

Preventing and Appeasing COVID-19 Vaccine Tension in Schools to Protect the Well-Being of Children and Adolescents in Québec, Canada

Tara SANTAVICCA¹, Anabelle VANIER-CLÉMENT¹, and Cécile ROUSSEAU²

1 Research Institute of McGill University Health Centre, Montreal, Quebec, Canada

2 Division of Social and Cultural Psychiatry, McGill University, Quebec, Canada

Corresponding Author: Tara Santavicca, MScPH, CoVivre, 7085 Hutchison, Montréal (Qc), Canada, H3N 1Y9
Email: tara.santavicca@mail.mcgill.ca

Abstract

Objectives: This article describes an intervention that took place in Québec, Canada, to mitigate COVID-19 vaccine tension in schools, exacerbated by the 12-17 years old vaccination campaign. Building on this initiative, it proposes guiding principles for prevention and intervention in conflict around COVID-19 vaccination in and around schools.

Intervention: Three complementary tools were developed by a community program, CoVivre, in collaboration with an interdisciplinary team, to help practitioners and parents understand vaccine tensions and their impact on youth, and to suggest simple ways to prevent and intervene in vaccine related conflicts.

Recommendations: A thorough research evaluation could not be performed due to the rapid crisis response; however, the tools received positive feedback by practitioners, institutions, and decision makers. Recommendations were structured around the following principles: (a) fostering transparent and nuanced health communications; (b) avoiding confrontation and refusing to escalate while strongly condemning criminal acts; (c) encouraging open dialogue; and (d) preserving relationships.

Implications: Mental health consequences of public health interventions should be considered at inception to avoid collateral damages. Removing children from the heart of societal conflict and maintaining the family-school relationship is crucial to child development. It is imperative to engage interdisciplinary teams to protect youth from societal polarization, and provide an opportunity for growth and resilience. This initiative suggests that more research is needed on the impacts of encouraging an open dialogue around vaccination, and adopting an empathetic approach amongst youth towards others who may not share the same opinion.

Keywords: Vaccine tension; school intervention; COVID-19; social polarization; health communication.

Introduction

This article describes an intervention that took place in Québec, Canada, as a rapid non-repressive response to mitigate COVID-19 vaccine tensions in and around schools, as these tensions unfolded in early Fall 2021, and as they were exacerbated by the 12- to 17-year-olds vaccination campaign. Building on this initiative, this article proposes guiding principles for action, as well as interventions to prevent and intervene in and around schools, on conflicts related to COVID-19 vaccination, at a time when society was highly divided about vaccination. It suggests more research is needed on the impacts of this approach on youth and schools.

Vaccines are a safe and effective way to protect against viral infections and reduce transmission (Vetter et al., 2018). Vaccination in children has been used for decades to protect against severe illness including polio, tetanus, mumps, measles, rubella, varicella, and more (Vetter et al., 2018). Historically, parents have been hesitant to vaccinate their child for various reasons including health safety, religion, social factors, and past experiences (Dubé et al., 2013). Prior to the COVID-19 pandemic, over 100 countries already had vaccine mandates, mainly around childhood vaccination (Gravagna et al., 2020).

Since March 2020, the widespread transmission of the SARS-COV-2 virus, referred to as COVID-19, has led to the adoption of several public health measures and governmental guidelines, to maintain the safety and well-being of the population worldwide (Ayouni et al., 2021). Following the rapid and effective development of several vaccines against the COVID-19 virus, these vaccines became available within Canada, in November 2020 for adults (18 years old and over), in May 2021 for children aged 12 to 17 years old, and in November 2021 for children 5 to 11 years old (Health Canada, 2022). Within just a few weeks, vaccination in Québec schools increased vaccine coverage among youth to that of the adult population (Morissette et al., 2022).

Growing COVID-19 Vaccine Tension

In August 2021, “vaccine passports” were announced for adults and children aged 13 years and older in the province of Québec, Canada, to access “non-essential” public spaces and services, and to participate in extracurricular activities (Government of Quebec, 2022). This appeared to create two unequal groups of citizens: the vaccinated and the unvaccinated (Labbé et al., 2022; Maclure & Bisson, 2022). The introduction of vaccine passports was contrasting with the approach taken at the start of the vaccination campaign, when vaccination was not mandatory and the Québec population was being highly encouraged to get vaccinated through various strategies (a Québec-wide lottery for instance; Government of Quebec, 2022; Lord, 2022). With the inception of the vaccine passport and the political discourse strongly in favor of vaccination, the approach seemed to move from using incentives (i.e., vaccine lottery) to using rules and regulations in efforts to “convince” people to get vaccinated, or else there would be consequences to what they could do in society (Dubé et al., 2022; Lord, 2022). The introduction of the vaccine passport led to either silent or vocal social tension, polarization, and radicalization (Bardosh et al., 2022; Labbé et al., 2022). This tension was accompanied and partly nourished by a shrinking of the democratic space (Bardosh et al., 2022), as has been observed in many countries since the beginning of the COVID-19 pandemic (Braillon, 2021). The existence of a real democratic space around vaccination would have allowed the population to discuss measures and consensus, and to respectfully express different visions and positions around the pandemic and how to move forward (Tworek et al., 2020).

In this increasingly polarized sociopolitical context around vaccination against COVID-19 in Québec, the Greater Montreal Area experienced several events in the Fall of 2021. Specifically, events took place around schools and included anti-vaccination protests, intimidation of youth and teachers, vandalized schools, rallies, and even face-offs in front of schools between “anti-vaxxers” and “pro-vaccine” parents who aimed to defend their children from disinformation and intimidation (Aubin, 2021; Morin-Martel, 2021; Scali, 2021). To appease parents’ and schools’ worries, the provincial government passed a decree forbidding protests (when linked to COVID-19 infection-control measures and vaccination) 50 meters or less from schools (National Assembly of Quebec, 2021).

Vaccine tension around schools, in Fall 2021, in Québec, could have been predicted. Children may be minimally affected by the COVID-19 virus, yet epidemiological data on its transmission warrants vaccination of this age group within Québec (Health Canada, 2022; Sauvageau et al., 2021). The pragmatic choice to vaccinate youth in schools, as done with other vaccine rollouts, increases accessibility for many families, thus, having the potential to increase the vaccination rate significantly, as seen in previous vaccination campaigns (Cheung et al., 2015), and more recently in Québec with COVID-19 vaccination (Morissette, 2022). In a polarized social context, this practice may, however, shatter the relative emotional safety of the school environment (Catalano et al., 2004). Considering that

children and youth carry an important symbolic value and that society is especially invested to protect their well-being, they have often been at the heart of debates around vaccination (Mckee & Bohannon, 2016). Some families and school staff may feel that the school neutrality is lost when COVID-19 vaccination is promoted in this space, and that this is endangering the freedom of their choice. Due to this context, vaccinating in schools can both fuel school community tensions, and displace larger social tension around vaccination in and around schools. Thus, schools can then become a symbol of the struggle against vaccination and against sanitary measures.

Vaccine Tensions Impact on Children and Adolescents

Vaccine tensions impacts have been documented in children and adolescents, such as bullying among peers, increased feelings of social exclusion, and decreased cohesion within the school team (Labbé et al., 2022; Lachapelle, 2021). These impacts are to be added to the emotional distress, anxiety, or depression experienced by youth from the earlier stages of the COVID-19 pandemic, including social isolation, grief, fear, and loss, without youth and their families necessarily having effective coping strategies to address this distress (Hsieh et al., 2021; Loades et al., 2020). A Canadian cross-national study has also highlighted mental health decline in families with children under the age of 18 (Gadermann, et al., 2021). Vaccine tension has added an extra layer of burden on children, parents, and school teams, with loyalty conflicts between the family and school, as well as increased stress-related symptoms among youth (Bardosh et al., 2022; Lachapelle, 2021). Just as they must be protected from other types of tension, children and adolescents need to be shielded from COVID-19 vaccine tension, through targeted prevention and intervention strategies in and around schools. The current literature has, so far, minimally documented the impact of vaccine tension in youth, and the ways their well-being can be protected from this tension.

The CoVivre Program

The CoVivre program is an independent emergency intervention project put in place during the first wave of the COVID-19 pandemic in the Greater Montreal Area, Québec, Canada. The program has acted as a facilitator and accelerator in supporting initiatives aimed at reducing socioeconomic and health disparities caused by the pandemic (CoVivre, 2022). CoVivre has had the flexibility to respond to current needs on the ground, in a timely manner, and the discussed intervention came as a rapid response to the growing tension and polarization around COVID-19 vaccination, in Québec, at the end of Summer 2021. The objective of the intervention was to rapidly develop adapted tools and resources for schools and professionals in contact with youth, and in doing so, to support them in understanding, preventing, and diminishing vaccine tension. The purpose of this article is to document the steps of this rapid-response intervention, while acknowledging the methodological limits of an emergency intervention, and to describe and discuss the proposed solutions to deal with vaccine tension in and around schools, in order to inform future vaccination campaigns for youth in Canada and elsewhere.

Intervention: Preventing and Appeasing COVID-19 Vaccine Tension in Schools

The CoVivre program began documenting vaccine tension in and around schools, and how they impacted youth, as a result of observations made by the team and its community, and institutional partners, at the end of August 2021. With mass vaccination taking place in high schools and CÉGEPS in September 2021, the team focused on children and adolescents with the intention to help protect the most vulnerable from tension (CoVivre, 2022). To document vaccine tension in and around schools, the CoVivre team collected testimonials, between August and October 2021, in diverse settings including high schools, during extracurricular activities, and in discussions with other specialists.

Forming an Interdisciplinary Team

Once the relational and emotional consequences of vaccine tension on children and adolescents had been documented, CoVivre brought together an interdisciplinary team of scholars with whom to collaborate in order to develop the desired tools, guiding principles, and prevention and intervention strategies. This approach aimed to weave together perspectives from different yet complementary disciplines to address a complex situation from various angles. The transdisciplinary expertise spanned from pediatric psychiatry, public health, pediatric microbiology and infectiology, to medical anthropology, health history, cultural mediation, and communication. In collaboration with these scholars, CoVivre developed a tool to understand, prevent, and act on vaccine tension in the school setting (see Appendix A). In addition to the integral version of this tool, a two-page summary was developed to facilitate the use of the resource for schools and professionals in contact with youth (see Appendix B), as well as an illustrated annex with

vignettes describing the documented vaccine tension (see Appendix C). In complement to these documents, four videos explaining the tool's key points were produced (see Appendix D).

Developing and Disseminating the Tools

After describing the social and political context around COVID-19 vaccination in Québec, in August 2021, the team analyzed the processes by which vaccine tension escalated in different social spaces, including around schools, and stated that this tension had documented impacts on children's and adolescents' well-being and on school teams' cohesion. With these observations as a basis, the team proposed guiding principles for preventing vaccine tension in the school community, and for intervening when conflict arises. The creation of the vignettes was facilitated by testimonials received by the CoVivre team. To preserve confidentiality, the vignettes' verbatim were slightly modified and pseudonyms were used.

The target population for this resource included schools and professionals in contact with youth, policy makers, public health officials, and health institutions responsible for putting in place the mass vaccination campaign. "Schools" included but were not limited to primary education, high schools, vocational schools, and post-secondary programs called "CÉGEPs". Children and adolescents affected by vaccine tension, and thus targeted through those intervention tools could be anywhere between the ages of 5 and 17.

These resources were presented (online) to institutional partners (health, school boards, police, government) and to community partners through youth- and school-oriented concertation tables in the Greater Montreal Area. Videos (French only) presenting the tools' main ideas were produced and made available online, to make the material accessible to a wider audience (in terms of age, literacy level, time availability, etc.), and to humanize the intervention through the voice and image of one of its main investigators. The written tools were made available in French and English to reach most schools in the province. The dissemination of these resources was primarily done through the above-mentioned concertation tables, through contacts at the Ministry of Education (provincial level), through school boards, and through CoVivre's partners in regional health institutions, in local public health teams, at the city level, and in pre-existing community groups and organisms, and with community or religious leaders.

Description of the Tools' Content

This section presents an overview of the vignettes tool developed by the CoVivre program, as well as the two-page summary of the main intervention tool. Both tools were illustrated in a way to make them easily accessible for professionals working in school settings or around children and families. For detailed context and suggestions for prevention and interventions in schools, please refer to the main interventional tool by Rousseau, Vanier-Clément et al. (2021; see Appendix A).

Vignettes

The proposed vignettes brought to life real perspectives, experiences, and feelings around vaccine tension and its impacts, and could serve as a starting point to initiate dialogue in the classroom and to create empathy between children and adolescents around various vaccine positions. They explored the relational and emotional consequences of the COVID-19 vaccine debate and associated tension, for children and youth. The vignettes showed different types of relations and settings in which vaccine tension and their impact were at play: in peer relations; in youth's relations with teachers at school; in relations involving the family, peers and schools; in relations within the school team; and lastly, in the school environment. Examples of the vignettes can be found in Table 1, and the tool can be found in Appendix C.

Table 1. Vignettes examples describing vaccine tension (see Appendix C)

Type of Relations	Vignette Examples
Peer Relations	<p><i>"I can't stand to hear people argue about the vaccine and the vaccine passport. It's really stressing me out. Why is it so complicated to get along?" – Amelia, age 17</i></p> <p><i>"Dance saved my life a few years ago. I don't want the vaccine, but the idea of being locked up at home for another year is unimaginable. I guess a vaccine against my will to attend dance is better than dealing with the difficulties at home. It just makes me angry." – Helen, age 15</i></p> <p><i>"I feel like I'm hurting people around me because they tell me it's selfish not to get the vaccine... but the vaccine scares me, and I don't know what to do. I don't know who to talk to about it." – Marylena, age 17</i></p> <p><i>"Even though I am vaccinated, I have doubts and questions about the vaccine. My friends often talk about it, but I'd rather not say anything because I'm afraid they'll make fun of me." – Sebastien, age 16</i></p> <p><i>"My boyfriend says I'm a 'chicken' because I'm vaccinated. A 'loser' who does what everyone else does!" – Adam, age 15</i></p>
Youth in Schools	<p><i>"My teacher told me that if I wasn't vaccinated, I wouldn't be able to participate in the assignments (outside of school) and that I would fail my class. I feel pressured to get vaccinated." – Sam, age 14</i></p>
Family, Peers, and Schools	<p><i>"I would really like to get vaccinated so I can do activities like all my friends, but I can't do it without my parents' permission, and they won't allow it." – Audrey, age 13</i></p> <p><i>"The kids in my class call my family 'idiots' because they don't believe in the vaccine. It makes me want to fight." – Justin, age 12</i></p> <p><i>"I'm on the neighborhood baseball team, the end-of-season games have started, but I can't participate because I only have one dose. Why did my parents wait so long to get me vaccinated? I feel like I'm letting my team down." – Fred, age 13</i></p> <p><i>"My parents don't want me to be around 'unvaccinated' people, nor do they want them to come to my house. My best friend is not vaccinated, but I want to say that he is, so I can continue to hang out with him." – Noah, age 15</i></p>
School Team	<p><i>"My colleagues laugh and insult the 'anti-vax' people, as they say, so I don't go in the teacher's lounge anymore. I'm really afraid of their judgment, and not really in the mood to come to work." – Issa, age 37</i></p> <p><i>"I think some of the staff are not even vaccinated! It's not right, they're putting me in danger, I'm afraid for my family." – Javier, age 32</i></p>
School Environment	<p><i>"I've seen demonstrations on TV in front of schools. It's violent, it scares me, I'm afraid it's going to happen in my school. I asked my parents to stay home." – Edith, age 13</i></p> <p><i>"We can't even protest now; we can't say anything! It's not right." – Simon, age 32</i></p>

Two-Page Summary of the Intervention Tool

The two-page summary addressed the impact of vaccine tension on children and adolescents, the polarized socio-political context around vaccination, guiding principles for action in schools, and measures for prevention and intervention on vaccine tension in school settings (see Appendix B). Here we elaborate on the development of these guiding principles and suggested intervention measures.

Context of Vaccine Tension Around Schools in the Fall of 2021 in Québec. In the Fall of 2021, in Québec, social and political processes at play increased vaccine tension into a polarized debate between "pro-vaccines" and "anti-vaccines". An escalation was seen between these two groups in the political discourse, in the media, and in society at large (Bardosh et al., 2022). Both positions were moralized (a "good" and solidary decision versus a "bad" and individualistic decision), generalizations and oversimplifications were made (i.e., all vaccinated people are "like this", and all unvaccinated people are "like that"), and disqualifying language, insults, and other verbal violence was tolerated and used in social and mainstream media and by public figures. All the while, democratic space to express doubts, preoccupations, or critiques about vaccines, or the measures shrunk (Bardosh et al., 2022; Lachapelle, 2021; Lord, 2022).

As a growing proportion of the eligible Québec population became vaccinated, several citizens supported the increasingly constraining measures adopted by the government in relation to vaccination. Other citizens, especially the non-vaccinated, but also many vaccinated, worried that two classes of citizens with different privileges were being created according to vaccination status. This held the risk of: increasing discrimination and marginalization of already marginalized groups; social fracture and social unrest; and decreased trust in the government, institutions, health professionals or vaccines, in the short or longer term.

Other underlying factors for the tension were the chronic stress caused by the pandemic, the lack of recognition of the emotions and distress motivating positions, the lack of historical perspective about pandemics and the role of vaccines, and the lack of understanding of the complexity and heterogeneity of vaccine hesitancy or refusal. This polarized sociopolitical context around vaccination against COVID-19 did percolate around and into school environments, especially considering the important symbolic value children and youth carry in our society, and given vaccination of 12- to 17-year-olds was massively starting in schools in September 2021.

Principles for Action. Four guiding principles were elaborated from theories and intervention approaches in interdisciplinary fields, with the goal of preventing and intervening on vaccine tension in and around schools. Firstly, it was encouraged to foster transparent, caring, and nuanced health communications (Tworek et al., 2020) by recognizing that the scientific knowledge behind institutional choices about vaccination was still limited in terms of immunization and health measures (Malecki et al., 2021), by ensuring governmental measures were followed while allowing for their respectful criticism, and by avoiding generalizations about the reasons behind individual and parental positions and choices regarding vaccination.

The second principle was to avoid confrontation and refuse escalation while strongly condemning criminal acts such as threats, vandalism, and aggression. At the same time, it was recommended to re-establish a respectful dialogue between divergent positions and normalize these differences (Capizzo, 2018).

Since safe spaces are effective foundations for anti-bullying approaches in schools (Ansary et al., 2015), the third principle encouraged safe spaces for individuals to speak, while restoring the legitimacy and respect for individual or parental rhythm and choice around vaccination (Capizzo, 2018; Gagneur, 2020). These spaces should have emphasized the legitimacy of the individual or parental choice (even if this choice could be worrisome), while reminding people of their obligations towards collective well-being, all of which requiring delicate negotiations (Korn et al., 2020).

The last principle emphasized the preservation, even the nurturing, of relationships beyond existing disagreements. Indeed, although political, linguistic, organizational, religious, and other disagreements have always been present between people, social cohesion remains possible (Jupp et al., 2007). This guiding principle emphasized the need to recall, especially at a time of crisis, the crucial social and psychological role of these bonds (between youth, parents, school colleagues, children and school staff, school staff and parents, etc.), and to prioritize these relationships over visions, positions, and decisions around vaccines or health measures (Catalano et al., 2004). In the case of the school team, this meant uniting first and foremost all school personnel around their mandate (i.e., the education and development of children, adolescents, and young adults) especially as the centrality of this mandate was being more than ever demonstrated with pandemic-related school closures (Catalano et al., 2004; Gilligan, 1998).

Preventing Tension in Schools. Proposed measures were formulated for different settings to appease tension and prevent conflict, including within the school administration, the school team, and in the classroom.

At the school administration level, it was proposed to send a message to parents that: (a) encouraged reserve and kindness in discussions to maintain an atmosphere of tolerance and respect, (b) encouraged vaccination but also respected individual and parental choice and rhythm while protecting youth and families from exclusion, while at the same time (c) reassuring parents and teachers that health measures were applied in the school.

Within the school team, conflict prevention efforts included recognizing the right to individual choice, and encouraging respect for different visions and choices regardless of what one might think is right. It was also recommended to acknowledge tensions (if they existed), and try to normalize them, while working to maintain cooperation and cohesion among coworkers.

In the classroom, it was suggested to provide students with safe and respectful spaces for exchange around vaccination and possible vaccine tension, using for example the vignettes tool to initiate dialogue, and to normalize the different visions and experiences students may have (see Appendix C). It was recommended to enter in respectful, caring, and non-judgmental dialogue with students, and to present individual or parental choice about vaccines as legitimate. Age-appropriate information on vaccines and their purpose could be provided based on the students' interest and needs, all the while continuing to restrain from judgmental and moralistic language.

Moreover, the concept of vaccine hesitancy could be introduced and discussed to familiarize students with the fact that choosing to get vaccinated or choosing not to is a normal and dynamic decision-making process involving weighing advantages versus potential risks of vaccination, and that getting vaccinated is often not just a matter of

willingness (Rousseau, Monnais et al., 2021). It could also be said that the decision has a legitimate complexity because of the different aspects it touches upon, for example the lack of or difficult access to vaccination and to adapted information about vaccines, as well as personal, family, or collective past or present experiences with the health system or with vaccination itself. In addition to this, social pressure and various beliefs may come into play when considering to get vaccinated or not (Dubé et al., 2016; Rousseau, Monnais et al., 2021).

Youth were encouraged to be empathetic and respectful towards those who might not have the same perspectives as themselves. In efforts to reduce tension and feelings of divide or exclusion among students, it was recommended to carry out inclusive activities that do not distinguish between vaccinated and unvaccinated youth. Moreover, in the case where the family unit did not agree on a common choice regarding a child's vaccination (i.e., parental consent was necessary for the vaccination of youth 13 years-old and under), preserving the family's cohesion and relationship should be put forward, and mediation should be recommended, if needed.

Intervening When Conflict Arises. Despite prevention and mediation efforts and measures, in the case of a demonstration or protest near a school, or in the case of an internal incident, it was suggested to first reassure children or teenagers, and to explain the situation to them at an age-appropriate level, bringing back the concept that disrespect or violence cannot be justified by disagreement or opposing opinions. The team also insisted on the importance to remain specific, to avoid generalizations about any position, and to refrain from using degrading or stigmatizing expressions (for instance, avoid using “anti-vaxxer”, “pro-vax” or similar terms). If an incident were to occur within the school community, the primary suggestion was to ensure that the school team cohesion was maintained throughout the response. Also, appropriate consequences were to be encouraged independently of individual positions, while minimizing exclusionary measures. Where possible, it was recommended to mediate and promote open dialogue between those involved (whether it be students, staff, or parents) rather than divide them, encouraging first and foremost the maintenance of the relationship.

The Intervention's Scope: Reception of Intervention by Partners

The current intervention rapidly addressed the COVID-19 little spoken vaccine tension in and around schools in Québec, and its impact on youth and school teams, in Fall 2021. It encouraged actors at the macro-level (political decision-makers, ministries, health institutions, public health, school boards) and at the micro-level (school teams and other professionals working with youth), to be attentive to possible vaccine tension and their impacts on youth, and to try preventing or acting on them. The intervention provided professionals and policymakers with tools, including guiding principles and strategies, to help understand, prevent, and intervene on tensions. Given these tensions were poorly documented, and school teams were either frightened and relatively helpless or sometimes in denial of any vaccine tension, this initiative was listened to and overall welcomed. However, it elicited questions and concerns: what was the school's appropriate role and position in this urgent mass vaccination campaign (promoting vaccination, hosting vaccination clinics, remaining “neutral”); was there really a problem in and around schools (tension, polarization and their impact) and would talking about it make it worse?

Although this intervention project was implemented in urgency without the ability to have a structured research method, it took a reflexive approach. The intervention was put forward as the need presented itself, and no formal evaluation of its impact has yet been made. Observations and feedback from partners, through online and in-person meetings, phone calls, and email exchanges, were documented by the CoVivre team to improve resources and answer questions. Initial findings showed a mixed reception from school partners, questioning whether these partners considered vaccine tensions existed and had an impact in school settings: while some welcomed the tools with an apparent relief (possibly because they saw or experienced some of those vaccine tensions), the majority initially remained silent and made few comments. We presume the initial silence could mean several things: a form of disagreement (i.e., they didn't think there were tensions), surprise, or an uneasiness to discuss disagreements in the context of a crisis, in which everyone was being instructed to work together in solidarity to overcome the pandemic (i.e., at that point, “working together” translated into promoting vaccination). Final feedback and reactions to the intervention were constructive and appreciative, implying they were distributed and used widely, paving the way for an impact on youth, families, teachers, and decision makers. A key limitation to this intervention remains that this impact was not measured.

The Teachers

At the level of the teachers, attitudes varied regarding whether vaccine tensions existed at school or not. While it was generally accepted that there were vaccine tensions and exclusion processes between parents and in the population, teachers did not necessarily see these tensions or exclusion processes at play, between children or between students and staff at school. Some said for example, that regardless of a family's position on vaccination and regardless of vaccination status, they wanted to focus on their students' needs and provide them with a reassuring and positive environment, especially in the context of a crisis. They also mentioned that considering this difficult context and the extra pressure that it put on them, they did not have energy to give to vaccine tensions between parents. Nevertheless, they stated that they would certainly intervene if they saw or were informed of a situation of exclusion or bullying between children, due to parental position over vaccines or to vaccine status, as they would in any other similar intimidation or bullying situation. A thorough evaluation of the usefulness for school professionals of the CoVivre program's tools would certainly shed light on how these tools could be adapted to teachers' and school professionals' realities.

The Institutional and Community Partners

In this health crisis, in which scientific knowledge and governmental actions have been evolving daily, it has been difficult to analyze (with little or no ability to take a step back) the complex political and social dynamics associated with the rapid changes, and to know how to best respond to them without taking too many wrong turns. The documents developed by CoVivre with various scholars, and widely distributed to institutional and community partners, rapidly offered school professionals tools to help them make sense of the ever-changing and complex social situation linked to vaccination in the school context and their effects on youth. Working in collaboration with university experts from different disciplines, from health sciences and social sciences, was necessary to develop tools trying to help understand and respond, from different vantage points to a complex social situation requiring these multiple perspectives. In fact, integrating interdisciplinary teams in public health initiatives and mediation efforts is imperative to develop this type of intervention, and, at another level, to protect youth from societal polarization and its effects, and to provide them with an opportunity for growth and resilience.

Overall, the tools were meant to reinforce school professionals' resilience to the stressful, demanding, and conflictual context of mass vaccination during a pandemic, and consequently, through those professionals, to have a ripple effect on children and adolescents, helping them become more adaptable and resilient to the uncertain and conflictual context. Considering that the consequences of vaccine tension on youth are often kept in silence and remain invisible both in the short- and long-term, it is necessary that they be considered in governmental, institutional, and public health approaches to vaccination, as well as by school actors working more closely with youth. We believe that the observations made around and during this intervention are likely to apply to other school settings outside of Québec and Canada, and should thus be taken into consideration when promoting vaccination for youth. In future interventions, it could be beneficial to find ways to also raise awareness among parents about vaccine tensions and their impact on youth and schools, to have a more comprehensive approach to protect children, their families, and schools from these tensions and their impacts.

Implications

The current intervention intended to respond to an urgent situation of growing social division and polarization around the COVID-19 vaccination that manifested itself in and around schools, and that had documented impacts on youth and schools, in Fall 2021. As it is often the case, schools revealed themselves as microcosms of society, and vaccine tensions in and around the Greater Montreal Area schools in early Fall 2021, were a warning signal of growing dissatisfaction and social division. Indeed, the anti-COVID-19 vaccine mandates movement that culminated in early 2021 in weeks-long protests in Ottawa and other Canadian cities (Dyer, 2022), confirmed the social polarization and radicalization around vaccines and vaccine mandates in Canada, the accompanying social fabric deterioration, and the ever-growing need for and importance of opponents to be heard, respectfully, in a democratic society.

While there are limits to this intervention, especially in terms of the little documentation collected and the absence of an evaluation, because of the emergency pandemic context and the CoVivre program's mandate, this article highlights the importance of documenting the intervention process and results. It indicates the need for research on eventual vaccine tension emerging in and around schools, especially in a crisis context with limited time to offer adapted public vaccine education, and in which the population and resources are already, at various levels, under

heightened pressure. Future research and interventions should integrate an evaluative component to provide insights on the impact of youth protection brought through encouraging caring, nuanced, and transparent health communications, and team cohesion in schools.

Truly grasping the complexity of public health crises requires the collaboration of interdisciplinary teams to ensure mental health and social factors are accounted for early on. The current intervention suggests there is potential for reducing vaccine polarization among citizens and youth, in and around schools, by nuancing and respecting positions on vaccination, and through adapted vaccine and vaccine hesitancy education. Maintaining a collaborative family-school relationship, and removing children from the heart of a polarized sociopolitical conflict is necessary to protect their well-being, foster their development, and strengthen their resilience. By encouraging open dialogue, and respect around vaccination within the school community and with the parents, the moral discourse around COVID-19 vaccines can be nuanced, and help youth feel comfortable sharing their views and experiences not only around vaccines, but eventually around other polarized topics. In the present societal context in Canada and elsewhere, capacity to show empathy towards those with different positions is imperative, and we must encourage such practices among youth at every jab there is.

Funding

The CoVivre program would like to acknowledge its funding by the Trottier Foundation and McGill Interdisciplinary Initiative in Infection and Immunity (MI4). Funders had no role in intervention, interpretation of intervention, writing of the manuscript or decision to submit the manuscript.

Acknowledgements

We would like to acknowledge Laurence Monnais, Caroline Quach-Thanh, Ève Dubé, Cindy NGov and Joy Schinazi for their contributions to this project.

Conflict of interest

The authors have no conflict of interest to disclose.

References

- Ansary, N. S., Elias, M. J., Greene, M. B., & Green, S. (2015). Best practices to address (or reduce) bullying in schools. *Phi Delta Kappan*, 97(2), 30-35. <https://doi.org/10.1177/0031721715610088>
- Aubin, E. (2021, September 8). Des vandales antivaccins s'attaquent à une école. *Journal de Montréal*. <https://www.journaldemontreal.com/2021/09/08/une-ecole-secondaire-de-lanaudiere-vandalisee-par-des-anti-vaccins>
- Ayouni, I., Maatoug, J., Dhoub, W., Zammit, N., Fredj, S. B., Ghammam, R., & Ghannem, H. (2021). Effective public health measures to mitigate the spread of COVID-19: A systematic review. *BMC Public Health*, 21(1), Article 1015. <https://doi.org/10.1186/s12889-021-11111-1>
- Bardosh, K., De Figueiredo, A., Gur-Arie, R., Jamrozik, E., Doidge, J., Lemmens, T., Keshavjee, S., Graham, J. E., & Baral, S. (2022). The unintended consequences of COVID-19 vaccine policy: Why mandates, passports and restrictions may cause more harm than good. *BMJ Global Health*, 7(5), Article e008684. <https://doi.org/10.1136/bmjgh-2022-008684>
- Braillon, A. (2021). Lack of transparency during the COVID-19 pandemic: Nurturing a future and more devastating crisis. *Infection Control & Hospital Epidemiology*, 46(4), 497-498. <https://doi.org/10.1017/ice.2020.271>
- Capizzo, L. (2018). Reimagining dialogue in public relations: Bakhtin and open dialogue in the public sphere. *Public Relations Review*, 44(4), 523-532. <https://doi.org/10.1016/j.pubrev.2018.07.007>
- Catalano, R. F., Haggerty, K. P., Oesterle, S., Fleming, C. B., & Hawkins, J. D. (2004). The importance of bonding to school for healthy development: Findings from the social development research group. *Journal of School Health*, 74(7), 252-261. <https://doi.org/10.1111/j.1746-1561.2004.tb08281.x>
- Cheung, S., Wang, H.-L., Mascola, L., El Amin, A. N., & Pannaraj, P. S. (2015). Parental perceptions and predictors of consent for school-located influenza vaccination in urban elementary school children in the United States. *Influenza and Other Respiratory Viruses*, 9(5), 255-262. <https://doi.org/10.1111/irv.12332>
- CoVivre. (2022). *CoVivre program* [Description of program]. <https://sherpa-recherche.com/sherpa/projets-partenaires/covivre/>

Preventing and Appeasing COVID-19 Vaccine Tension in Schools to Protect the Well-Being of Children and Adolescents in Québec, Canada

- Dubé, E., Bettinger, J. A., Fisher, W. A., Naus, M., Mahmud, S. M., & Hilderman, T. (2016). Vaccine acceptance, hesitancy and refusal in Canada: Challenges and potential approaches. *Canada Communicable Disease Report*, 42(12), 246-251. <https://doi.org/10.14745/ccdr.v42i12a02>
- Dubé, É., Dionne, M., & Rochette, L. (2022). Exploring the impact of Quebec's vaccine lottery and vaccine passports on Covid-19 vaccination intention: Findings from repeated cross-sectional surveys. *Human Vaccines & Immunotherapeutics*. Advance online publication. <https://doi.org/10.1080/21645515.2022.2100168>
- Dubé, E., Laberge, C., Guay, M., Bramadat, P., Roy, R., & Bettinger, J. (2013). Vaccine hesitancy. *Human Vaccines & Immunotherapeutics*, 9(8), 1763-1773. <https://doi.org/10.4161/hv.24657>
- Dyer, O. (2022). Covid-19: Ottawa declares emergency as truckers' protest continues. *BMJ*, 376, Article o352. <https://doi.org/10.1136/bmj.o352>
- Gadermann, A. C., Thomson, K. C., Richardson, C. G., Gagné, M., McAuliffe, C., Hirani, S., & Jenkins, E. (2021). Examining the impacts of the COVID-19 pandemic on family mental health in Canada: Findings from a national cross-sectional study. *BMJ Open*, 11(1), Article e042871. <https://doi.org/10.1136/bmjopen-2020-042871>
- Gagneur, A. (2020). Motivational interviewing: A powerful tool to address vaccine hesitancy. *Canada Communicable Disease Report*, 46(4), 93-97. <https://doi.org/10.14745/ccdr.v46i04a06>
- Gilligan, R. (1998). The importance of schools and teachers in child welfare. *Child & Family Social Work*, 3(1), 13-25. <https://doi.org/10.1046/j.1365-2206.1998.00068.x>
- Government of Quebec. (2022). *COVID-19 vaccination passport*. Quebec, <https://www.quebec.ca/en/health/health-issues/a-z/2019-coronavirus/progress-of-the-covid-19-vaccination/covid-19-vaccination-passport>
- Gravagna, K., Becker, A., Valeris-Chacin, R., Mohammed, I., Tambe, S., Awan, F. A., Toomey, T. L., & Basta, N. E. (2020). Global assessment of national mandatory vaccination policies and consequences of non-compliance. *Vaccine*, 38(49), 7865-7873. <https://doi.org/10.1016/j.vaccine.2020.09.063>
- Health Canada. (2022). *COVID-19 vaccines: Authorized vaccines*. Government of Canada, <https://www.canada.ca/en/health-canada/services/drugs-health-products/covid19-industry/drugs-vaccines-treatments/vaccines/pfizer-biontech.html#a1>
- Hsieh, W.-J., Powell, T., Tan, K., & Chen, J.-H. (2021). Kidcope and the COVID-19 pandemic: Understanding high school students' coping and emotional well-being. *International Journal of Environmental Research and Public Health*, 18(19), Article 10207. <https://doi.org/10.3390/ijerph181910207>
- Jupp, J., Nieuwenhuysen, J. P., & Dawson, E. (2007). *Social cohesion in Australia*. Cambridge University Press.
- Korn, L., Böhm, R., Meier, N. W., & Betsch, C. (2020). Vaccination as a social contract. *Proceedings of the National Academy of Sciences of the United States of America*, 117(26), 14890-14899. <https://doi.org/10.1073/pnas.1919666117>
- Labbé, F., Pelletier, C., Bettinger, J. A., Curran, J., Graham, J. E., Greyson, D., MacDonald, N. E., Meyer, S. B., Steenbeek, A., Xu, W., & Dubé, É. (2022). Stigma and blame related to COVID-19 pandemic: A case-study of editorial cartoons in Canada. *Social Science & Medicine*, 296, Article 114803. <https://doi.org/10.1016/j.socscimed.2022.114803>
- Lachapelle, J. (2021, October 25). Déchirés par le vaccin. *La Presse*. <https://www.lapresse.ca/covid-19/2021-10-25/place-aux-lecteurs/dechires-par-le-vaccin.php>
- Loades, M. E., Chatburn, E., Higson-Sweeney, N., Reynolds, S., Shafran, R., Brigden, A., Linney, C., McManus, M. N., Borwick, C., & Crawley, E. (2020). Rapid systematic review: The impact of social isolation and loneliness on the mental health of children and adolescents in the context of covid-19. *Journal of the American Academy of Child & Adolescent Psychiatry*, 59(11), 1218-1239. <https://doi.org/10.1016/j.jaac.2020.05.009>
- Lord, P. (2022, July 28). Free vaccines and lost privileges. *Ottawa Law Review Blog*. <http://dx.doi.org/10.2139/ssrn.3984856>
- Maclure, J. & Bisson, K. (2022). The case for the vaccine passport. *Canadian Journal of Bioethics / Revue canadienne de bioéthique*, 5(1), 128-131. <https://doi.org/10.7202/1087211ar>
- Malecki, K. M. C., Keating, J. A., & Safdar, N. (2021). Crisis communication and public perception of COVID-19 risk in the era of social media. *Clinical Infectious Diseases*, 72(4), 697-702. <https://doi.org/10.1093/cid/ciaa758>
- Mckee, C., & Bohannon, K. (2016). Exploring the reasons behind parental refusal of vaccines. *Journal of Pediatric Pharmacology and Therapeutics*, 21(2), 104-109. <https://doi.org/10.5863/1551-6776-21.2.104>
- Morin-Martel, F. (2021, September 10). Manifestation contre la vaccination devant une école secondaire. *La Presse*. <https://www.lapresse.ca/covid-19/2021-09-10/manifestation-contre-la-vaccination-devant-une-ecole-secondaire.php>
- Morissette, A., Lefebvre, G., Bacque-Dion, C., Bélanger, R., Cazalais-Asselin, F., Lalonde, B., Dontigny, A., Leatherdale, S. T., & Haddad, S. (2022). Disparities in high schools' vaccination coverage (COVID-19). A natural experiment in the Province of Quebec. *Preventive Medicine*, 159, Article 107056. <https://doi.org/10.1016/j.ypmed.2022.107056>

Preventing and Appeasing COVID-19 Vaccine Tension in Schools to Protect the Well-Being of Children and Adolescents
in Québec, Canada

- National Assembly of Quebec. (2021). *Bill 105. An act to establish a perimeter around certain places in order to regulate demonstrations in relation to the COVID-19 pandemic*. Government of Quebec. <http://www.assnat.qc.ca/en/travaux-parlementaires/projets-loi/projet-loi-105-42-1.html>
- Rousseau, C., Monnais, L., Tousignant, N., Mekki-Berrada, A., Mekki-Berrada, W., Santavicca, T., Ngov, C., Guenat, C., & Bolduc, E. (2021). *Comprendre l'hésitation vaccinale au sein des communautés ethnoculturelles dans le cadre de la pandémie de la COVID-19: Version intégrale*. CoVivre, https://sherpa-recherche.com/wp-content/uploads/2021/07/FR_Guide_CoVivre_Long_26-juillet-2021.pdf
- Rousseau, C., Vanier-Clément, A., Santavicca, T., Monnais, L., Quach-Thanh C. & Dubé, E. (2021). *Protéger le bien-être des enfants et des adolescents: apaiser les tensions vaccinales autour des écoles: Version longue*. CoVivre. https://sherpa-recherche.com/wp-content/uploads/2021/10/V.-longue-Tensions-ecoles-CoVivre_13.10.2021.docx.pdf
- Sauvageau, C., De Wals, P., Dubé, E., Gilca, R., Kiely, M., Guay, M., Brousseau, N., & Quach, C. (2021). *Vaccination contre la COVID-19 chez les jeunes âgés de 5 à 11 ans au Québec*. Institut national de santé publique du Québec (INSPQ). <https://www.inspq.qc.ca/sites/default/files/publications/3181-vaccination-covid-19-5-11-ans.pdf>
- Scali, D. (2021, September 20). *Manifestations devant les écoles: une loi pour éloigner les antivaccins?* *Journal de Montréal*. <https://www.journaldemontreal.com/2021/09/20/manifestations-devant-les-ecoles-une-loi-pour-eloigner-les-antivaccins>
- Tworek, H., Beacock, I., & Ojo, E. (2020). *Democratic health communications during Covid-19: A RAPID response*. UBC Centre for the Study of Democratic Institutions. https://democracy2017.sites.olt.ubc.ca/files/2020/09/Democratic-Health-Communication-during-Covid_FINAL.pdf
- Vetter, V., Denizer, G., Friedland, L. R., Krishnan, J., & Shapiro, M. (2018). Understanding modern-day vaccines: What you need to know. *Annals of Medicine*, 50(2), 110-120. <https://doi.org/10.1080/07853890.2017.1407035>

Appendix A

Protecting the Well-Being of Children and Adolescents: Appeasing Vaccine Tension around Schools

This document is intended for Quebec schools and was developed in October 2021 by C. Rousseau (child psychiatrist, McGill U.) and the CoVivre program, in collaboration with É. Dubé (medical anthropologist, INSPQ and U. Laval), L. Monnais (health historian, U. Mtl) and C. Quach-Thanh (pediatric microbiologist-infectologist, CHU Ste-Justine). A 2-page summary sheet is also available, as well as an appendix illustrating the relational and emotional consequences of the debates surrounding the COVID-19 vaccine for children and youth.

1. - Context: Vaccine tension around schools in the fall of 2021

1.1 Vaccination of children and youth against COVID-19

- Vaccination of youth is warranted by available epidemiologic data about transmission of the virus by children, even if they are minimally affected by the virus.
- Using schools as a vaccination site is a pragmatic choice to offer vaccination to the largest number of youth as quickly as possible.
- Vaccination at school requires consent by the parents for those under 14 years of age and by youth 14 years of age and older.
- There are issues associated with using schools as vaccination sites in the current polarized context, namely a loss of the protective character of school for some, and the displacement of conflicts into the school environment.
- Children and youth carry an important symbolic value in our society and are at the heart of the current debates on the issue of vaccines. For both the vaccinated and the non-vaccinated, children represent a part of the population that we want to protect at all costs. There is resistance to the growing intrusion of the government into the family and private spheres of people's lives (parental rights and legitimacy). For some, there is also resistance to what is perceived as the "brainwashing and enslavement of young people", ideas at the heart of conspiracy and anti-system theories.
- Vaccination of 5- to 11-year-olds could accentuate these cleavages and should therefore be planned with this context in mind.

1.2 Escalating tensions between supporters and opponents of vaccination or other health measures, in a context where increasingly restrictive measures are perceived as disguised forms of vaccine obligation

- Different views of the seriousness of the health crisis and the dangers of the virus, and divergent views on which actions to prioritize and the choice of means and policies to implement. While there is a consensus on the desire to get out of the pandemic and to put an end to the limits imposed by the health measures, there is less consensus on the best way out of the crisis, and positions tend to crystallize around two poles. The government, relying on the advice of its Ministry of Health and that of the Public Health Department, has implemented solutions (sanitary measures, vaccination) that have the support of the vast majority of the population (90% of those aged 12 and over are vaccinated), but the disadvantages of these actions (or their collateral effects) are not usually considered in public discourse. A heterogeneous minority opposes these solutions using arguments putting forward the lack of transparency of institutions and a distrust of science and institutions. These debates lead to clashes and a lack of consideration on both sides.
- Use of disqualifying language and insults (idiots, stupid, morons, etc...) on both sides, as well as by the media, politicians, high profile people, and in the general population which, in combination with a position of blame, exacerbates anger and frustration. Unlikely to bring about changes in positions, this language can even exacerbate the crystallization of these positions and legitimize further forms of aggression and expression of hatred.
- Moralization on both sides: each position is associated with a moral valence, considers itself legitimate, and accuses, directly or indirectly, those holding the other position of being criminal.
- Polarization leads to a narrowing of the democratic space in which doubts and criticisms could be expressed in a respectful way.
- Widespread oversimplification of who constitutes the two groups (pro- and anti-vaccination), which are actually very heterogeneous.

- Lack of understanding of the structural barriers that influence choices about vaccination: these are seen as coming solely from the will of individuals. There is a lot of conflation: being hesitant or critical of the institution or government would mean being a conspiracy theorist; conversely, being vaccinated would mean adhering to vaccination without questioning and following the government's instructions without thinking.
- Loss of perspective on what vaccine hesitancy (VH) is: a multiple, complex and dynamic phenomenon that can be seen on a continuum from total acceptance of all vaccines to systematic refusal of vaccines, with a multitude of intermediate positions involving questioning, doubts, fears, delaying, etc., and possibly also, for example, acceptance of the COVID-19 vaccine for one's self and one's elderly parents but not for one's child. Vaccine hesitation is nevertheless normal and even healthy, since it is beneficial to ask questions and to be critical before making a choice.
- The pragmatic considerations needed to be taken into account by the government and various political stakeholders (allowing economic activity and a certain normality for the vaccinated, protecting the most vulnerable, protecting a weakened health system, politicizing the debate for electoral gain), seem to have led to a gradual loss of perspective in the Quebec public health approach to vaccination, which is traditionally based on prevention and awareness rather than coercion. Yet, evidence shows that a motivational approach to vaccine hesitancy ultimately produces better results than coercion or obligation, since it fosters lasting trust in institutions and encourages individuals to exercise choice.
- There seems to be a gradual shift towards a perception of vaccination as quasi-obligatory, through the rise of increasingly restrictive measures: vaccination passport for those aged 13 and over for activities deemed non-essential (including extracurricular activities), compulsory vaccination in certain workplaces, the ban on demonstrating against vaccination within 50 meters of certain places including schools (forms of institutional constraints), setting aside the basic principle that vaccination is an individual or parental choice even if it also implies consideration of collective well-being.
- These constraining measures, which can be seen as disguised forms of vaccine obligation, tend to cause tension among those who are hesitant or refuse vaccination. In other words, the consequences of choosing not to be vaccinated involve being excluded from society to a large extent, and are experienced and seen as a socially and politically accepted form of discrimination that goes beyond the simple public health objective of controlling the virus.
- In addition, several institutions, such as libraries and hospitals, have instituted their own policies with regards to the unvaccinated that further restrict their access to their services, creating for the unvaccinated more anxiety and a sense of exclusion from society.
- These institutional constraints can provoke either silence (among opponents who fear retaliation), or anger and frustration leading to public demands, associated in a small number of cases with violent deviations, or virtual or direct violent acts (threats and violence). The more implicit violence on the side of the vaccine supporters is minimized overall (insults- derogatory attitudes towards the sick, blame and scapegoating placed on the non-vaccinated).
- Vaccinating in schools, for a number of parents, is going to feel like an incitement, since somewhere along the line, public schools represent the State. These parents, who see vaccination in schools as the school's positioning in favor of vaccination, may see their trust in institutions (the government, the school) diminish, which could have non-negligible consequences on their children, who could be taken out of the school system (see point 2.8).
- Tensions and polarization are also related to the lack of recognition of the underlying emotions (fear, anger, frustration) on both sides. Underlying these tensions are fear (of contracting or transmitting COVID but also of never returning to "normal" life), psychological distress (at the thought of reliving isolation and lockdowns, lack of socialization, estrangement from loved ones, loss of activities). This emotional state, now often referred to as "pandemic fatigue," is related to feelings of frustration (arising from health measures and their consequences, or arising from the fact that unvaccinated people are "threatening" others and "delaying the return to normal life"). These emotions and distress, coupled with the gradual shift towards quasi-obligatory vaccination as the only way out of the crisis, provide fertile ground for polarization and the deterioration of social ties (already damaged by the previous waves and isolation measures). Kindness and empathy, which require tolerance in the face of disagreement, must be prioritized again.

2. - Impact of this context on children, adolescents and young adults

Tensions between supporters and opponents of health measures or vaccines are experienced around the school, but are also present among peers, within the school team, among parents and in the community around the school, weakening ties, leading to the creation of alliances (for or against vaccines) and polarizing the environment. This context has consequences for children's mental health and development.

The consequences described here were documented in the fall of 2021 on a repeated basis. The most frequent ones will be illustrated with anonymous vignettes in an attached document (peer relations; student-school relations; family-school-peer relations; school team; school environment).

2.1 Peer-to-peer bullying

- Unvaccinated or partially vaccinated youth may be ridiculed and insulted by their peers, either in groups or individually. These comments may be directed at their families (derogatory comments). The strength of the group heightens the hurtfulness of these interactions.
- Unvaccinated youth may be ostracized and isolated, peers being unwilling to sit near them.

2.2 Increased social exclusion

- Unvaccinated youth constitute a minority group, and are also vulnerable because they cannot participate in certain activities, which increases their sense of exclusion and exacerbates social inequalities, because of the association between vaccination status and parental education level, SES and diversity.
- Beyond the current context, these experiences will impact the perceptions that future parents (today's children) will have of vaccination, which is an important concern.

2.3 Family-School Loyalty Conflicts

- Many young people find themselves caught between their families, friends and school regarding vaccination. They feel like they have to take a stand or hide their family's position regarding the vaccine, as if it were shameful. Some youth 14 and over get vaccinated in secret (without their parents' knowledge).
- For young people in opposition-rebellion with their parents, or with the school, these divisions are an opportunity to aggravate cleavages and conflicts, with one side being protected over another. The school and family can no longer work as a team.
- When parents who disagree with vaccination end up having their children vaccinated so their child doesn't get excluded at school or from other activities, the child may not feel safe, perceiving that his or her parents are concerned. This can undermine trust within the family.

2.4 Fragility of the school team and risk of polarization within it

- Conflicts between vaccinated and unvaccinated staff within the school team. Fear of the non-vaccinated who do not dare to say what their position is. Non-vaccination of some school team members can generate discomfort, tension or stigmatization.
- School teams are not homogeneous. The emotional charge of the debate and its moral character make it difficult to dialogue or even share positions. Tensions, said or unsaid, can affect the school team's ability to cope together with the situation.
- School teams are worn out by the burden of changing health measures. Current tensions can lead to avoidance or burnout.

2.5 Insecurity about the physical and social environment of the school

- Because of demonstrations against vaccines or health measures that have taken place around some schools (banned by the government within fifty meters of schools since then), students, parents, and professionals may feel that school is no longer a safe place to be. The media coverage of such incidents contributes to this feeling of insecurity.

2.6 Increased symptoms associated with stress among youth

- This environment of vaccine stress elicits or reactivates well-documented anxiety symptoms in youth during the pandemic, anxiety symptoms that did indeed increase significantly during the pandemic.
- This affects the readiness to learn of some youth: when a child or youth is stressed or preoccupied, they may have difficulty focusing on learning.

2.7 Increase in school phobia and behavioural problems for certain groups of young people who are more vulnerable

2.8 Risk of dropping out of school for some youth

- Some parents may choose to withdraw their child from regular school to home school or send him or her to a new type of school in line with their values against health measures or vaccination. The impact of this withdrawal from school could be significant, especially since these are usually children already in a position of social vulnerability.

3. - What to do ? Principles for Action

3.1 Foster transparent, caring, and nuanced health communications

- Recognize that the science behind institutional choices about vaccination is still limited in terms of immunization and health measures.
- Follow government measures while allowing for respectful criticism.
- Avoid generalizations.

3.2 Avoid confrontation and refuse to escalate while strongly condemning criminal acts (threats, vandalism, aggression)

- Re-establish a respectful language and discourse with regards divergent positions, and normalize these positions.

3.3 Encourage safe spaces for all to speak out and restore legitimacy and respect for individual or parental rhythm and choice

- These spaces should emphasize the legitimacy of the individual or parental choice (even if this choice may be worrisome), while reminding us of our obligations to the collective well-being and the fact that this requires delicate negotiations.

3.4 Preserving connections, beyond disagreements

- Disagreements have always existed (political, organizational and otherwise), but in most cases they do not interfere with the ability to maintain a bond. In light of the current situation, it is necessary to recall the crucial role of these bonds, which unite all school personnel around a precious mandate: the education and development of children and young people.

4. - How to do it ?

4.1 Preventing tensions at school

4.1.1 Within the school administration: messages to parents

- Invite restraint and kindness, and demand respect during exchanges
- Send a clear message to parents that: (1) while encouraging immunization, the administration respects individual or parental choice and protects families and youth from exclusion; (2) encourages tolerance and respect for positions on immunization or health measures; and (3) reassures parents and teachers that health measures are being enforced in the school.

4.1.2 Within the school team

- Recognize the right to individual choice and encourage respect for all choices.
- Work to maintain cohesion and cooperation despite possible tensions.
- Acknowledge tensions if they exist and normalize them (the school is a reflection of society).

4.1.3 In the classroom

- Provide safe and respectful spaces for exchanges by using, among others, the vignettes in the appendix to initiate dialogue.
- Approach vaccination in an open and caring manner and lead discussions about vaccines (what it's for, why it's a collective process, what is the immune system) and about the legitimacy of individual or parental choice (to avoid putting too much pressure to vaccinate, and to avoid parents reacting negatively to these class discussions).
- Offer more information about vaccines that is appropriate to the age and needs of students, moving away from judgmental or moralistic language.
- Familiarize students with vaccine hesitancy to encourage them to understand that it is normal, complex, dynamic, and not just a matter of willingness, and to encourage them to adopt an empathetic and respectful attitude towards those who might have different perspectives on the issue.
- Provide inclusive activities that do not distinguish between vaccinated and unvaccinated, to avoid feelings of exclusion.
- In the event of parent-student disagreement, opt for mediation rather than division, encouraging the preservation of the relationship.

4.2 Dealing with an incident at school

4.2.1 In the case of a demonstration

- Reassure students and explain what is happening according to their developmental stage.
- Remind them that disagreement does not justify disrespect or violence.
- Remain specific and avoid generalizing about any positions (do not say "anti-vaxxer").

4.2.2 In the case of an internal incident

- Ensure cohesion among the school team around the response.
- Implement appropriate consequences regardless of the position supported by the parties involved, but minimize exclusionary measures as much as possible.
- Propose a posture of mediation between the actors involved (youth, parents, schools) rather than being divisive, and encourage the maintenance of the bond.



Document developed by C. Rousseau and CoVivre, in collaboration with E. Dubé, L. Monnais, and C. Quach-Thanh, Oct. 13, 2021.

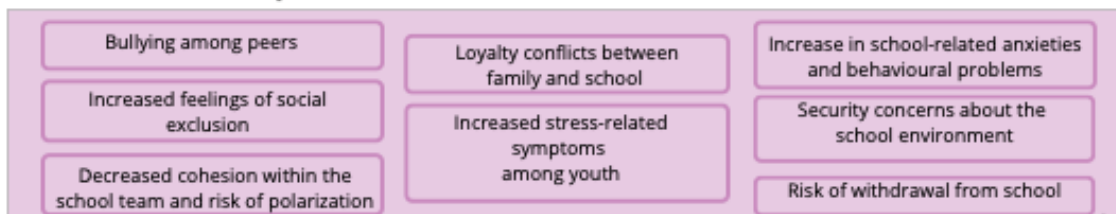
Appendix B



Protecting the Well-being of Children and Adolescents: Easing Vaccine Tension Around Schools



Vaccine Tension Impacts on Children and Adolescents



Illustrated in the appended document "The Relational and Emotional Consequences of the COVID-19 Vaccine Debate for Children and Youth"



Why is there tension around schools?

Vaccination of youth (12 years +) against COVID-19 is justified by the available epidemiological data and requires parental consent for those under 14 years of age or from youth as of 14 years of age.

- **Vaccinating in schools** is a pragmatic choice but is **associated with problems in a polarized context** (loss of the protective aspect of the school environment for some, displacement of conflicts to the school environment).
- Youth carry an important **symbolic value** in our society and are at the heart of debates (for or against vaccination).
- Vaccination for 5-11 years of age **could accentuate these divisions** and must be planned with this context in mind.

Escalation of Vaccine Tension Around Schools

- Different views, positions and decisions between supporters and opposers of vaccination or health measures (social duty versus individual right)
- Positions being moralized (blame, stigma)
- Generalizations and oversimplification of both groups
- Use of disqualifying language and insults
- Verbal violence from pro-vaccine advocates minimized
- Silence of some opposers who fear the consequences of their disagreement
- Public protests
- Virtual or direct violent acts



Implementation of Measures that can be Constraining

Vaccination passport (13 years +) for activities deemed non-essential including extracurricular activities, mandatory vaccination in certain workplaces, ban on protests against vaccination within 50m of certain places including schools

Beware of Generalizations!

- Not all non-vaccinated individuals are conspiracy theorists.
- Being vaccinated does not mean being in support of the vaccine passport.
- A parent (and even their own parents) may have been vaccinated, but refuse to vaccinate their child.
- Scientific experts may be in favour of vaccination of an age group, but against the coercive aspect of the vaccine passport for sports and cultural activities.
- Someone can be opposed to vaccines and unvaccinated but in favour of banning anti-vaccination demonstrations near schools.



Unintended Effects of These Measures

- Vaccination perceived as quasi-mandatory
- Risk of decreased trust in the government, institutions, science, health professionals or vaccines, in the short or longer term
- Risks of discrimination and marginalization of already marginalized groups
- Social unrest, polarization and risk of social fracture

Underneath These Tensions...

- Chronic stress caused by the pandemic and the challenge of learning to live with the virus
- Diminishing democratic spaces to express opinions and positions in a respectful manner
- Lack of recognition of the emotions (fear, frustration, anger) and the underlying distress that motivate positions
- Lack of awareness of the historical importance of vaccines
- Lack of understanding of the complexity and heterogeneity of vaccine hesitancy or refusal
- Lack of recognition of the contexts in which people do or do not choose to vaccinate, and of the structural barriers that exist - it is not all about individual will





Preventing and Addressing Vaccine Tension in Schools



Guiding Principles

- Prioritize relationships despite disagreements
- Encourage and facilitate dialogue and respectful exchanges despite differences
- Bring back the legitimacy and respect of the individual or parental choice and rhythm, even if this choice can be concerning
- Avoid confrontation and refuse escalation
- Condemn criminal acts (threats, vandalism, aggression)
- Foster transparent, caring and nuanced health communications :
 - Recognize that the science behind institutional choices about vaccination is still limited;
 - Follow government measures while allowing respectful criticism;
 - Avoid generalizations.



Preventing Tensions at School

School Administration

Send a message to parents that :

- Encourages reserve and kindness in discussions to maintain an atmosphere of tolerance and respect;
- Encourages vaccination but also respects individual and parental rhythm and choice while protecting youth and families from exclusion;
- Reassures parents and teachers that health measures are applied in the school.

School Team

- Work to maintain cohesion and cooperation despite possible tensions

In the Classroom

- Provide safe and respectful spaces for discussion, using e.g., the attached vignettes to initiate dialogue
- Provide age-appropriate information about vaccines in a caring and non-judgmental manner
- Familiarize youth with vaccine hesitancy so that they understand that it is normal, complex, dynamic and not just a matter of willingness
- Encourage youth to be empathetic and respectful of those who have different perspectives than themselves
- Offer inclusive activities that do not distinguish between vaccinated and unvaccinated youth



Intervening

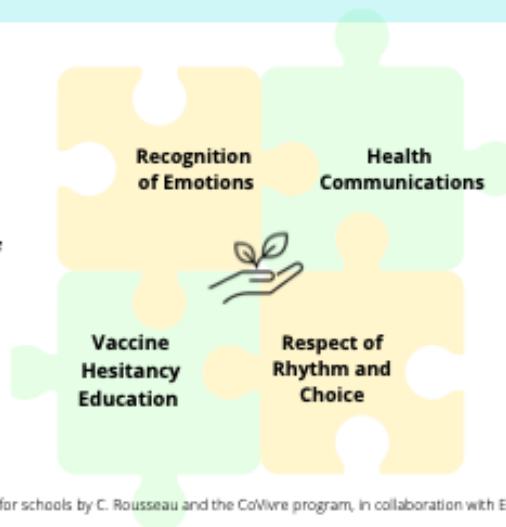
Dealing with a Protest

- Reassure young people and explain to them what is happening in an age appropriate way
- Remind them that disagreement does not justify disrespect or violence
- Remain specific and avoid generalizations (do not say "anti-vaxxer")

Dealing with an Incident at School

- Ensure school team cohesion around the response
- Implement appropriate consequences regardless of the position of the parties involved, minimizing exclusionary measures
- Mediate between the people involved rather than divide them and encourage the maintenance of the relationship

In Brief



Four Axes

1. Recognize the role of emotions
2. Discuss vaccines and health in a transparent, nuanced and caring manner
3. Raise awareness about vaccine hesitancy and vaccine refusal
4. Respect the rhythm and choice

To Achieve This

- Create safe and respectful spaces for dialogue
- Protect relationships
- Promote school team cohesion
- Avoid confrontation
- Avoid exclusion



Appendix C

The Relational and Emotional Consequences of the COVID-19 Vaccine Debate for Children and Youth*

Appendix to CoVivre's infosheet "Protecting the Well-Being of Children and Youth: Easing Vaccine Tension Around Schools"

Peer Relations



*Testimonials were collected by the CoVivre team in Sept. 2021. To preserve confidentiality, names of individuals have been changed and the verbatim of the vignettes has been slightly modified.
Oct. 13, 2021; page 1/4

Peer Relations

"My friends don't understand why I am not vaccinated. At first we were all scared, but now I'm the only one in my group who isn't vaccinated. My friends don't talk to me about it, but I can see that they think I'm weird, they avoid me, and I feel alone. I avoid talking about COVID-19 and vaccines with them."
- Maxime, age 15



"My friends are involved in after-school activities, but I'm not vaccinated. I feel left out because I can't participate, and my friends talk to me less and less because I don't see them after school. I'm afraid I'll be alone."
- Sabrina, age 13



"I feel like I'm hurting people around me because they tell me it's selfish not to get the vaccine...but the vaccine scares me and I don't know what to do. I don't know who to talk to about it."
- Marylena, age 17

Youth in Schools

"My teacher told me that if I wasn't vaccinated, I wouldn't be able to participate in the assignments (outside of school) and that I would fail my class. I feel pressured to get vaccinated."
- Sam, age 14



"My teacher is really afraid of the virus, she says non-vaccinated people are irresponsible criminals."
- Laurent, 17 years old



Family, Peers, and Schools

"I would really like to get vaccinated so I can do activities like all my friends, but I can't do it without my parents' permission and they won't allow it."
- Audrey, age 13



"The kids in my class call my family 'idiots' because they don't believe in the vaccine. It makes me want to fight."
- Justin, age 12



"I'm going to be able to get the vaccine, but the other kids in my class are laughing at me because they've been vaccinated for a while already. I thought they would be happy for me, but now I'm ashamed that my parents took so long to decide."
- Joël, age 13



"I really want to continue soccer, it's such an important part of my life, but I'm not vaccinated because my parents are afraid of vaccines, and that makes me a little scared too. I'm going to find it very difficult, another year without soccer, it's going to be hard. I've been playing soccer since I was 3 years old, it motivates me a lot at school and it gives me energy."
- Brenda, age 13



"60 years of feminism in Quebec, 15 years of teaching my daughter that only she decides what she does with her body, and now I'm discussing with her that she should go get vaccinated against her will so she won't be excluded from society!"
- Mother of a teenager



Carmen, now 13 years old, wants to be vaccinated to visit her grandmother in her final weeks in the hospital, but she cannot do so because she is not vaccinated. Her mother agrees to let her be vaccinated but her father refuses.

Family, Peers, and Schools

"My parents don't want me to be around 'unvaccinated' people, nor do they want them to come to my house. My best friend is not vaccinated, but I want to say that he is, so I can continue to hang out with him."
- Noah, age 15



"I'm on the neighborhood baseball team, the end-of-season games have started, but I can't participate because I only have one dose. Why did my parents wait so long to get me vaccinated? I feel like I'm letting my team down."
- Fred, age 13



School Team

"My colleagues laugh and insult the 'anti-vax' people, as they say, so I don't go into the teacher's lounge anymore. I'm really afraid of their judgment, and not really in the mood to come to work."
- Issa, age 37



"I think some of the staff are not even vaccinated! It's not right, they're putting me in danger, I'm afraid for my family."
- Javier, age 32



School Environment

"I've seen demonstrations on TV in front of schools. It's violent, it scares me, I'm afraid it's going to happen in my school. I asked my parents to stay home."
- Edith, age 13



"We can't even protest now, we can't say anything! It's not right."
- Simon, age 32



Appendix D

Interview with Dr. Cécile Rousseau on Vaccine Tension in Schools (Oct.2021) (French only)

Four capsules addressing the following questions:

- Why are there vaccine tensions around schools?
- The impact of stress on children
- How to prevent tension at school?
- How to prevent tension at school? (summary)

<https://sherpa-recherche.com/en/sherpa/partner-projects/covivre-program/#covivre-2-tab-5>