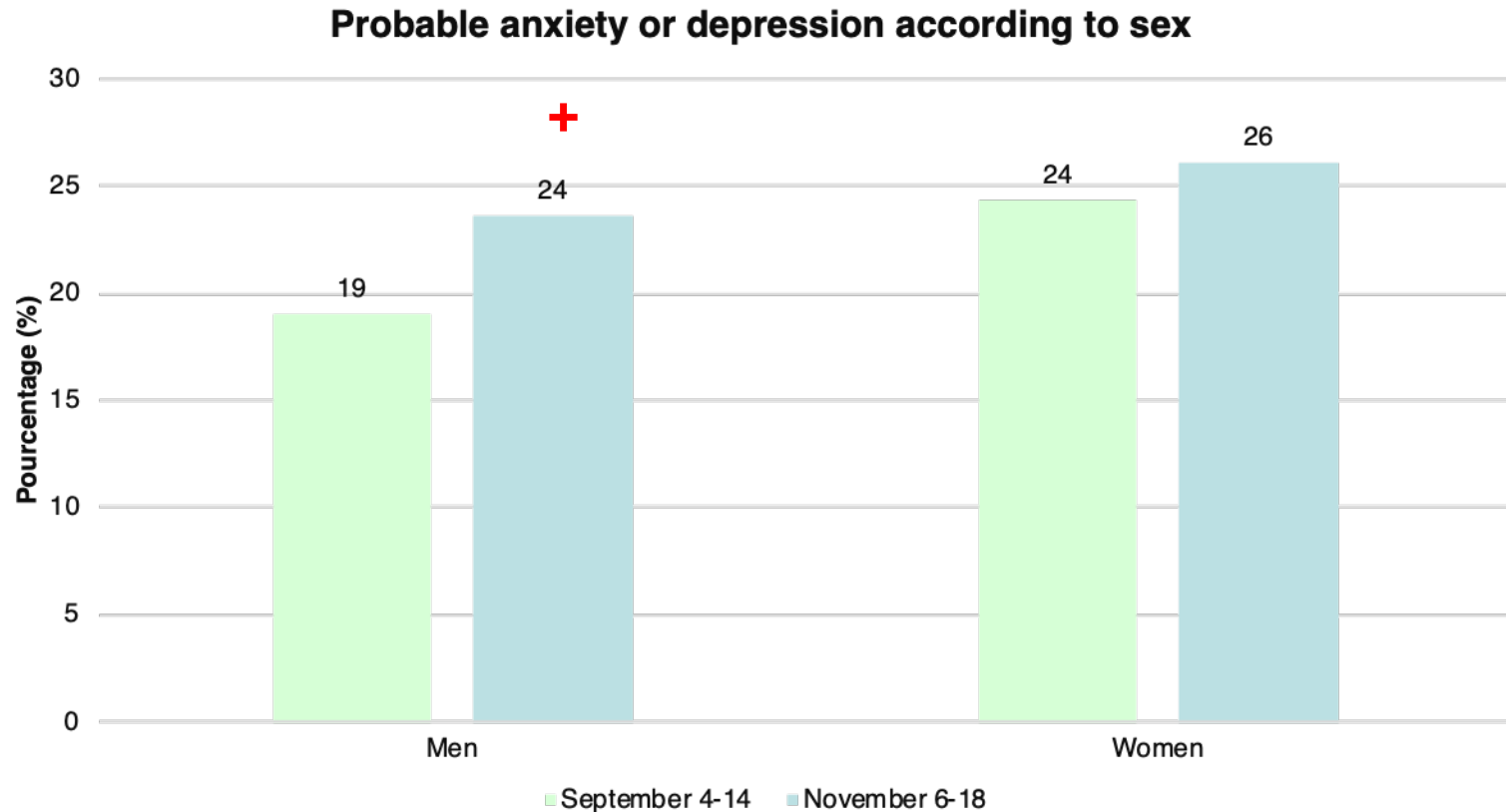
## Evolution of psychological response (7 regions)

Probable anxiety or depression according to age



# Résultats

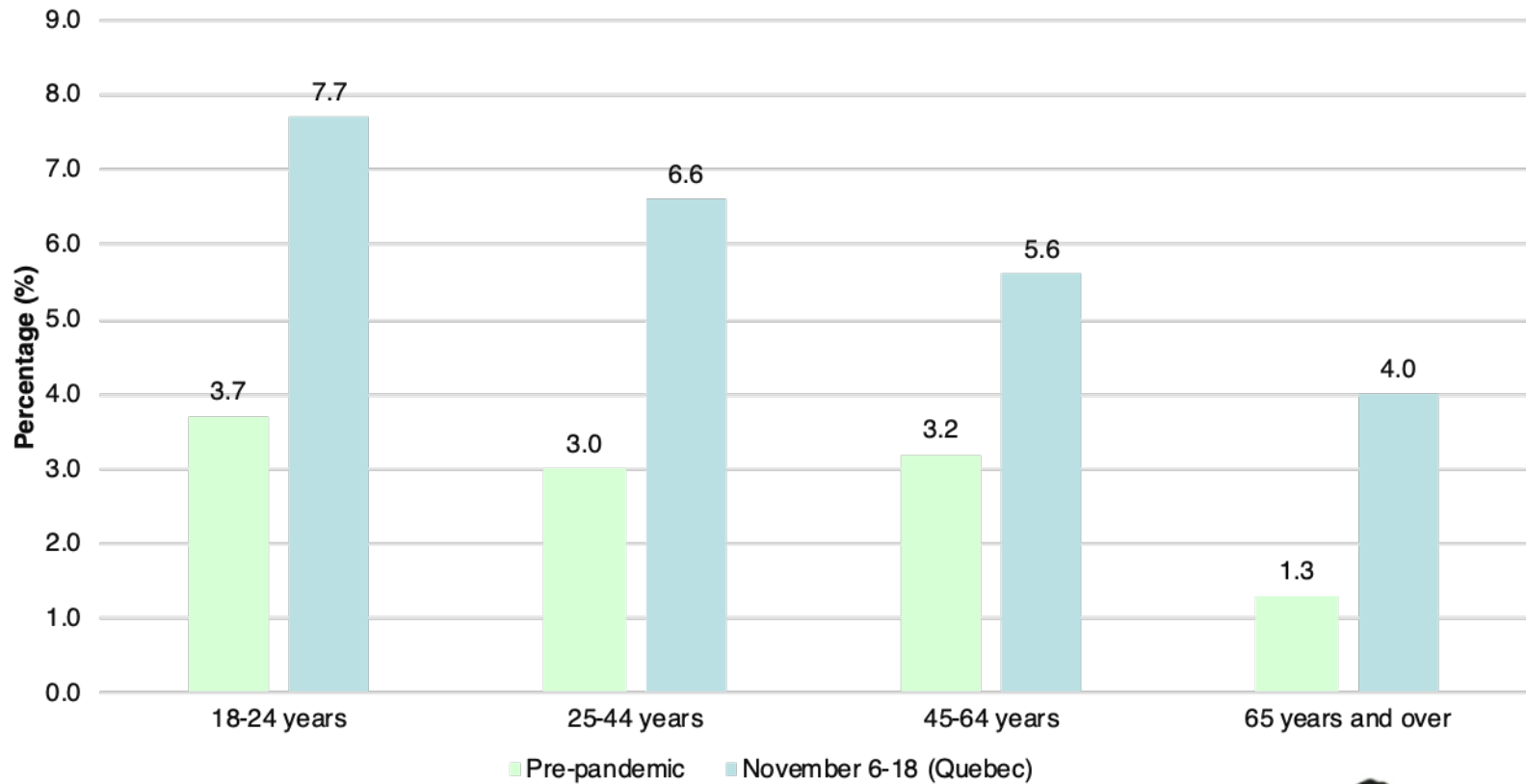
## Evolution of psychological response (7 regions)



# Results

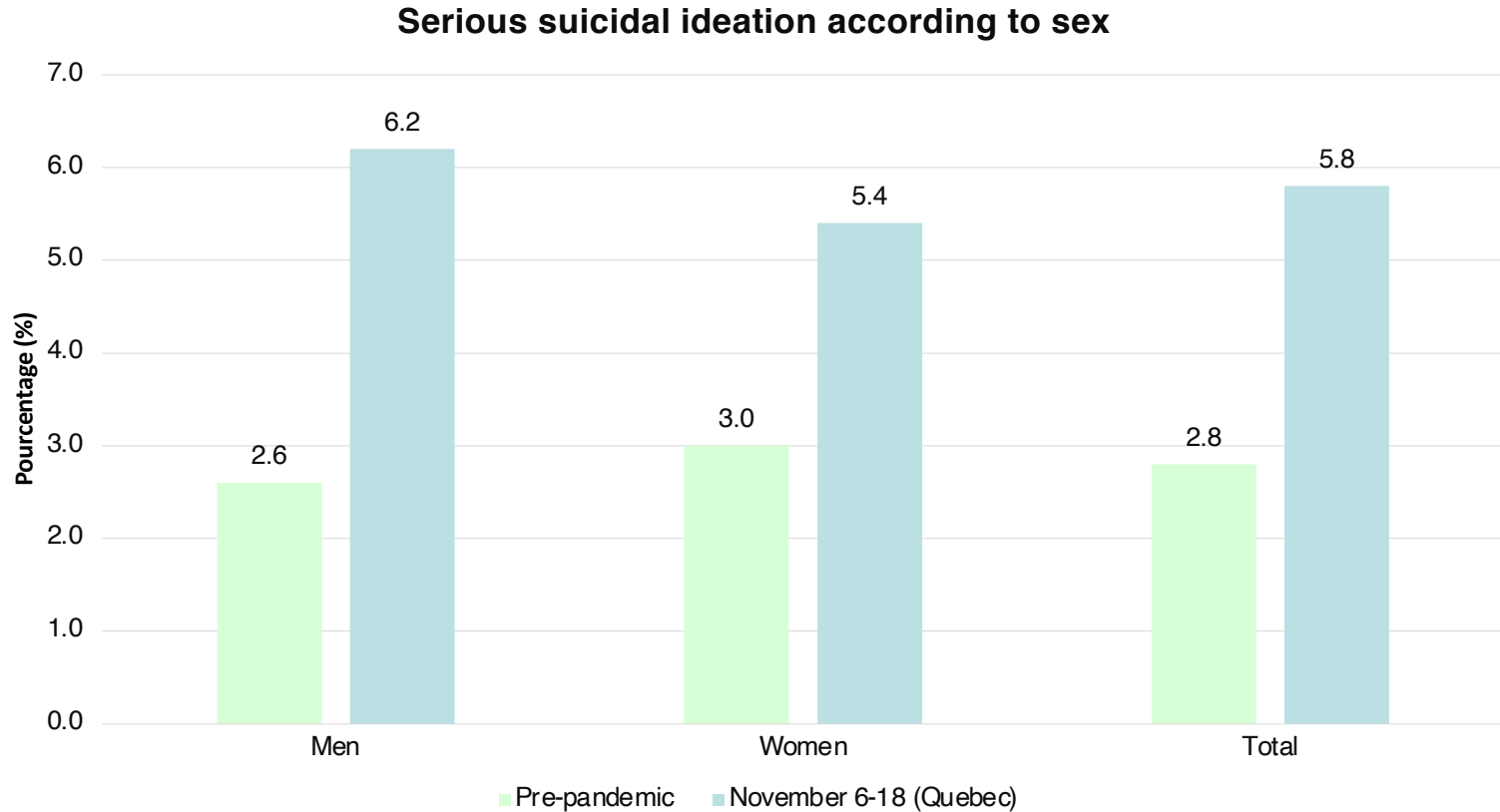
## Evolution of psychological response (Quebec)

Serious suicidal ideation according to age



# Results

## Evolution of psychological response (Quebec)



# Results

## Prevalence amongst anglophones

- Probable generalized anxiety disorder
  - Anglophones: **24.2% (+)**
  - Others: **14.2%**
- Probable major depression episode:
  - Anglophones: **28.5% (+)**
  - Others: **17.8%**
- Probable anxiety or depression:
  - Anglophones: **31.8% (+)**
  - Others: **21.6%**
- Serious suicidal ideation:
  - Anglophones: **7.8% (+)**
  - Others: **5.4%**





# 10 reasons why anglophones are more anxious or depressed

1. They experience more stress on a daily basis.
2. They perceive a higher level of threat to self/family
3. They have suffered more financial losses.
4. They have more often had an experience of COVID-19.
5. They feel more stigmatized.
6. They are more suspicious of the authorities.
7. They get more information about COVID-19 online.
8. They more often adhere to false beliefs about COVID-19.
9. Many find more often the instructions exaggerated and unclear.
- 10. They have a lower sense of coherence.**



# Sense of coherence

(Lindstrom & Eriksson, 2010<sup>5</sup>)

- Core concept of salutogenesis
  - examines the factors contributing to the promotion and maintenance of physical and mental well-being rather than disease
- Composed of three elements:
  1. **Intelligibility**: Ability to understand and analyze stressful situations
  2. **Meaningfulness**: Meaning that a person gives to a stressful situations and in life in general
  3. **Manageability**: Ability to identify and mobilize available resources to deal with stressful situations



# Results

## Evolution of potential acceptance of a COVID-19 vaccine by region (November 6-18, 2020)

	Acceptance	Refusal	Hesitation
<b>Mauricie-CDQ</b>	58.9%	17.2% (+)	24.0%
<b>Estrie</b>	58.2%	16.2%	25.6%
<b>Montréal</b>	61.4%	14.8%	23.8%
<b>Laval</b>	61.9%	14.6%	23.6%
<b>Lanaudière</b>	62.1%	12.5%	25.5%
<b>Laurentides</b>	59.0%	17.4% (+)	23.7%
<b>Montérégie</b>	66.7% (+)	10.8% (-)	22.6%
<b>5 small regions</b>	64.8%	12.3%	22.9%
<b>All of Quebec</b>	62.2%	14.1%	23.7%



# Results

## Evolution of potential acceptance of a COVID-19 vaccine (7 regions)

 **June 2020** (7 regions)

Acceptance: **70%**

Refusal: **12%**

Hesitation: **19%**

 **November 2020** (7 regions)

Acceptance: **62% (-)**

Refusal: **14% (-)**

Hesitation: **24% (+)**

 **September 2020** (7 regions)

Acceptance: **65%**

Refusal: **16% (+)**

Hesitation: **19%**



# Results

## Groups less likely to accept the COVID-19 vaccine

(November 6-18, 2020)

- Younger adults:
  - 18-24 years : 55.1%
  - 25-34 years : 50.9%
  - 35-44 years : 53.3%
- Less educated individuals : 53.3%
- Immigrants : 54.0%
- People less at risk : 56.9%
- Health care workers 57.2%
- Women: 58.0%
- **Anglophones: 59.1%**



# Key points

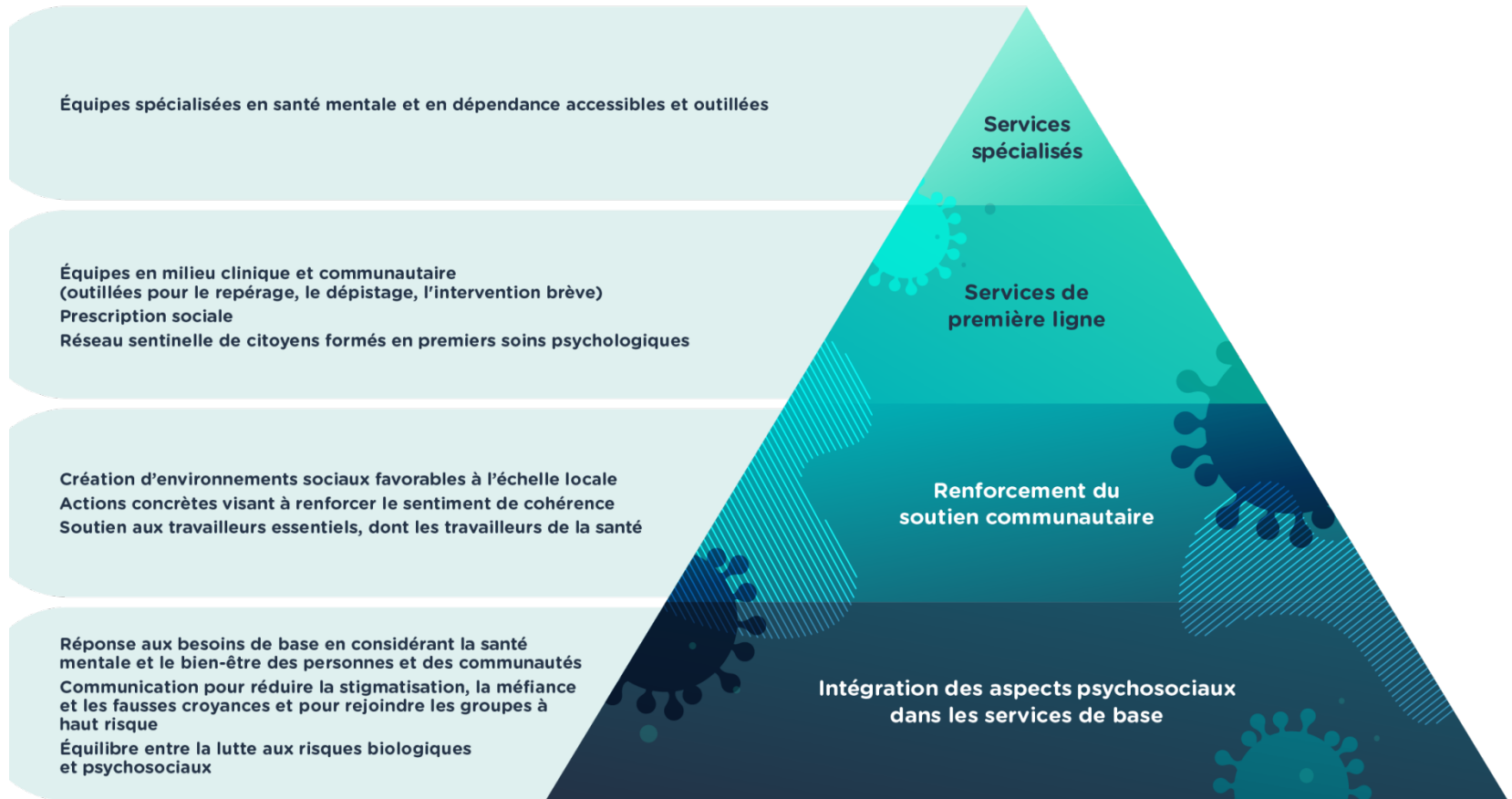
1. **One in 4 adults** reports symptoms consistent with generalized anxiety disorder or major depression.
2. **One in 2 young adults** reports symptoms consistent with generalized anxiety disorder or major depression.
3. This phenomenon is on the rise since September, especially among men and young adults.
4. Serious suicidal thoughts are twice as common as before de pandemic.
5. The situation is worse in **Montreal**.
6. The situation is worse for **English speakers**.
7. Both the pandemic and the infodemic influence psychological health.
8. The sense of coherence is a very important protective factor.
9. Only 6 in 10 adults would be ready to receive a vaccine (decreasing).



# Stepped-care model

(adaptation de Roberge et al., 2020<sup>6</sup>)

## Pistes d'action



# Avenues for action

- **Specialized mental health services:** Accessible/equipped teams
- **Front line services:**
  - Clinical AND community teams (outreach, early screening and intervention)
  - Social prescription
  - Psychological first aid training (sentinel networks)
- **Strengthening community support:**
  - Creation of favorable social environments at the local level
  - Concrete actions aimed at strengthening the sense of coherence
  - Support for the workforce, including healthcare workers
- **Integration of psychosocial aspects in basic services:**
  - Responding to the social needs of individuals and communities
  - Improved communication strategies
  - Balance between the fight against biological and psychosocial risks





# Outreach approach (Généreux et al., 2019/2020<sup>7-8</sup>)

## Intervention principles

- Acting close to citizens, in the community
- Acting upstream of problems
- Promotion of overall health
- An inclusive approach
- An approach that promotes self-determination
- Actions at different levels (from the individual to the collective)
- A model inspired by previous knowledge
- A model complementary to existing services
- A model relying on interdisciplinarity and partnership
- Work based on strengths and capabilities



# Social prescribing



- Community referral:
  - Enables health professionals to refer people to local, non-clinical services
  - Addresses people's needs in a more holistic way
  - Aims to support individuals to take greater control of their own health
- Range of activities : **volunteering, arts activities, group learning, gardening, cooking, sports, etc.**
- A link worker usually involved

<https://www.kingsfund.org.uk/publications/social-prescribing>



# Psychological first aid

- Emotional and practical support
- Compassionate and non-judgmental interactions
- Objective to bring calm and comfort
- Cycle:
  - **LOOK**: Awareness that there is a problem; what does stress look like in ourselves or others
  - **LISTEN**: Listening to the warning signs in yourself or others
  - **LINK**: Linking to your self-care plan or resources in your community
  - **LIVE**: Living fully, bouncing forward



# How to strengthen the SoC ?

1. Sports and leisure programs
2. Meditation and mindfulness
3. Artistic and cultural activities
4. Storytelling

And any other activity that promotes (Super et al., 2016<sup>9</sup>):

- Reflection
- Empowerment



# Key messages

1. Many are affected by the pandemic, especially young people and essential workers.
2. These psychosocial impacts could be felt for months or even years.
3. The health system alone cannot be responsible for the psychosocial recovery of the population.
4. A preventive approach offered directly in living environments is necessary.
5. In extraordinary situations, we need extraordinary solutions.



# Conclusion

- The pandemic has and will continue to have major psychosocial impacts.
- In order to adapt well, it is important to:
  - Develop a common understanding of risks
  - Work together in the search for solutions
- Our action should not be limited to the management of the event but to all the associated risks (**disaster management vs. disaster risk management**).



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