

**PROJET LAURENT - COVID-IMMUNO research project**  
Participant Brief Report no2  
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## IMPACT OF COVID-19 PANDEMIC ON LIFESTYLE BEHAVIORS AND MENTAL HEALTH OF IMMUNOSUPPRESSED POPULATIONS AND THEIR RELATIVES

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### INTRODUCTION

The COVID-19 pandemic context has led to unprecedented efforts to institute the practice of physical and social distancing in countries all over the world. These physical and social distancing measures have led to major changes in lifestyle habits and social relationships and impacted mental health.

*Projet Laurent* ([projetlaurent.org](http://projetlaurent.org)) is a pan-Canadian “One-health” research program, initiated and co-developed by patient partners, researchers, and health professionals from multiple disciplines. This program aims to evaluate the risks and benefits of pet ownership in immunosuppressed populations. Following the onset of the COVID-19 pandemic in March of 2020, the COVID-IMMUNO subproject of *Projet Laurent* was developed, aiming to provide a better understanding of the impact of COVID-19 and the physical and social distancing measures on lifestyle and mental health of immunosuppressed individuals and their relatives.

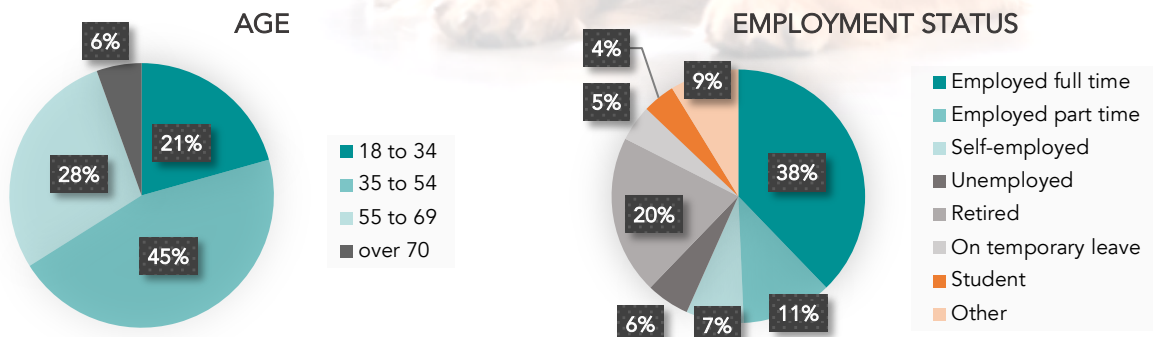
### METHODOLOGY

To achieve the goals of the project, data were collected through two online questionnaires: a first baseline questionnaire from May-August 2020 (T1) and a second follow-up questionnaire from May-September 2021 (T2). Participants were recruited through The Canadian Donation and Transplantation Research Program (CDTRP), other organisations (the Kidney Foundation of Canada, the Canadian Society of Transplantation, Lupus Canada, Crohn's and Colitis Canada) and social media.

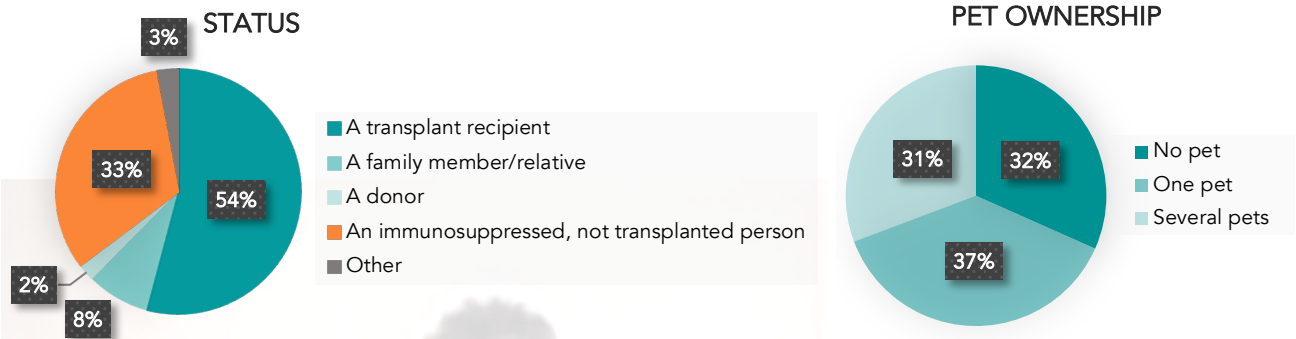
In the following brief report, we present preliminary results of the T2 (2021) questionnaire and comparison with T1 (2020) data. We will introduce a glimpse of our data regarding participant profile, impact of COVID-19 on mental health and how these impacts varied according to pet ownership.

### PARTICIPANT PROFILE (T2 - 2021)

A total of 218 participants completed the follow-up questionnaire at T2 (thank you all!); 93 of them had completed the first baseline questionnaire at T1. At T2, the majority of participants were women (76%) and English-speaking (81%). All participants were over 18 years old; the majority were between 35 and 54 years old (45%) and reported various employment statuses.



Most participants were **transplant recipients (54%)**. As a result of the research team expanding the eligibility criteria of the T2 questionnaire to be more inclusive, 33% of participants at T2 were immunosuppressed, but not transplanted. Relatives of transplant recipients (8%) as well as organ donors (2%) also filled out the T2 questionnaire.



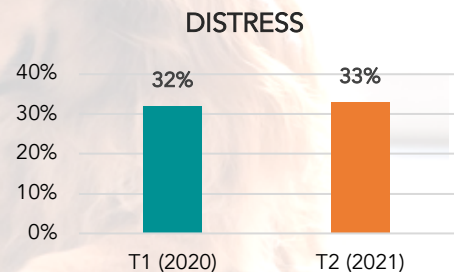
With regards to pet ownership, more than two thirds of participants reported having **one (37%)** or **several (31%)** pets. Among pet owners, most report having at least one dog (64%). Others reported having cats, rabbits, birds and other pets.

**MENTAL HEALTH** (Comparison T1 - 2020 and T2 - 2021)

The physical and social distancing measures instigated following the onset of the COVID-19 pandemic have had noticeable impacts on the mental health of immunosuppressed populations and their loved ones. Impacts observed in our study included, but were not limited to, anxiety and depressive symptoms, distress and resilience.

**DISTRESS**

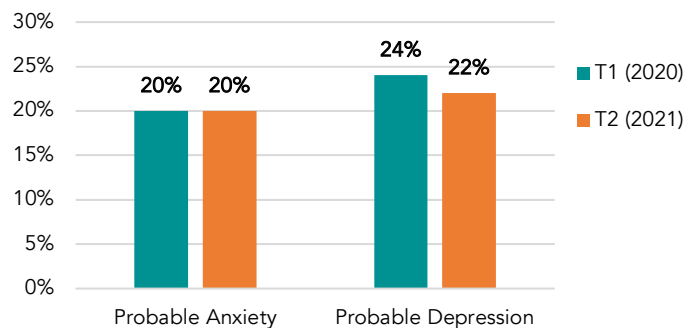
Participants were asked to report their level of distress on a scale of 0 (no distress) to 100 (extreme distress) over the past seven days. Similar distress levels were observed at T1 (2020) and T2 (2021) (32% and 33%, respectively).



**ANXIETY AND DEPRESSIVE SYMPTOMS**

At both T1 (2020) and T2 (2021), a total 20% of participants reported having moderate or severe anxiety symptoms, which indicates a probable anxiety disorder<sup>1</sup> upon further evaluation. Additionally, 24% of participants have a probable depressive disorder<sup>2</sup> at T1 compared to 22% of participants at T2, based on symptoms reported.

**PROBABLE ANXIETY AND DEPRESSION**



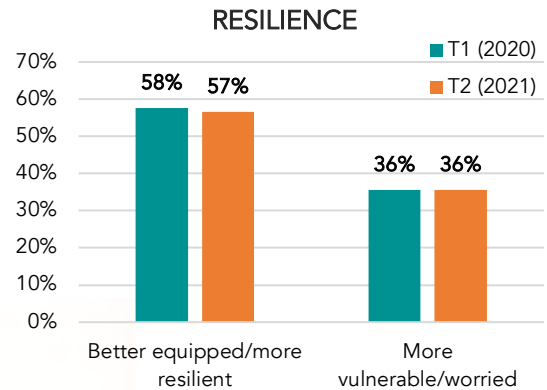
<sup>1</sup> Anxiety symptoms were assessed using a brief self-report scale, the 7-item Generalized Anxiety Disorder (GAD-7), that helps identify probable cases of generalized anxiety disorder (GAD) by asking participants how often, over the past 7 days, they were bothered by different symptoms.

<sup>2</sup> Symptoms of depression were assessed using the 9-item Patient Health Questionnaire (PHQ-9). This scale helps identify probable cases of depression by asking participants how often they were bothered by specific symptoms over the past 7 days.

## RESILIENCE

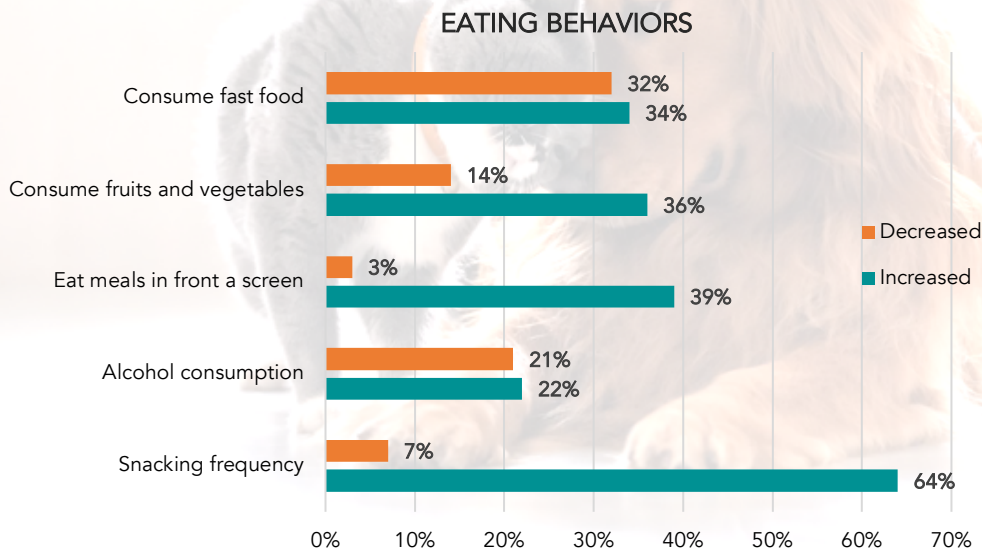
Resilience is defined as the ability to bounce back or recover from stress. When asked how they perceived their resilience compared to the general population, immunosuppressed people and their relatives may feel either better equipped or more resilient due to their transplant/immunosuppressed condition which might have accustomed them to do be careful/vigilant, or more vulnerable/worried because of the risks of complications associated with contracting COVID-19.

In our study, similar proportions of participants reported being better equipped/more resilient and more vulnerable/worried compared to the general population in 2020 and 2021. Indeed, more than half of participants (58% and 57% in 2020 and 2021, respectively) have indicated feeling better equipped than the general population, while 36% indicated they felt more vulnerable or more worried at both times.



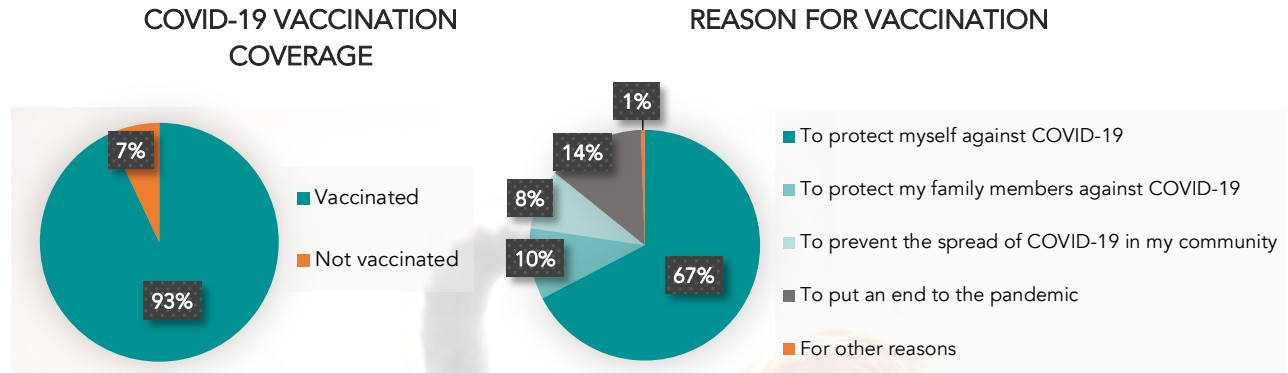
## NUTRITION (T2 - 2021)

At T2 (2021), participants were asked how their eating behaviors and food consumption changed since the onset of the COVID-19 pandemic. 64% indicated that they snacked more frequently than usual and 39% mentioned eating in front of a screen more frequently. Additionally, 36% reported consuming more fruits and vegetables while 34% indicated consuming more fast food.



## VACCINATION (T2 - 2021)

In 2021, most participants reported being vaccinated (93%) against COVID-19. Approximately two-thirds (67%) of them reported that they got vaccinated to protect themselves against COVID-19, while others mentioned it was to protect their family members against COVID-19 (10%), to prevent the spread of COVID-19 in their community (8%) and to put an end to the pandemic (14%). Additionally, 60% of participants indicated that their priority was to get vaccinated as quickly as possible, while 30% indicated that their priority was to get vaccinated with the most effective vaccine.



## CONCLUSION

In summary, this preliminary report provides a good portrait of our cohort participant profile. Follow-up analyses will evaluate the impact of the COVID-19 pandemic context and the physical and social distancing measures on lifestyle and mental health and how these impacts varied according to pet ownership. We will keep you informed!

Thank you to all participants! If you have questions or comments, please contact *Projet Laurent* Research Coordinator, Nathalie Bedrossian, at [nathalie.bedrossian.chum@ssss.gouv.qc.ca](mailto:nathalie.bedrossian.chum@ssss.gouv.qc.ca)

Thank you to the **Projet Laurent** team and collaborators for their contribution to this project!

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