

Keeping Safe Schools Open in a Pandemic: What BC teachers say we *still* need



Report of the 2021 BCTF Health and Safety Membership Survey BC Teachers' Federation

<https://bctf.ca/research.aspx>

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As COVID-19 has upended life over the past year, the need for a resilient public education system has become even more evident. Schools are key public spaces of community and care. They are where children develop intellectually, emotionally and socially. Research has demonstrated the importance of schools for child well-being,¹ and teachers across the province are working hard to meet the needs of all students in their classrooms.

However, our school communities are threatened where key health and safety measures are still not in place to protect against the risks of COVID-19. Almost 9 in 10 public school parents report having some concerns about their child's safety when they attend school during the pandemic.²

The 2021 BCTF Health and Safety Membership Survey was conducted in January 2021 to build a representative picture of the perspectives and needs of teachers across the province. The survey was conducted for the BCTF by a small team of professional researchers at Strategic Communications (Stratcom)³ and was fielded online from January 6–12, 2021.

Survey invitations were emailed to a random sample of 15,000 BCTF members. The survey links in these emails could be used only once and were non-transferable. Prior to the survey launch, a Broadcast Voice Message (BVM) was sent to members in the random sample with phone numbers on file alerting them to the survey.

BCTF Research received an initial report and the raw, anonymized data. Overall, there were 4,186 completed surveys. The margin of error for a sample of this size is +/- 1.4%, 19 times out of 20. The final survey data has been statistically weighted to ensure the proportions of gender, age and region (Regional Health

Authority) match their proportions in the active BCTF membership database (excluding Federation staff).

This specific report, produced by BCTF Research, utilizes only data for the teachers who were working physically within BC schools (in-person instruction or other in-person work) during the period of data collection, representing 89.6% of the total survey participants ($N = 3,750$).⁴ This analytical sample of in-person teachers has a margin of error of +/- 1.5%, 19 times out of 20 (For a breakdown of the sample and other technical notes, see Appendix 2 on page 25).

According to the [2021 BCTF Health and Safety Membership Survey](#), over half of teachers (57.8%) who are working in BC schools report that they still do not feel safe. The lack of adequate safety procedures, as well as inadequate supports for learners with diverse needs and often complex medical vulnerabilities,⁵ have made some families feel that they are being forced out of the public education system.⁶

Knowing that most people in our school communities won't get a vaccine until the 2020–21 school year is over,⁷ it is crucial to put in place key safety measures to keep schools open. As trusted advocates for conditions within classrooms,⁸ teachers are speaking out about the realities they and their students face everyday in BC schools.

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The concerning state of health and safety in schools across BC

1. Health and safety measures in schools are still inadequate

Key findings:

- A majority of teachers working in-person (61.0%) report that the overall health and safety precautions taken in their workplace are not adequate.
- More than half of teachers (57.8%) do not feel safe working in person.
- Most teachers agree that teachers and other adults (86.9% agree) and students (79.9% agree) should be required to wear a face mask or shield all or most of the time.
- Half of all teachers working in-person (50.4%) report that the quality and availability of PPE in their workplace are not adequate.
- A majority of teachers (60.7%) report that their workplace ventilation system is not adequate.
- 3 out of every 4 teachers (77.7%) report that class sizes in their workplace are not adequate for effective social distancing.
- Two thirds (65.2%) of teachers agree that additional fixed or mobile barriers are needed in their workplace.

Halfway through the 2020–21 school year, a majority (61.0%) of teachers working in-person report that the overall health and safety precautions taken in their schools are NOT adequate (see Table 1).^{*} BC teachers overwhelmingly support the implementation of preventative safety measures, such as mask wearing, social distancing, the installation of plexiglass barriers in relevant

^{*} Note: all tables referenced in this report are available in Appendix 1 (pp. 13–24).

spaces, and improved ventilation in school buildings. These measures exist in many indoor public spaces,⁹ but not in schools. Lacking these necessary preventative measures, a majority (57.8 %) of teachers do not feel safe working in-person in BC schools (see Table 2).

Mandatory masks for students and teachers

Support for mask wearing is widespread, with most (86.9%) teachers involved with in-person instruction agreeing that teachers and other adults in their workplace should be required to wear a face mask or face shield all or most of the time. A slightly smaller majority (79.9%) agree students should also be wearing masks all or most of the time in school (see Table 3). Support for widespread mask wearing (both for teachers and students) is highest in the Fraser Health Region, with 90.8% of teachers supporting mask wearing for teachers/other adults and 85.3% for students all or most of the time in school (see Table 4). This health region saw some of the highest rates of COVID-19 infection in the province in the early Fall of 2020,¹⁰ as BC began experiencing its 'second wave' of infections. The high levels of support for more robust mask-wearing from teachers working in this region indicate an overall increased sense of worry and concern. Widespread mask wearing is even more important given the difficulty of physical distancing in most schools.¹¹

Smaller class sizes to maximize physical distancing

The very nature of teaching often means being in close proximity to students, fellow teaching colleagues or other individuals in the school building. Almost all (96.4%) of the teachers working in-person (instruction or otherwise) reported that their work requires frequent physical proximity with other individuals in the workplace (see Table 5).

At the same time, current conditions in schools make physical distancing virtually impossible. Years of underfunding have led to increasingly larger class sizes and only 18.5% of teachers feel that class sizes are adequate for effective social distancing (see Table 6). This risk may be compounded in some schools by

additional overcrowding, most severely in areas with growing populations such as Surrey School District. Within this context, reducing class size is an essential health and safety measure during COVID-19.

Upgrading ventilation systems

Many teachers and students are in school buildings that are poorly ventilated and only 24.8% of teachers working in-person feel that the ventilation system in their workplace is adequate to help reduce the spread of COVID-19 (see Table 7). Viral particles spread between people more easily indoors than outdoors and poor ventilation in indoor spaces can increase the risk of spreading COVID-19.¹² The BCTF has been calling for upgrades to outdated and inadequate ventilation systems in schools long before the 2020-21 school year began. In November 2020, the BCTF Executive Committee highlighted the continued urgency of this issue by recommending the Provincial Government immediately address air quality standards with enhanced filtration systems and portable HEPA units, where necessary.

Physical barriers when physical distancing is not possible

A majority (65.2%) of teachers (and 70% of specialist teachers) feel that there should be additional fixed or mobile barriers (i.e., plexiglass) available in their workplace (see Table 8). These are widely used in other sectors and are an important layer of protection when physical distancing is not possible, as is often the case in BC schools.¹³ Furthermore, in classrooms, close proximity to students is often required and mask-wearing by either the teacher or student may not be appropriate for health and educational reasons. Installing clear plexiglass barriers, as has been done effectively in many other BC workplaces, is an important health and safety measure to ensure that all teachers can continue to interact with students in a safe way.

Equitable access to adequate personal protective equipment

Half of the teachers working in-person (50.4%) report that the quality and availability of personal protective equipment (PPE) in their workplace are not adequate to help reduce the spread of COVID-19 (see Table 10).

The provision of PPE, masks or face shields becomes ever more important when teachers do not have other layers of protection, such as physical distancing or physical barriers. In the absence of adequate PPE, teachers may find themselves purchasing and supplying their own masks or shields, shouldering the cost of keeping themselves and their students safe.

2. Teachers' workload is increasing and teachers are burning out

Key findings:

- More than two-thirds of all teachers working in-person (72.8%) report that their workload has increased in comparison to before the pandemic.
- A third (34.2%) of teachers report that their experience of the pandemic has made it more likely that they will leave teaching in the next two years.
- Teachers who identify as female (74.9%) were significantly more likely than male-identified teachers (65.6%) to agree their overall workload has increased.
- Teachers who identify as female (35.0%) were significantly more likely than male-identified teachers (30.7%) to say that their experiences during the COVID-19 pandemic made it more likely that they would leave teaching within the next two years.

While BC teachers were reporting increasingly large and unsustainable workloads prior to the pandemic,¹⁴ COVID-19 has further intensified their workloads. Approximately three out of four teachers (72.8%) report that their overall workload has increased compared to before the COVID-19 pandemic (see Table 11).

An intensified workload

There are many factors that may be contributing to increased workload during the pandemic. Teachers are implementing a range of health and safety measures, such as frequent hand washing, to keep students safe. These new tasks have added to the complexity of teaching and meeting the needs of all students in the classroom. Specialist teachers may be juggling multiple caseloads, while supporting students both in-person and through remote learning. Many secondary teachers have also seen increased workloads as they adjust to new timetables.

There are important gender differences in how workload has intensified. Teachers who identify as female are significantly more likely (74.9%) than male-identified teachers (65.6%) to agree their overall workload has increased (Gamma = -.20, $p = .001$; see Table 12). As a feminised profession, teaching in BC reflects a gendered division of labor in which female-identified teachers are more likely to teach in elementary than secondary schools, less likely to take-on administrative positions, and more likely to take part-time positions than their male-identified counterparts.¹⁵ Coupled with longstanding stereotypical attitudes related to women's innate ability to nurture children,¹⁶ further investigation is needed to understand the intersection between the "care work" of teaching and increasing workloads experienced by female-identified teachers.

A deepening crisis for recruitment and retention

Increasing workload coupled with the stress and anxiety of not feeling safe at work can result in more frequent teacher burnout. A worrying number of BC teachers indicate they are now considering leaving the profession. A third (34.2%) of all in-person teachers report that they are more likely to leave teaching within the next two years due to their experience during the pandemic (see Table 13).

The findings of this study indicate that burnout is also gendered. More than a third of teachers who identify as female (35.0%) indicate they are now more likely to leave teaching within the next two years due to their COVID-19 experience, compared to 30.7% of the male-identifying teachers (see Table 14). This is a significant gender difference (Gamma = -.11; p = .015) that needs more investigation and one that resonates broadly with data from other sectors demonstrating the gendered impacts of COVID-19.¹⁷

BC's severe teacher shortage and the struggle to recruit and retain teachers predates COVID-19.¹⁸ A weak pandemic policy response may exacerbate this chronic shortage if those currently teaching leave the profession earlier than they planned. Intensifying health and safety measures now are critical for addressing urgent understaffing issues during the remainder of the 2020–21 school year and contributing to a long-term post-pandemic retention strategy.¹⁹

3. Teachers' mental and physical health has worsened during the pandemic

Key findings:

- Most teachers working in-person (83.0%) report that their mental health has worsened during the pandemic.
- A majority of teachers (53.4%) report that their physical health has worsened during the pandemic.
- Younger teachers are significantly more likely than older teachers to report their mental health has worsened during the pandemic.
- Female teachers are significantly more likely than male teachers to report their mental health has worsened during the pandemic.

COVID-19 has created new demands and magnified pre-existing vulnerabilities, leaving a significant number of teachers feeling more physically and emotionally compromised. The public recognizes that BC teachers are working hard to ensure students' academic and social needs are being met during the COVID-19 pandemic, as well as the toll that this is taking on teachers. In a recent public poll, 83% of respondents agreed that teachers are experiencing more stress and health risks with increased workload during COVID-19.²⁰

Physical health

When asked about their physical health, a majority of in-person teachers (53.4%) state it has worsened during the pandemic, and a vast majority (83.0%) of teachers state their mental health has also worsened (see Tables 15 and 16). Younger teachers are significantly more likely than older members to state their mental health has worsened (Gamma = $-.24$, $p = .001$; see Table 17). Survey findings also align with research related to the “mental health gender gap” during the COVID-19 pandemic.²¹ BC teachers who identify as female are significantly more likely than male-identified teachers to state their mental health has worsened during the pandemic, 85.4% and 75.1% respectively (Gamma = $.32$, $p = .001$; see Table 18).

Mental health

Most teachers working in-person (83.0%) report that their mental health has worsened during the pandemic. Mental health concerns among teachers are not new. Research shows that, globally, teachers experience more stress, burnout, and depression compared to other professions, higher levels of stress than the average population, and comparable levels to other caregiving and client-oriented professions such as physicians and nurses.²² Research conducted by the BCTF in 2017–18, well before the COVID-19 pandemic, indicated widespread stress, weariness, and burnout related to workload and inadequate student and classroom supports.²³ However, the return to in-person instruction during the COVID-19 pandemic has added new health and safety concerns to these pre-existing stressors.

Overall, supporting teachers' physical and mental health is a complex issue requiring a complex set of responses. Short-term emergency responses are critical to ensuring BC's over-burdened teachers safely carry out the remainder of this school year. Ensuring teachers remain physically and mentally well in the long term, however, will require sustained commitment to addressing the chronic factors that erode teacher well-being.²⁴

4. Teachers are concerned about COVID-19's impact on students

Key findings:

- Only 28.3% of in-person teachers report that students' academic needs are being completely met or very much met (53.3% say moderately met; 18.4% say not at all met or slightly met).
- A third of teachers (33.0%) report that students' social and emotional needs are not at all met or slightly met compared with only 20.1% who report these social and emotional needs are completely met or very much met (the remaining 46.9% say moderately met).

The 2020–21 school year has brought unprecedented challenges for school communities and BC students have been impacted in multiple ways. The COVID-19 pandemic has amplified the need for more supports as well as further exposed the inadequacy of existing supports to best meet the social and emotional needs of all students. While the full impacts will only be understood through rigorous investigation in the wake of the pandemic, teachers are raising concerns now about the extent to which students' academic, social and emotional needs are being met. It is vitally important to be able to dedicate time to fully explore and unpack the

impacts on students' education resulting from program delivery changes and increased levels of student absenteeism due to the COVID-19 pandemic.

Meeting students' academic needs

About half of in-person teachers (53.3%) feel that students' academic needs are being "moderately met" during this school year. A little more than a quarter (28.3%) describe them as "completely met" or "very much met" and the remaining teachers (18.4%) state that students' academic needs are "not at all met" or "slightly met" (see Table 19).

There are many factors that might influence how students' academic needs are being met this year. Research illustrates the impact that prolonged school closure has on children, both in terms of their mental health as well as their learning.²⁵ This is one of the key rationales for keeping schools open during the pandemic. At the same time, many students who have returned to in-person classes are likely living with heightened stress and anxiety, or potential trauma as COVID-19 impacts their loved ones. Furthermore, there have been changes to how classes are organized this year, particularly at a secondary level. For example, some secondary schools have moved to a compressed timetable (e.g. a quarter or octet system)²⁶ as a strategy to reduce interactions between different student cohorts. These changes also have potential impacts on student learning. For instance, anecdotal evidence shared by teachers and parents points to increased levels of stress for many students in classes with compressed schedules, as well as highlights challenges in supporting students with learning disabilities and other diverse needs to access and thrive in these classes.

Meeting students' social and emotional needs

Broadly, research indicates that children's mental health has also worsened during the COVID-19 pandemic.²⁷ At the same time, systemic measures to meet students' social and emotional needs have long been inadequate and inconsistent. Within the context of chronic underfunding of public health and education systems, BC's teachers, counsellors, and specialist educators continue to manage students' mental

health concerns with inadequate staffing and delayed specialist intervention and referral processes.²⁸ Just under half (46.9%) of teachers feel that students' social and emotional needs are being "moderately met" this school year. A third (33.0%) describe them as "not at all met" or "slightly met," and only 20.1% state that these needs are being "completely met" or "very much met" (see Table 20). As with students' academic needs, the reasons for why social and emotional needs may or may not be met are complex and will require further investigation.

What teachers and students need *now*

BC's teachers and youth are in the middle of a once-in-a-century global pandemic. The results of the 2021 BCTF Health and Safety Survey provide a worrying picture of critical issues that must be addressed if we want to keep BC public schools safe and open. The findings clearly illustrate that:

- Health and safety measures in schools are still inadequate.
- Teachers' workload is increasing and teachers are burning out.
- Teachers' mental and physical health has worsened during the pandemic.
- Teachers are concerned about COVID-19's impact on students.

Furthermore, the survey has revealed specific gendered dynamics in how BC teachers are experiencing the impacts of COVID-19, including statistically significant findings related to mental health, workload and burnout. This is an important contribution to growing awareness of the gendered impacts of COVID-19.

We must act boldly now to address these urgent gaps and widening inequities. In addition to health and safety in BC schools, we must also ensure broad-based investment in a resilient public education system. Government and school districts must act now.

Reference notes

1. SickKids (2021). COVID-19: Guidance for School Operation during the pandemic. Available at <https://www.sickkids.ca/en/news/archive/2021/covid19-updated-guidance-school-operation-during-pandemic/#considerations>
2. This data comes from a public opinion survey commissioned by the BCTF and conducted by Viewpoints Research (referred to as Viewpoints Research, 2021, in subsequent citations). 802 adult Canadian citizens who are residents of BC completed the survey online in December 2020. Respondents were drawn from an online panel sample and results were cross-tabulated by demographic and attitudinal variables. Views of children's safety were drawn from public school parents (n=400) and includes the following responses: 34% very concerned, 39% somewhat concerned, 13% not very concerned.
3. See <https://www.stratcom.ca/>. Stratcom is bound by federal privacy rules, regulations and standards imposed by PIPEDA, and the global market research industry association – ESOMAR.
4. Other working conditions included remote instruction, remote non-instructional work, not currently working, and not classified (these respondents are not included within the analytical sample used for this report).
5. Representative for Children and Youth (2020). Left Out: Children and youth with special needs during the pandemic. Available at <https://rcybc.ca/reports-and-publications/cysn-report/>
6. Inclusion BC, Family Support Institute, BC ED Access & BC Parents of Complex Kids (2020). BC Family and Student Education Survey. Available at <https://inclusionbc.org/bc-family-and-student-education-survey/>
7. As of January 2021, unless deemed clinically extremely vulnerable, most teachers will be vaccinated during “Phase 4” of the provincial vaccine roll-out from July to September 2021. See <https://www2.gov.bc.ca/gov/content/safety/emergency-preparedness-response-recovery/covid-19-provincial-support/vaccines>
8. Viewpoints Research (2021). 88% of respondents agreed with teacher advocacy on conditions in classrooms.
9. See <https://www2.gov.bc.ca/gov/content/safety/emergency-preparedness-response-recovery/covid-19-provincial-support/restrictions#masks>
10. See the B.C. Covid-19 Dashboard for current statistics by Regional Health Authority, accessed January 27, 2021: <https://experience.arcgis.com/experience/a6f23959a8b14bfa989e3cda29297ded>
11. In this report, the terms ‘social distancing’ and ‘physical distancing’ are used interchangeably. When discussing the specific health and safety survey item, the term ‘social distancing’ is used to remain consistent with the wording of the survey question.
12. See <https://www.worksafefbc.com/en/resources/about-us/covid-19/general-ventilation-and-air-circulation-covid-19-faq?lang=en>
13. Teachers Teaching on Call were significantly less likely to agree that additional physical barriers should be available in their workplaces (58.4%) This may be due to logistical issues of transporting barriers between worksites, but further analysis is necessary to understand this finding.
14. For example, see the 2019 BCTF Curriculum Change and Implementation Survey, available at <https://bctf.ca/publications/ResearchReports.aspx?id=55723>
15. BCTF (2018). Teachers in British Columbia: A feminized workforce. Available at <https://bctf.ca/publications/ResearchReports.aspx?id=52009>
16. Gaskell, J., & McLaren, A. (Eds.). (1987). Women and education: A Canadian perspective. Ottawa, ON: Canadian Social Science and Humanities Research Council.

17. For example, analysis by the Canadian Union of Public Employees (CUPE) on how workers have been affected differentially by measures to contain the spread of COVID-19. See <https://cupe.ca/gendered-impact-covid-19-pandemic>
18. The 2017 Minister's Task Force on Immediate Recruitment and Retention Challenges outlines an array factors contributing to BC's chronic regional and subject area teacher shortages. See https://www2.gov.bc.ca/assets/gov/education/administration/kindergarten-to-grade-12/uploads/task_force_report.pdf
19. BCTF (2020). Healthy, resilient schools: Cornerstones of community and COVID-19 recovery. Available at <https://bctf.ca/uploadedFiles/Public/Publications/Briefs/EducationFundingBrief2021.pdf>
20. Viewpoints Research (2021)
21. Centre for Addiction and Mental Health (2020). COVID-19 pandemic adversely affecting mental health of women and people with children. Retrieved from <https://www.camh.ca/en/camh-news-and-stories/covid-19-pandemic-adversely-affecting-mental-health-of-women-and-people-with-children>
22. See for example: Nubling, M. et al. (2011). European-wide survey on teachers work related stress: Assessment, comparison and evaluation of the impact of psychosocial hazards on teachers at their workplace. Brussels, Belgium: European Trade Union Committee for Education; Weldon, P. & Ingvarson, L. (2016). School staff workload study: Final Report to the Australian Education Union Victorian Branch. Camberwell, Australia: The Australian Council for Educational Research Ltd.; Martin, Dolmage & Sharpe (2012). Seeking wellness: Descriptive findings from the survey of the work life and health of teachers in Regina and Saskatoon; Kinman, G., Wray, S. & Strange, C. (2011). Emotional labour, burnout and job satisfaction in UK teachers: the role of workplace social support. *Educational Psychology*, 31(7), 843-856.
23. The BCTF conducted a member survey on mental health in May/June 2017. The survey drew 679 respondents from a random sample of 4,000 BCTF members resulting in a 95% confidence level and 3.75% margin of error.
24. For further discussion on COVID-19 and teachers' mental health, see the BCTF 's brief submitted to the 2020 House of Commons Standing Committee on Health: https://bctf.ca/uploadedFiles/Public/Publications/Briefs/SafeguardingTeachersMentalHealth_Dec2020.pdf
25. SickKids (2021)
26. In a quarter system, courses are organized into four semesters while an octet system consists of 8 short (22 day) semesters. An octet system is made up 8 short (22 days) semesters, with a full course offered each semester.
27. SickKids (2021)
28. BCTF (2015). Addressing youth mental health issues in BC's K-12 public schools: A BCTF submission. Available at <https://files.eric.ed.gov/fulltext/ED573417.pdf>

Appendix 1: List of Tables

Table 1 – Overall adequacy of health and safety precautions

Overall, I feel that health and safety precautions in my workplace are adequate to keep everyone safe.		
Response	Valid %	N
Strongly agree or somewhat agree	31.8	1188
Neither agree nor disagree	7.2	270
Strongly disagree or somewhat disagree	61.0	2281
Valid total	100.0	3740
<i>Don't know/not applicable</i>	--	10

Table 2 – Safety of in-person work

I feel safe working in-person.		
Response	Valid %	N
Strongly agree or somewhat agree	34.9	1306
Neither agree nor disagree	7.4	276
Strongly disagree or somewhat disagree	57.8	2165
Valid total	100.0	3747
<i>Don't know/not applicable</i>	--	2

Table 3 – Mask-wearing to help reduce the spread of COVID-19

Response	<u>Students should be required to wear a face mask/face shield all or most of the time¹</u>		<u>Teachers/other adults should be required to wear a face mask/face shield all or most of the time²</u>	
	Valid %	N	Valid %	N
Strongly agree or somewhat agree	79.9	2982	86.9	3245
Neither agree nor disagree	6.2	230	4.2	157
Strongly disagree or somewhat disagree	14.0	522	8.9	332
Valid total	100.0	3733	100.0	3734
<i>Don't know/not applicable</i>	--	16	--	16

¹ Full Question: “I feel that students in my workplace should be required to wear a face mask or face shield all or most of the time to help reduce the spread of COVID-19.”

² Full Question: “I feel that teachers and other adults in my workplace should be required to wear a face mask or face shield all or most of the time to help reduce the spread of COVID-19.”

Table 4 – Mask-wearing by regional health authority

Regional Health Authority	<u>Students</u> should be required to wear a face mask/face shield all or most of the time ¹		<u>Teachers/other adults</u> should be required to wear a face mask/face shield all or most of the time ²	
	% Strongly or somewhat agree	<i>N</i>	% Strongly or somewhat agree	<i>N</i>
Fraser	85.3	1482	90.8	1483
Vancouver Coastal	84.4	692	90.2	692
Vancouver Island	71.3	637	82.4	637
Interior	74.5	612	81.9	614
Northern	72.2	245	79.2	245
Francophone School District	73.4	64	80.0	65
Total	79.9	3732	86.9	3736
Statistical measure	Strength of association	Significance	Strength of association	Significance
<i>Cramer's V</i>	.11	.001	.10	.001

¹ Full Question: “I feel that students in my workplace should be required to wear a face mask or face shield all or most of the time to help reduce the spread of COVID-19.”

² Full Question: “I feel that teachers and other adults in my workplace should be required to wear a face mask or face shield all or most of the time to help reduce the spread of COVID-19.”

Table 5 – In-Person working conditions of BC teachers

Which of the following BEST describes your typical in-person working conditions?		
Response	%	N
Instruction that requires frequent physical proximity to students, coworkers or other individuals in the workplace.	92.8	3479
Instruction that DOES NOT require frequent physical proximity to students, coworkers or other individuals in the workplace.	2.5	94
Other work (excluding instruction) that requires frequent physical proximity to students, coworkers or other individuals in the workplace.	3.6	134
Other work (excluding instruction) that DOES NOT require frequent physical proximity to students, coworkers or other individuals in the workplace.	0.5	20
Other in-person work	0.6	22
Total	100.0	3750

Table 6 – Class size and COVID-19

I feel that class sizes in my workplace are adequate for effective social distancing to help reduce the spread of COVID-19.		
Response	Valid %	N
Strongly agree or somewhat agree	18.5	688
Neither agree nor disagree	3.7	138
Strongly disagree or somewhat disagree	77.7	2885
Valid total	100.0	3711
<i>Don't know/not applicable</i>	--	38

Table 7 – Ventilation systems and COVID-19

I feel that the ventilation system in my workplace is adequate to help reduce the spread of COVID-19.		
Response	Valid %	N
Strongly agree or somewhat agree	24.8	835
Neither agree nor disagree	14.5	488
Strongly disagree or somewhat disagree	60.7	2044
Valid total	100.0	3367
<i>Don't know/not applicable</i>	--	383

Table 8 – Physical barriers and COVID-19

I feel that there should be additional fixed or mobile barriers (ex. plexiglass) available in my workplace to help reduce the spread of COVID-19.		
Response	Valid %	N
Strongly agree or somewhat agree	65.2	2399
Neither agree nor disagree	17.4	640
Strongly disagree or somewhat disagree	17.4	638
Valid total	100.0	3678
<i>Don't know/not applicable</i>	--	72

Table 9 – Physical barriers and COVID-19 by teaching position

I feel that there should be additional fixed or mobile barriers (ex. plexiglass) available in my workplace to help reduce the spread of COVID-19.		
Teaching position	% Strongly or somewhat agree	N
Classroom Teacher only	64.4	2250
Specialist Teacher only	70.0	704
Teacher Teaching on Call only	58.4	243
Other position or multiple positions mentioned	65.6	480
Total	65.2	3677
Statistical measure		
	Strength of association	Significance
<i>Cramer's V</i>	.06	.001

Table 10 – Personal Protective Equipment (PPE) and COVID-19

I feel that the overall quality and availability of personal protective equipment (PPE) supplied to individuals within my workplace is adequate to help reduce the spread of COVID-19.		
Response	Valid %	N
Strongly agree or somewhat agree	41.0	1518
Neither agree nor disagree	8.6	318
Strongly disagree or somewhat disagree	50.4	1868
Valid total	100.0	3705
<i>Don't know/not applicable</i>	--	45

Table 11 – COVID-19 workload change

Compared to before the COVID-19 pandemic, my overall workload has increased.		
Response	Valid %	N
Strongly agree or somewhat agree	72.8	2662
Neither agree nor disagree	14.0	512
Strongly disagree or somewhat disagree	13.2	483
Valid total	100.0	3656
<i>Don't know/not applicable</i>	--	93

Table 12 – COVID-19 workload change by gender (binary)

Compared to before the COVID-19 pandemic, my overall workload has increased.		
Gender	% strongly or somewhat agree	<i>N</i>
Male	65.6	873
Female	74.9	2700
Total	72.7	3573
Statistical measure	Strength of association	Significance
<i>Gamma</i>	-.20	.001
<i>Spearman's rho</i>	-.09	.001

Table 13 – Experiences of COVID-19 and teacher burnout

Has the experience of the COVID-19 pandemic made it more or less likely that you will leave teaching within the next two years?		
Response	Valid %	<i>N</i>
I'm now more likely to leave teaching.	34.2	1004
I'm now no more or less likely to leave teaching.	64.0	1878
I'm now less likely to leave teaching.	1.8	53
Valid total	100.0	2934
<i>Don't know/not applicable</i>	--	815

Table 14 – Experiences of COVID-19 and teacher burnout by gender (binary)

Has the experience of the COVID-19 pandemic made it more or less likely that you will leave teaching within the next two years?		
Gender	% now more likely to leave teaching	N
Male	30.7	726
Female	35.0	2146
Total	33.9	2872
Statistical measure		
Statistical measure	Strength of association	Significance
<i>Gamma</i>	-.11	.015
<i>Spearman's rho</i>	-.05	.016

Table 15 – COVID-19 and physical health

Has your physical health improved or worsened during the COVID-19 pandemic?		
Response	Valid %	N
Improved a lot or improved somewhat	8.6	320
No change	38.0	1405
Worsened a lot or worsened somewhat	53.4	1977
Valid total	100.0	3703
<i>Don't know/not applicable</i>	--	47

Table 16 – COVID-19 and mental health

Has your mental health improved or worsened during the COVID-19 pandemic?		
Response	Valid %	N
Improved a lot or improved somewhat	2.3	87
No change	14.7	545
Worsened a lot or worsened somewhat	83.0	3078
Valid total	100.0	3709
<i>Don't know/not applicable</i>	--	40

Table 17 – COVID-19 and mental health by age

Has your mental health improved or worsened during the COVID-19 pandemic?		
Age category	% worsened a lot or worsened somewhat	N
34 or younger	88.2	897
35 to 44	85.3	1164
45 to 54	81.3	1040
55 or older	73.2	570
Total	83.0	3671
Statistical measure		
	Strength of association	Significance
<i>Gamma</i>	-.24	.001
<i>Spearman's rho</i>	-.12	.001

Table 18 – COVID-19 and mental health by gender (binary)

Has your mental health improved or worsened during the COVID-19 pandemic?		
Gender	% worsened a lot or worsened somewhat	<i>N</i>
Male	75.1	875
Female	85.4	2749
Total	82.9	3624
Statistical measure		
<i>Gamma</i>	.32	.001
<i>Spearman's rho</i>	.12	.001

Table 19 – Students' academic needs in 2020-2021 school year

In general, during this school year, to what extent do you feel that students' academic needs are being met?		
Response	Valid %	<i>N</i>
Completely met or very much met	28.3	1039
Moderately met	53.3	1954
Not at all met or slightly met	18.4	673
Valid total	100.0	3666
<i>Don't know/not applicable</i>	--	84

Table 20 – Students’ social and emotional needs in 2020-2021 school year

In general, during this school year, to what extent do you feel students’ social and emotional needs are being met?		
Response	Valid %	N
Completely met or very much met	20.1	736
Moderately met	46.9	1717
Not at all met or slightly met	33.0	1208
Valid total	100.0	3661
<i>Don't know/not applicable</i>	--	89

Appendix 2: Technical notes

Total sample breakdown by working conditions

(before selection of analytical sample)

		Frequency	Percent	Valid Percent
Valid	In-person instruction or other in person work	3750	89.6	89.6
	Remote instruction	96	2.3	2.3
	Remote non-instructional work	29	.7	.7
	Not currently working	156	3.7	3.7
	None of these options apply to me	155	3.7	3.7
	Total	4186	100.0	100.0

NOTE: The above variable is what was used to select the analytical sample for this report. The survey was delivered to a random sample drawn from the entire population of active members in the BCTF database (excluding federation staff). The 4,186 respondents included in the table above make up our representative sample of that population. However, we only used data from the 3,750 teachers engaged in “in-person instruction or other in person work” for this report (as seen in the table below). There are several reasons for why we focus only on this sample of in-person teachers:

1. The in-person teachers are the only respondents who were asked to report on the health and safety conditions within their workplace. Because this topic is a key factor in this report, it is logical to exclude all respondents who were not asked the health and safety questions.
2. While the teachers excluded from the analytical sample (remote instruction, remote non-instruction work, not currently working, not classified) provided data on some of the other variables utilized within this report, we did not want to introduce confusion by reporting results from multiple different samples. Instead, the reader can understand that all the results from this report are from the same sample of only in-person teachers.
3. By restricting the sample to only in-person teachers, we also control for a variety of confounding effects related to working conditions that could otherwise introduce error or bias into the results.

Analytical sample breakdown by working conditions

		Frequency	Percent	Valid Percent
Valid	In-person instruction or other in person work	3750	100.0	100.0

Demographic description of the sample

Gender

		Frequency	Percent	Valid Percent
Valid	Male	889	23.7	24.2
	Female	2775	74.0	75.4
	Non-binary	12	.3	.3
	Two Spirited	1	.0	.0
	Others	1	.0	.0
	Total	3678	98.1	100.0
Missing	Prefer not to answer	72	1.9	
Total		3750	100.0	

		Frequency	Percent	Valid Percent
Valid	Male	889	23.7	24.3
	Female	2775	74.0	75.7
	Total	3664	97.7	100.0
Missing	Not placed in gender binary	86	2.3	
Total		3750	100.0	

Age

		Frequency	Percent	Valid Percent
Valid	34 or younger	903	24.1	24.3
	35-44	1176	31.4	31.7
	45-54	1051	28.0	28.3
	55 or older	581	15.5	15.7
	Total	3711	99.0	100.0
Missing	Prefer not to answer	39	1.0	
Total		3750	100.0	

Regional health authority

		Frequency	Percent	Valid Percent
Valid	Fraser	1488	39.7	39.7
	Vancouver Coastal	693	18.5	18.5
	Vancouver Island	639	17.0	17.0
	Interior	617	16.5	16.5
	Francophone	64	1.7	1.7
	Northern	249	6.6	6.6
	Total	3750	100.0	100.0

NOTE: Regional health authority is determined by the school district in which the respondent works most frequently.

Grades taught

		Frequency	Percent	Valid Percent
Valid	K-4 Teacher	1040	27.7	28.6
	Teaches a mix of K-4 and 5-12	796	21.2	21.9
	5-12 Teacher	1765	47.1	48.6
	Any adult instruction (even if teacher also does K-12)	30	.8	.8
	Total	3630	96.8	100.0
Missing	Not applicable	120	3.2	
Total		3750	100.0	

NOTE: This variable summarizes answers to a multiple response survey question. Any involvement in adult instruction automatically assigns the respondent to category 4 because at least some of their students are adults (and belong to a higher-risk category concerning COVID-19).

Years of experience

		Frequency	Percent	Valid Percent
Valid	Less than 1 year	86	2.3	2.3
	1 to 5 years	625	16.7	16.7
	6 to 10 years	701	18.7	18.7
	11 to 20 years	1198	31.9	32.0
	21 to 30 years	879	23.5	23.5
	31 to 40 years	231	6.2	6.2
	Over 40 years	20	.5	.5
	Total	3740	99.8	100.0
Missing	Not applicable	9	.2	
Total		3750	100.0	

Teaching position

		Frequency	Percent	Valid Percent
Valid	Classroom Teacher only	2294	61.2	61.2
	Specialist Teacher only	716	19.1	19.1
	Teacher Teaching on Call only	252	6.7	6.7
	Others	136	3.6	3.6
	Multiple positions mentioned	352	9.4	9.4
	Total	3750	100.0	100.0

NOTE: Priority is given to the most prevalent categories of Classroom Teacher, Specialist Teacher and Teacher Teaching on Call when summarizing replies to this multiple response survey item.

Note on the combination of some variable categories

For the purposes of this report, the categories of some variables were combined. This is a typical approach to providing more accessible and readable results (especially when working with directional Likert-scale items). In each of the cases where categories were combined, the five valid response categories were combined into 3 valid categories, maintaining the direction of responses but losing distinction between categories of the same direction.

For example, each of the eight health and safety items were originally presented to respondents with the following response options: **Strongly agree; Somewhat agree; Neither agree nor disagree; Somewhat disagree; Strongly disagree; Don't know/Not applicable.**

After combination, the response categories for the eight health and safety items are as follows: **Strongly agree or somewhat agree; Neither agree nor disagree; Strongly disagree or somewhat disagree; Don't know/Not applicable.**

Other variables that were treated in the same manner as the above: COVID-related workload increase, COVID-related impact on mental health, COVID-related impact on physical health, student academic needs and student social/emotional needs.

Tables containing the uncombined versions of these variables can be made available upon request.

