

THU COVID-19 Response Evaluation

For the response period of August/September 2020 to February/March 2021

All Staff Survey Results

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Executive Summary

To support effective public health practice and in alignment with our 2019-2023 strategic plan, Timiskaming Health Unit (THU) is evaluating its response to COVID-19. The aim is to capture and understand successes, challenges and areas for improvement in THU's collective systems, processes and efforts in handling COVID-19 pandemic response in order to identify what is working well and where there are ongoing or new areas for improvement.

An all staff questionnaire was first administered in July of 2020 to identify successes, challenges and areas for improvement related to THU's COVID-19 first wave response (March to June 2020). Survey findings were shared with management and staff. In addition to use for informing ongoing management decisions, the findings were documented to support future evidence based emergency response planning. Given the duration of the COVID-19 pandemic, a second all staff questionnaire was administered in February of 2021. This survey asked staff to reflect on the preceding six month period. This survey contained many of the same questions from the first survey and included topics such as staff supports, health & safety, communication, engagement and workload. Employees were also asked to reflect on successes and challenges, and specific actions to improve. Unique to this second survey was an added section on stress and well-being. Furthermore, THU staff who were members of the Incident Management System (IMS) were invited to continue on with an additional two matrix style questions covering leadership and decision making, IMS meetings and roles, communication, evidence and documentation.

Of 66 staff, 54 completed the survey for a response rate of 82%. Staff working the case management and contact tracing or outbreak management / prevention (long-term care & congregate living) and/or other tasks (regular duties) make up the largest proportion of respondents at ~29% and ~33% respectively. During the first wave response, the highest proportion of respondents worked in the COVID hotline or Public Health Inspector (PHI) line and related tasks area of work.

Key Findings include:

- In terms of **support for assigned tasks** the majority of staff strongly agreed or agreed that they received the proper training (72%), resources and tools (~78%), and clear direction from their manager (70%) to complete assigned tasks. Differences between percent respondents who strongly agreed/agreed versus strongly disagreed, disagreed, or were neutral were significant.
- 72% agreed or strongly agreed that **health and safety protocols and actions** were adequate to support measures such as physical distancing in the workplace, cleaning and sanitation, screening and signage.
- Over 80% of respondents strongly agreed or agreed that they felt **supported to cope with the uncertainty and changes brought on by COVID-19** by their managers, colleagues and agency. Significant differences in % respondents were observed between those who strongly agreed/agreed and those who were neutral, disagreed or strongly disagreed.
- 71% of respondents strongly agreed or agreed that their **workload** was appropriate and manageable with 14% disagreeing and strongly disagreeing.
- 39% of respondents reported their level of **work-related stress** to be moderate, with the top two sources being heavy workload (27%) and balancing work and caregiving responsibilities (25%).
- Feedback about **mental health and well-being support** were generally positive; 81% strongly agreed or somewhat agreed that they felt supported by their manager. Approximately 70% of respondents perceived

that management took adequate steps to support the mental health of employees and that they were comfortable sharing concerns to their managers.

- In terms of **internal communication and access to information**, the majority of staff (~70%) felt they were kept informed and that all-staff communication was timely and of adequate detail with approximately 10-12% disagreeing and strongly disagreeing. Respondents who strongly agreed or agreed were significantly higher than those who disagreed or strongly disagreed.
- **Regarding place of work supports**, 81% of respondents strongly agreed or agreed that their location of work was suitable to accommodate their situation during the pandemic. This was significantly higher than the % of respondents who disagreed and strongly disagreed (6%). 81% strongly agreed or agreed that they had the ability to adjust their work schedule to accommodate personal situations; this was significantly higher than the % of staff who disagreed or strongly disagreed (6%).
- 57% of staff agreed and strongly agreed that during the COVID-19 response **essential non-COVID-19 programs and & services** continued. Approximately 40% agreed or strongly agreed that they were able to continue supporting non-COVID-19 related projects with community partners or projects assigned prior to the pandemic response. In all cases, those who agreed with these statements were significantly greater than those who disagreed.
- Of the IMS member section of the survey, respondents (80-100%) strongly agreed or agreed that **communication from and between IMS leadership and sections** was effective and timely; however this was not significant. A significantly greater proportion strongly agreed or agreed that these **communications had been transparent**. 90% of respondents strongly agreed or agreed that THU's **leadership and direction was effective**; this was significantly greater than those who were neutral.
- **Comparison between the first and second all-staff survey** demonstrated no significant differences in mean ratings (strongly agree, agree, neutral, disagree and strongly disagree) between most questions. However, survey 2 respondents were significantly *more* likely to agree that they received proper resources and tools required to complete assigned tasks during the COVID-19 response.

Staff recognized a number of **successes** and **challenges** related to THU's COVID-19 second wave response. Communication, collaboration and teamwork between staff, and overall management of COVID-19 cases emerged as the top 3 successes. A challenge most frequently identified by staff was communication, particularly internal communication as well as a need for clarity and plain language in external communications. Difficulty managing other Public Health work due to fluctuating priorities was also identified as a challenge, as well as balancing workload and taking care of staff's personal well-being.

Staff also offered insight on actions to consider regarding internal processes and structures for an improved and sustained THU COVID-19 response. Recommendations spanned several areas including communication, supports to complete assigned tasks including health and safety supports, supports related to dealing with the uncertainty and changes brought on by COVID-19 as well as supports related to work-related stress and staff mental health and well-being, as well as other workplace policy supports.

These findings can be used to protect the health of our communities by building on aspects of the response that worked well and should continue or be enhanced during future pandemic waves and emergencies as well as by course correcting as necessary.

Background

On March 17, 2020 the Government of Ontario declared an emergency under the Emergency Management and Civil Protection Act, to protect the health and safety of all Ontarians in light of the COVID-19 pandemic. To limit and delay the epidemic spread of COVID-19, several public health measures were enacted by the Ontario government to keep people at home including the closure of schools, childcare, restaurants, all non-essential businesses, public spaces, and the prohibition of events and gatherings. Population-level public health measures also included asking everyone to practise physical distancing (previously referred to as social distancing).

Since the beginning of 2020, and more specifically since March, Timiskaming Health Unit (THU) has been leading the local public health response to the COVID-19 pandemic across various sectors in the communities we serve. The components of the local public health response include activities to prevent or mitigate the immediate and short-term effects of the pandemic. This requires a collaborative approach, leadership, strategic partnerships, a health equity focus and strong communications. Additionally, a diverse and dedicated team of staff to support infectious disease outbreak prevention and management in a variety of settings, contact tracing, epidemiological assessment and surveillance, risk communication and work collaboratively to identify and address health disparities in order to prevent local health care system from being overwhelmed.

Goal

To facilitate prompt reflection on THU's COVID-19 emergency response during the period of August/September 2020 to February/March 2021.

Objective

To capture and understand successes, challenges and areas for improvement in THU's collective systems, processes and efforts in handling the ongoing COVID-19 response in order to identify what is working well and where there are ongoing or new areas for improvement.

Methods

Staff Survey Design and Distribution

Survey questions were repeated from the first staff survey. Based on feedback in the first survey, questions related to stress and well-being were adopted from a federal government public service employee survey. These questions were reviewed by internal staff who support mental health promotion work.

The main portion of the questionnaire contained 8 categories of questions in total. Of these, 7 required respondents to rate statements using a Likert scale of 5 levels, such as: strongly agree, agree, neutral, disagree, and strongly disagree. There was also the opportunity to provide comments in open-ended questions. The last category of questions contained 3 completely open-ended questions aimed at assessing the successes and challenges of the pandemic response, as well as any insights on improvements staff wanted to share.

The survey also contained 2 matrix style questions for staff members of the incident management system. These questions were also repeated from a questionnaire that was distributed earlier in the pandemic.

On February 19th, 2021, the survey was sent to all THU staff using Survey Monkey via email. The survey remained open until March 11th, 2021.

Analysis

Descriptive statistics were calculated for each question. These include the number and **percent of respondents (count/total responses x 100)**, standard error (SE) and 95% confidence intervals (CI) **around the percent respondents**. Proportions were compared using STATA (Version 16) software; significant findings were represented as a p-value less than 0.05 ($p < 0.05$) and all p-values were double sided. **All tables displaying summary statistics are provided in [Appendix B](#).**

Furthermore, when comparing survey results with the first all-staff survey, a one-way repeated measure analysis of variance (ANOVA) was utilized to test for significant differences in mean Likert scale ratings for each question that was comparable between the two surveys.

Open-ended survey responses were analyzed using an inductive descriptive approach to content analysis. The intent of this analysis was simply descriptive to develop themes of staff's views, with minimal interpretative inferences. Initial coding began by the analyst coding independently, then meeting to discuss and create a refined coding schema ([Appendix A](#)). N-Vivo 12 was used to manage qualitative data analysis.

Analysis by Program Area

In order to assess differing perspectives or perceptions among THU staff depending on their role, analyses for a few questions were carried out by primary area of COVID-19 work. However, these results are not presented in the report to ensure anonymity. Although survey responses were collected in an anonymous matter, the possibility of identifying respondents by program area are of concern due to the low sample size in these areas of work.

Findings

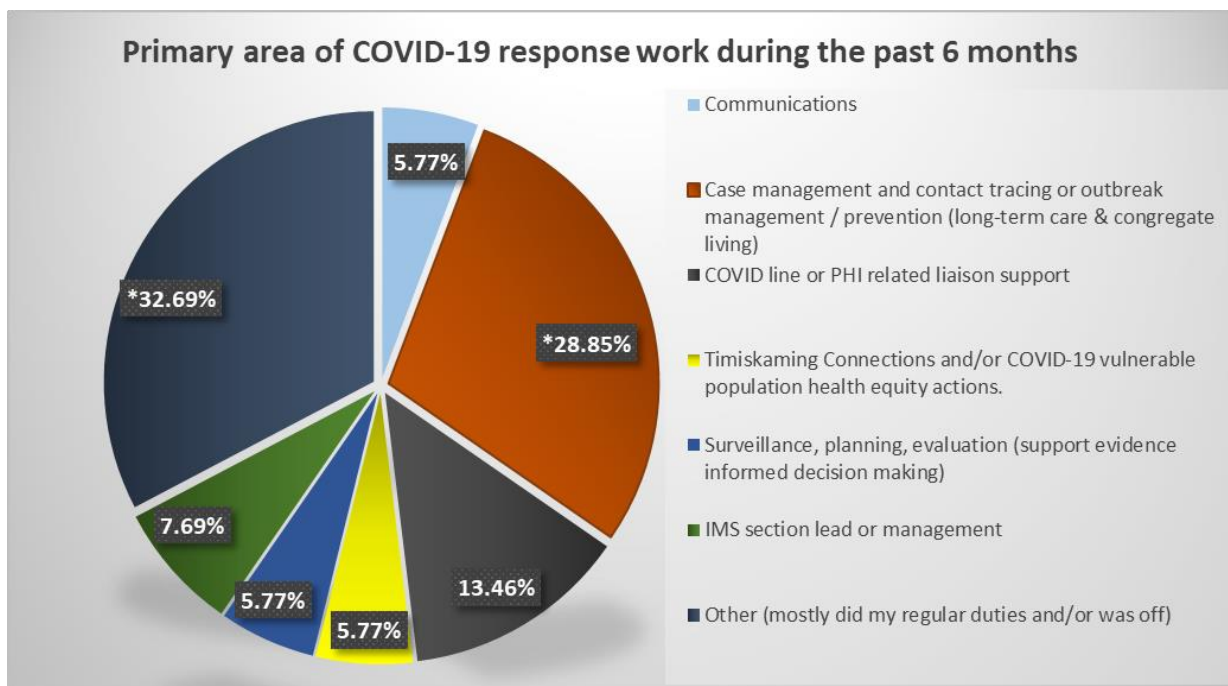
Staff Sample

There were a total of **54 respondents** to the THU all-staff survey. With 66 staff in total, this is an **82% response rate**.

The following analysis includes responses of only the completed surveys (**n=54**). Missing values or questions where respondents replies “N/A” were excluded from analysis.

The largest proportion of respondents were part of the **case management and contact tracing or outbreak management / prevention** (long-term care & congregate living) making up approximately 30% of all respondents. 32% of respondents reported working in **another primary area of work** relating to their regular duties. There were significantly higher proportion of staff working in these two areas than the rest. The next largest portion was made up by individuals working in COVID line or PHI related liaison support (**Figure 1**).

Figure 1: Respondents Primary area of COVID-19 work, September 2020 to February 2021



* Represents significant findings ($p < 0.05$). These proportions were significantly greater than the rest.

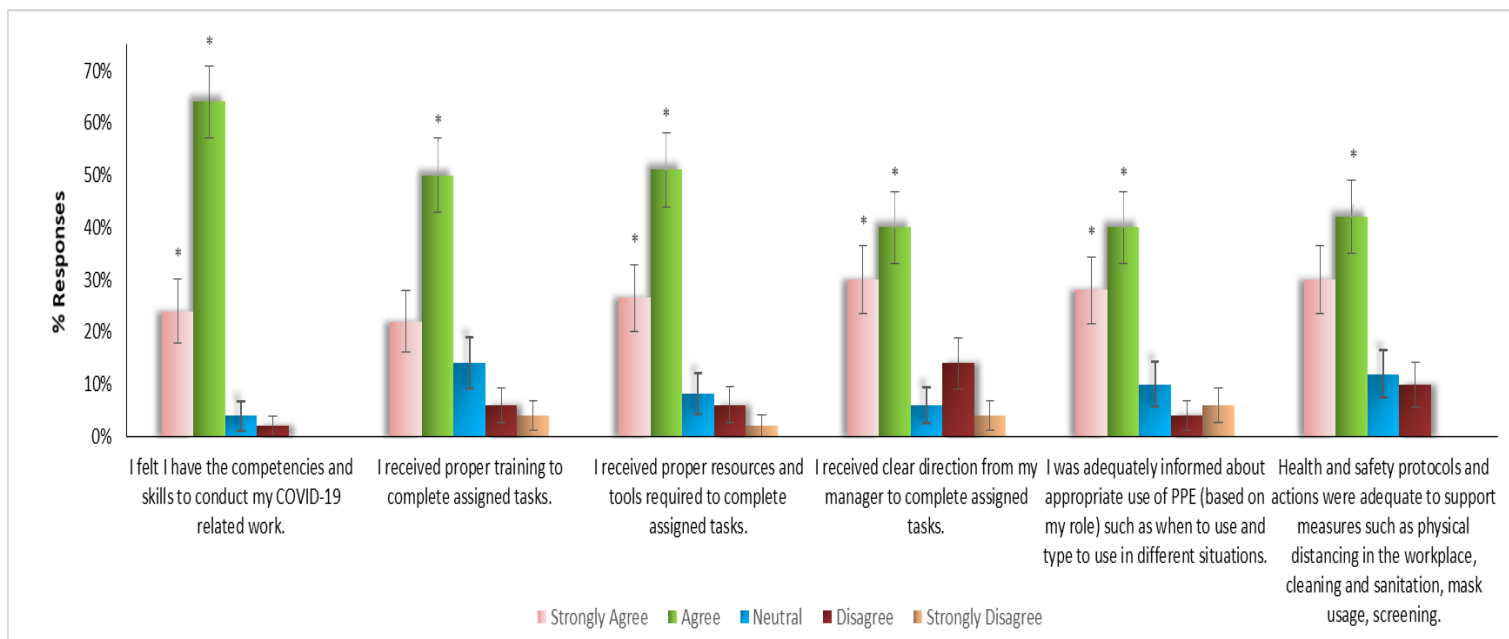
Support for Assigned Tasks

THU staff were asked to rank whether they received proper training, resources and tools, clear direction, and information about PPE and health and safety protocols to complete assigned tasks during the previous 6 month COVID-19 response reference period. In addition, staff were invited to identify whether they felt they had the required competencies and skills to conduct their assigned COVID-19 work. Findings overall are illustrated in **Figure 2**.

Overall, the majority of respondents (**88%**) felt they had the competencies and skills to conduct their COVID-19 work. **72%** of respondents agreed or strongly agreed they received proper training to complete their assigned tasks; the proportion of those who agreed (**50%**) was **significantly higher** than the proportion of responses in other rating categories. There was little disagreement related to receiving proper training and resources and tools, with majority of staff (**77%**) **significantly** agreeing or strongly agreeing they had adequate resources and tools to complete assigned tasks.

70% of staff **significantly** agreed or strongly agreed that they received clear direction from their manager to complete assigned tasks, compared to the **18%** disagreeing or strongly disagreeing (**Figure 2**). With respect to receiving adequate information about appropriate use of personal protective equipment (PPE), **68%** of staff agreed or strongly agreed; this was **significantly greater** than those who disagreed or strongly disagreed. Overall, majority of staff (**72%**) agreed or strongly agreed on being appropriately informed on health and safety protocols, with those **agreeing** being **significantly greater** than those who reported being neutral or disagreeing.

Figure 2. Perceived support for assigned tasks during the COVID-19 pandemic response

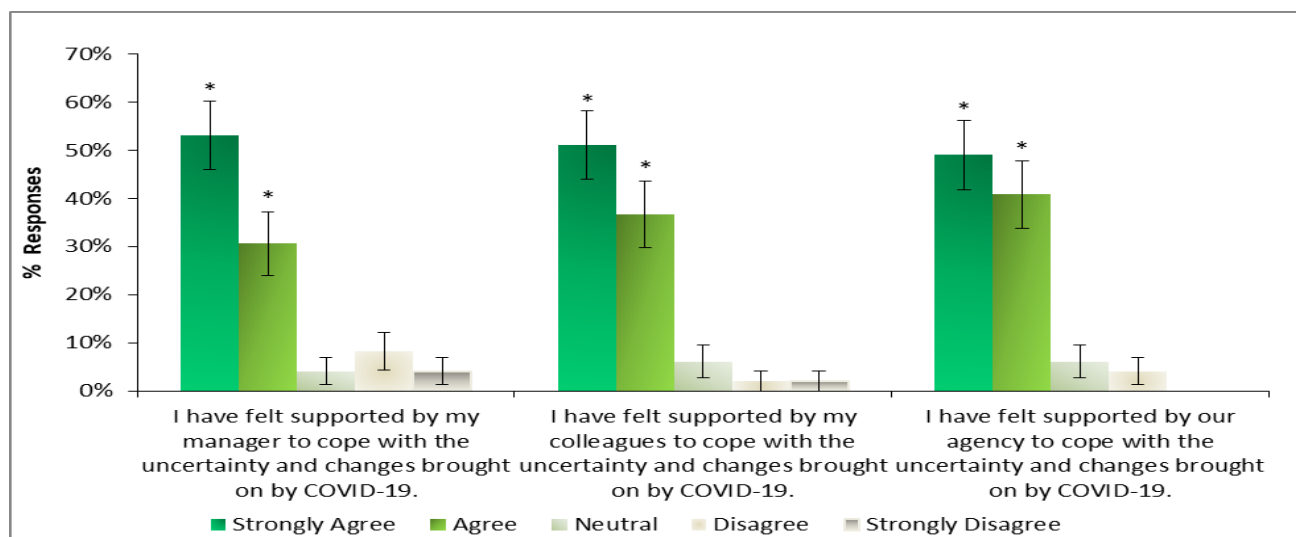


* Represents proportions which were significantly different ($p < 0.05$).
Error bars are presented to demonstrate the variability in responses.

Support to Cope with Uncertainty and Changes Brought on by COVID-19

Overall, THU staff agreed or strongly agreed that they felt supported by their manager, colleagues and the agency to cope with the uncertainty and changes brought on by COVID-19 (Figure 3). The proportion of staff who strongly agreed or agreed were **significantly higher** than those who were neutral, disagreed or strongly disagreed.

Figure 3. Support during COVID-19 pandemic



* Represents proportions which were significantly different ($p < 0.05$).

Error bars are presented to demonstrate the variability in responses.

Perceived Workload & Factors Causing Work-Related Stress

Staff were asked about their perceived workload level. Nearly **72%** of respondents agreed or strongly agreed that their workload was appropriate and manageable during the previous 6 month COVID-19 pandemic response reference period (Figure 4).

However, when asked about factors contributing to work-related stress (Figure 5), heavy workload was perceived to be the **most common** factor causing a large or very large amount of stress (~27%), and this was **significantly different** from all other stressors *except* “Balancing work and caregiving responsibilities” which was the **second most** contributing factor to work-related stress among staff (~25% reported large or very large). Overall, staff reported their level of work related stress to be moderate (~39%), with 27% reporting it to be high or very high (Figure 4).

The majority of staff reported other factors such as unreasonable deadlines, overtime or long work hours, lack of clear expectations and difficulty accessing my work tools or network (e.g. work email, work device, ergonomic equipment) as either having no effect at all, or a small effect, on their work-related stress (Figure 5); these proportions were **significantly greater** than those who reported a large or very large effect. In addition, respondents who believed that difficulty accessing work tools or networks caused a moderate level of stress was **significantly greater** than those who perceived it as being large or very large.

Figure 4. Workload perceived as appropriate and manageable (a) and perceived level of overall stress during last 6 months of COVID-19 Pandemic response (b)

a)

b)

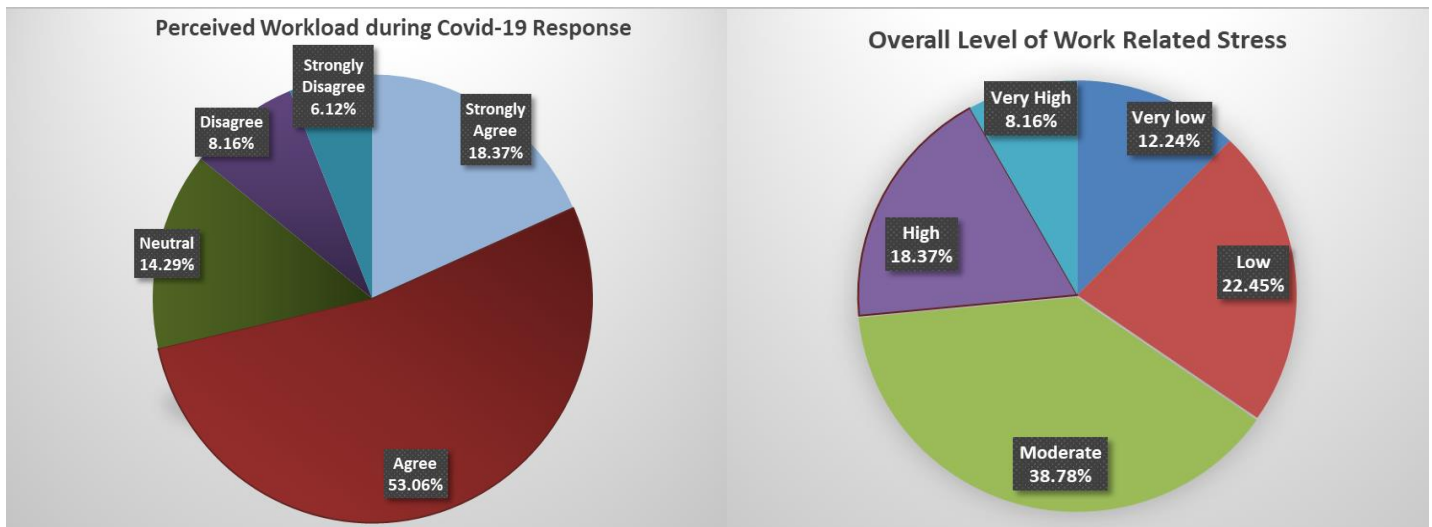
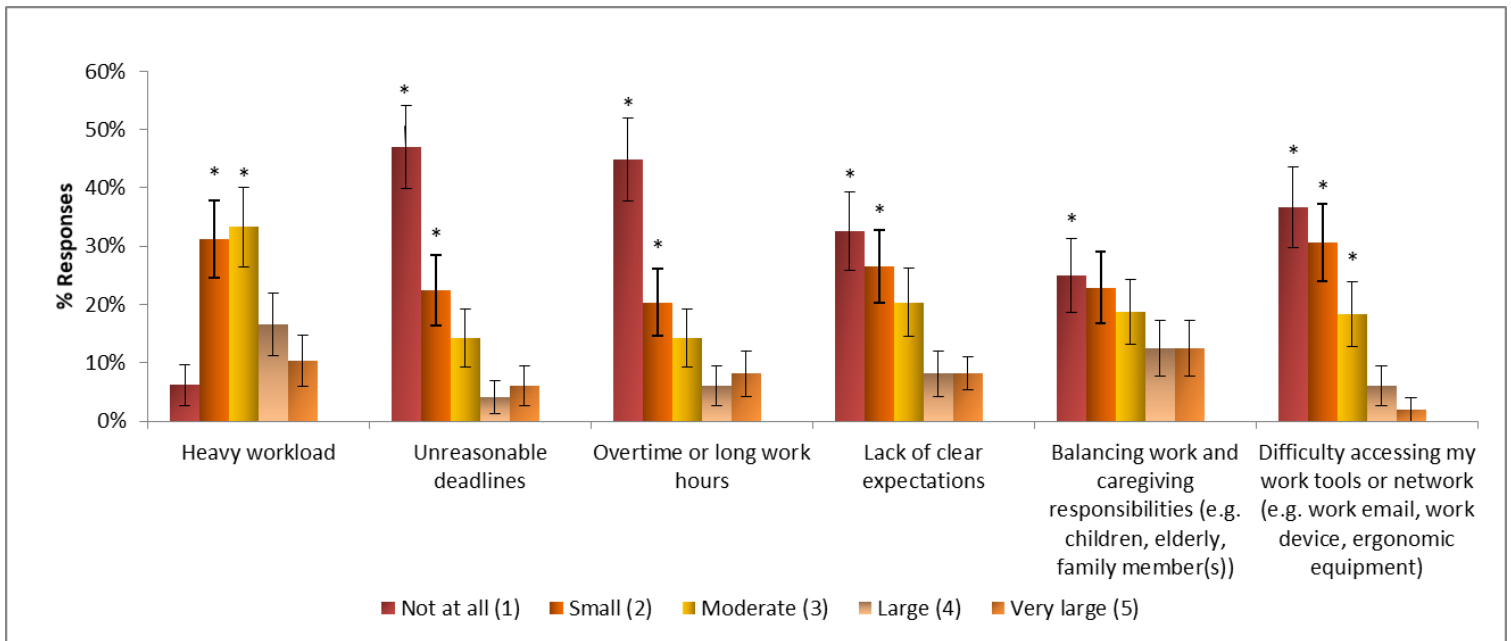


Figure 5. Contributing factors for work-related stress during the last 6 months of COVID-19 Pandemic response



* Represents proportions which were significantly different (p<0.05). Error bars are presented to demonstrate the variability in responses.

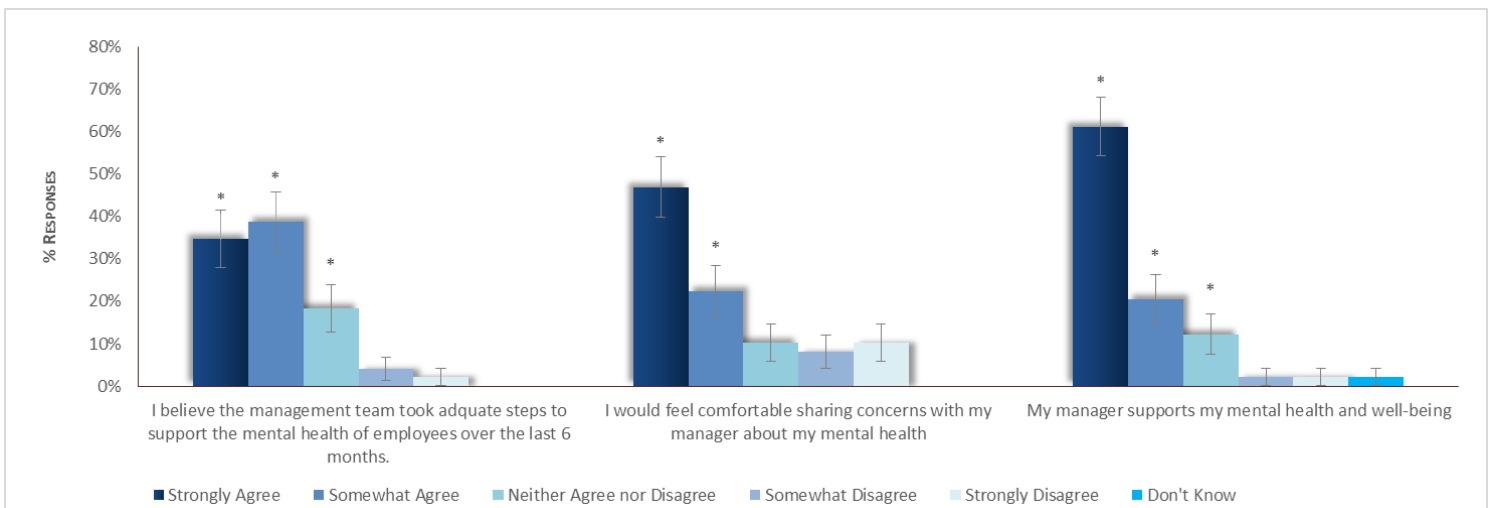
Mental Health and Well-Being Support

Positively, a majority of respondents (70-80%) strongly agreed or somewhat agreed their managers & management provided the necessary support for their mental health and overall well-being (Figure 6). This was significantly greater than the proportion of respondents who disagreed or strongly disagreed.

When asked about the level of extent staff felt comfortable sharing concerns with their managers about their mental health concerns, a significantly higher proportion of individuals strongly agreed or somewhat agreed (~70%).

The proportion of respondents who disagreed or strongly disagreed on any of the statements in Figure 6 ranged from 4-18%, with higher % of individuals disagreeing/strongly disagreeing in feeling comfortable sharing concerns with managers (18.4%).

Figure 6. Perceived mental health and well-being support from managers during last 6 months



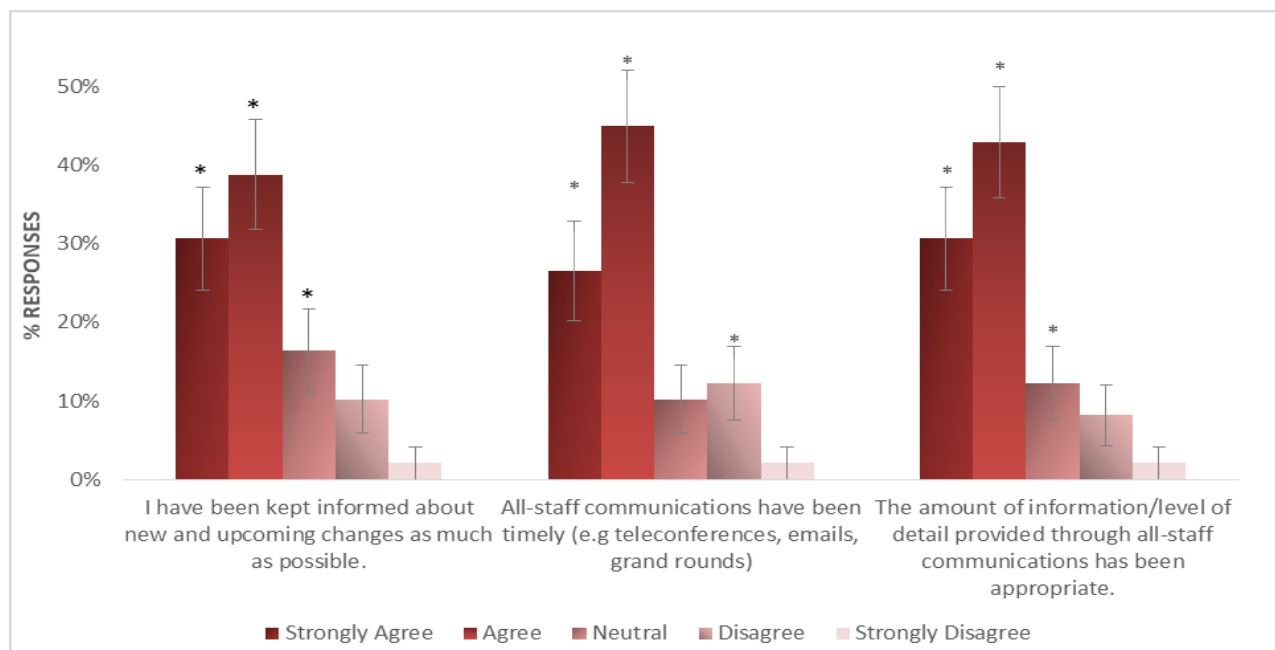
* Represents proportions which were significantly different ($p < 0.05$).
Error bars are presented to demonstrate the variability in responses.

Internal Communication and Access to Information

With respect to being kept informed about new and upcoming changes, the majority of staff strongly agreed or agreed (68%) to feeling informed and 71% felt that all-staff communication was timely and adequate (Figure 7); % staff who strongly agreed and agreed was significantly higher than those who strongly disagreed or disagreed. Approximately 12% disagreed or strongly disagreed that they were kept informed of new and upcoming changes and 14% felt that communication was not timely (Figure 7).

The proportion of staff who strongly agreed or agreed (74%) that the amount of information/detail was appropriate was significantly higher than the proportion of respondents who indicated they felt neutral, disagreed or strongly disagreed with that statement. Staff who reported feeling neutral about this statement was also significantly greater than those who perceived to strongly disagree.

Figure 7. Access to information during COVID-19 pandemic



* Represents proportions which were significantly different ($p < 0.05$).

Error bars are presented to demonstrate the variability in responses

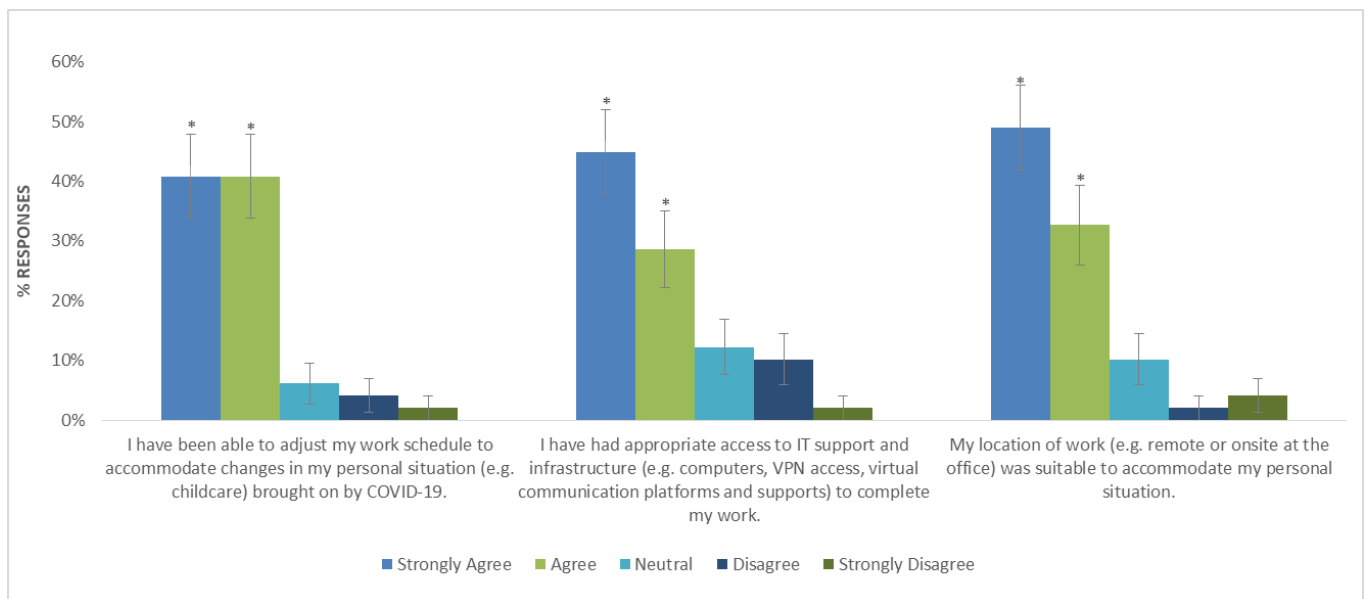
Place of Work Supports

In terms of having the ability to adjust work schedule to accommodate personal situations brought on by COVID-19, **82%** indicated they agreed or strongly agreed and these were **significantly different** from the rest; with **6%** indicating they disagreed or strongly disagreed (**Figure 8**).

Regarding IT infrastructure and supports to complete work, the majority of respondents (**74%**) agreed or strongly agreed that they had appropriate access; this was **significantly greater** than percent respondents who were neutral, disagreed and strongly disagreed. However, there were no significant differences between respondents that agreed vs. strongly agreed.

Over **80%** of respondents felt that their location of work (remote, onsite) was suitable to accommodate their situation during the pandemic. There was a **significantly greater** proportion of staff who agreed and strongly agreed with this statement than those who were neutral, disagreed or strongly disagreed.

Figure 8. Perceived impact of adjustments in work environment, suitability of work setting and access to IT support during COVID-19 Pandemic response



* Represents proportions which were significantly different ($p < 0.05$).

Error bars are presented to demonstrate the variability in responses.

Perceived impact on non-COVID Programs, Services and Projects

Staff were asked to rank their level of agreement with statements related to the delivery of essential programs and services, and non-COVID-19 projects. **57%** of staff agreed or strongly agreed that essential non-COVID programs and services continued during the last 6 months of the COVID-19 response, with **16%** disagreeing or strongly disagreeing (Figure 9). There was a **significantly greater** proportion of staff who agreed than those who strongly agreed, neither agreed nor disagreed, disagreed or strongly disagreed. There was a **significantly greater** proportion of staff who neither agreed nor disagreed than those who disagreed.

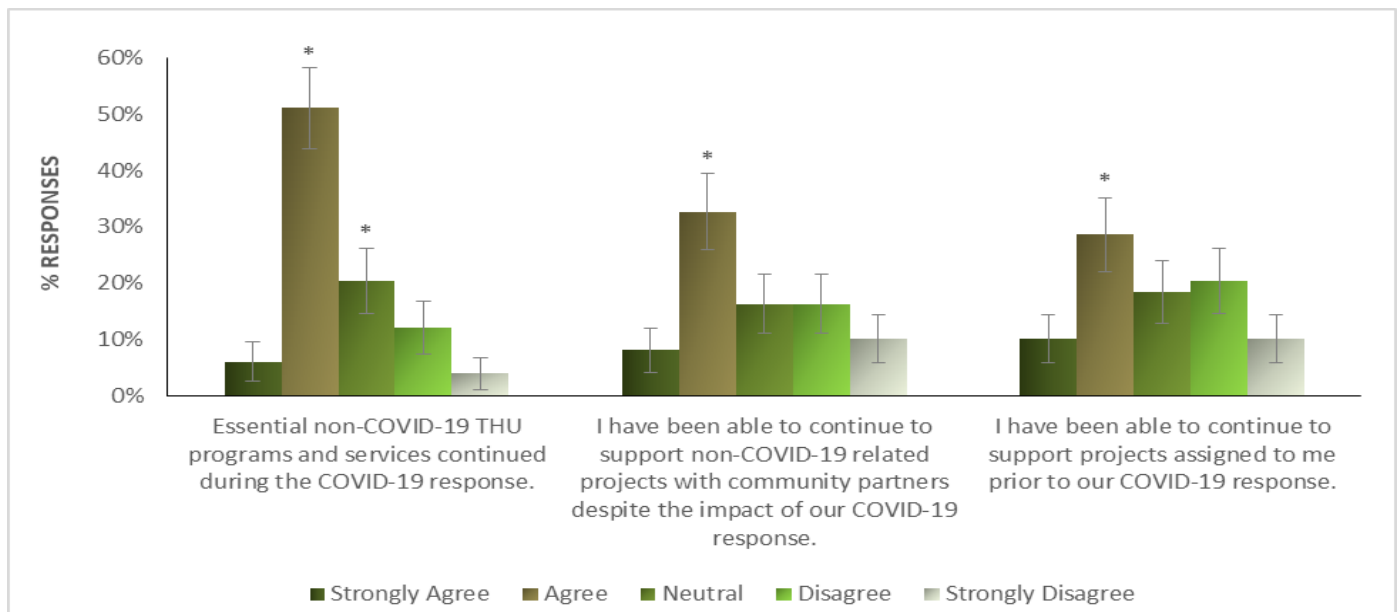
With respect to supporting other non-COVID-19 related projects with community partners, approximately **41%** of respondents agreed or strongly agreed that they have been able to continue this support, whereas **26%** of respondents disagreed or strongly disagreed. **Significant differences** were found between percent of staff who agreed vs those who strongly agreed or strongly disagreed.

39% of respondents agreed or strongly agreed that they were able to continue to support projects assigned prior to the pandemic response; approximately **30%** of staff thought they were unable to continue with that work (Figure 9). **Significant differences** were only found between those who agreed vs those who strongly agreed or strongly disagreed.

With respect to perceived impact of not being able to continue to support projects assigned prior to the COVID-19 response, approximately **70%** of respondents indicated that they had not noticed any impacts of COVID-19 on other projects during last 6 months (Figure 10). Out of the **30%** who responded yes and **24%** of all respondents who provided comments:

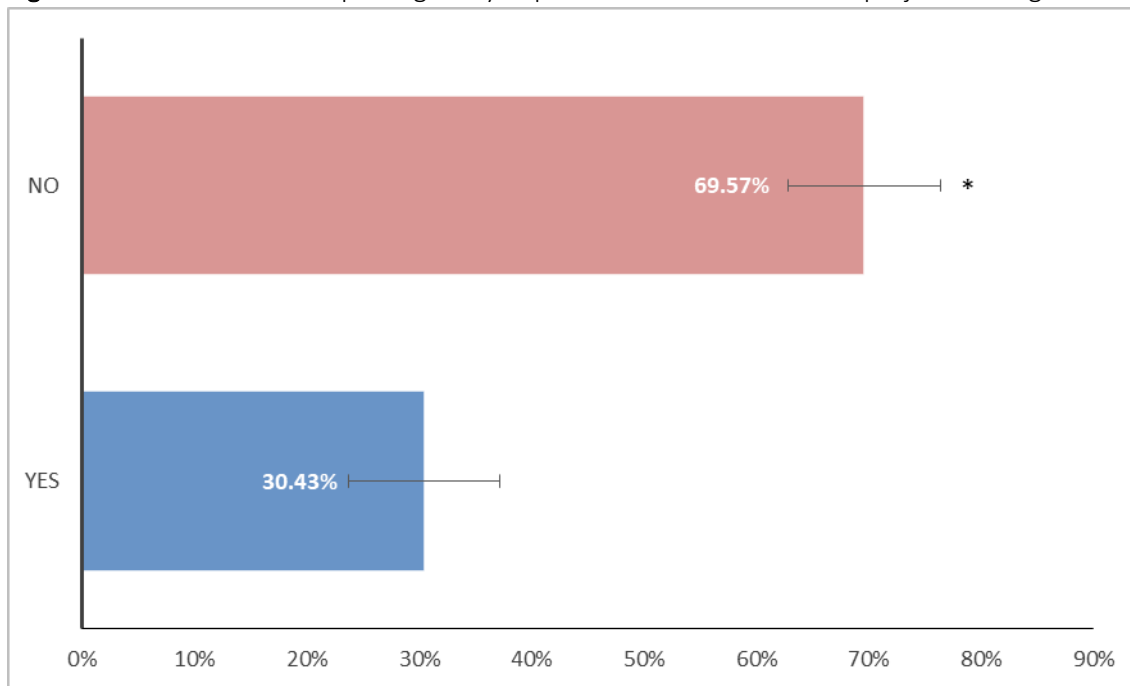
- 1) **23%** mentioned decreased support for school community & other clients as an unintended impact
- 2) **23%** stated a decrease in number of services provided in other programs
- 3) **8%** observed irregular inspections
- 4) **38%** stated other negative impact such as loss of momentum on several projects, severe project delays and the use of outdated data for project planning

Figure 9. Perceived Support for Non-COVID-19 Programs and Services during COVID-19 pandemic



* Represents proportions which were significantly different (p<0.05).
Error bars are presented to demonstrate the variability in responses

Figure 10. Percent of staff reporting if any impacts of COVID-19 on other projects during last 6 months



* Represents proportions which were significantly different ($p < 0.05$).

IMS (Incident Management System) Leadership and Direction

There were several questions specific to THU leadership. Out of the 54 staff that completed the survey, 11 (22%) reported to be IMS members. When asked about the role of IMS during the last 6 months of the COVID-19 response, 90% of respondents felt that THU's IMS leadership and direction had been effective at guiding the local COVID-19 response (Figure 11). There were significant differences observed between percent respondents who strongly agreed and those in other categories.

A significantly large proportion of respondents also agreed or strongly agreed that the information shared through IMS meetings had informed key COVID-19 response decisions (90%). Overall, respondents provided positive ratings when asked about their contribution and role within the IMS (Figure 11).

Communications within IMS (Incident Management System)

Almost all respondents (90-100%) reported communications from IMS as being transparent and timely (Figure 12). In addition, 80% of respondents agreed or strongly agreed that communications between IMS sections has been effective and timely. Significant differences were only observed between those who strongly agreed that communications from IMS as being transparent vs those who neither agreed nor disagreed.

Figure 11. IMS Leadership and Direction to guide local COVID-19 response during last 6 months

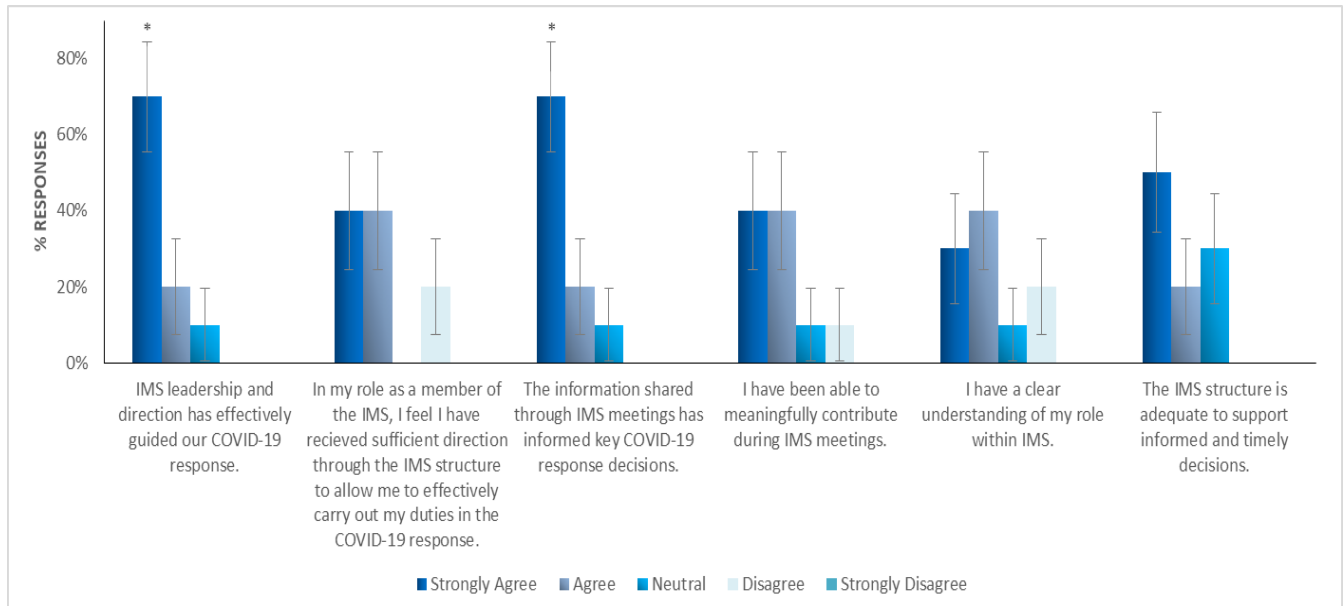
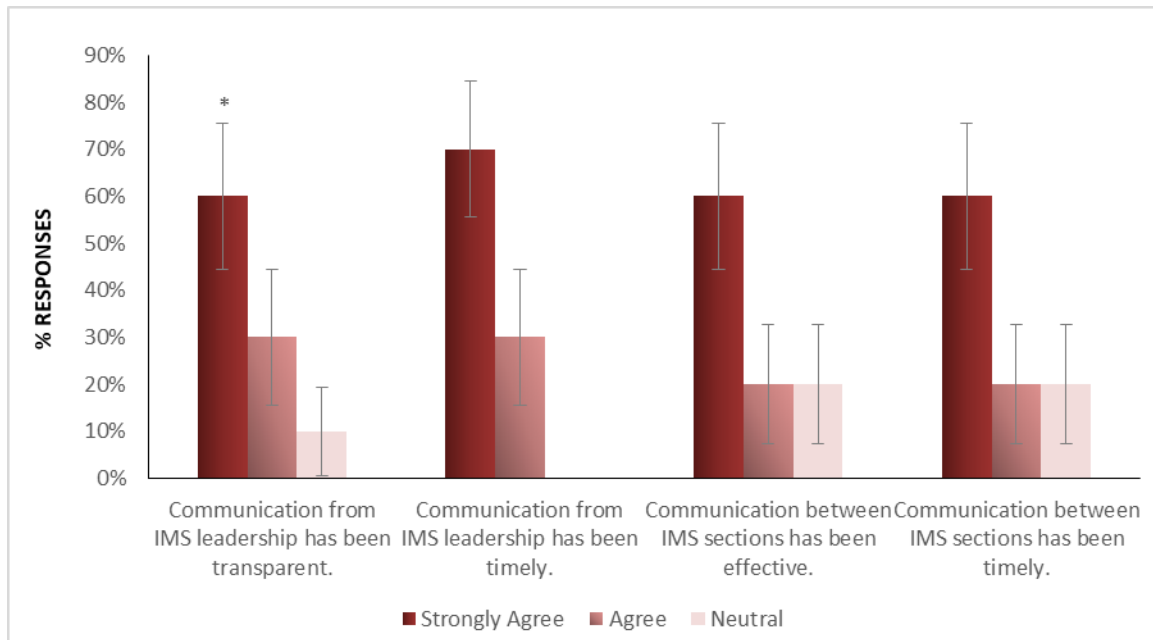


Figure 12. IMS Communication during last 6 months of COVID-19 response



Survey Comparison

Results from the first all-staff survey (March to June 2020) were compared to the second all-staff survey. Results are summarized below; shaded rows represent significant findings. Comparable questions between the two surveys were related to training, health & safety, perceived support from managers & colleagues, perceived level of workload as being manageable or appropriate, all-staff communications, work support, diversion of resources from other public health programs and IMS leadership.

Comparison of the matrix style questions asked of incident management system staff members only was not completed at the time of this report.

Questions were rated using a Likert scale (5- Strongly agree, 4- Agree, 3-Neutral, 2-Disagree, 1- Strongly disagree). Overall, **no significant differences** in mean ratings were observed between the first and second all-staff survey **except** for **perceived support (resources and tools) to complete tasks**. During the period of September 2020 to February 2021, staff perceived having proper resources and tools to complete their assigned tasks, compared to the first staff-survey where less staff reported agreed with this statement.

1. Training, Health and Safety

Question	Survey 1 Mean Rating	Survey 2 Mean Rating	Difference in Mean Rating (p-value)
I felt I have the competencies and skills to conduct my COVID-19 related work.	4.23	4.17	Survey 2 mean rating was slightly lower – but not significant (p= 0.663)
I received proper training to complete assigned tasks during the COVID-19 response	3.4	3.83	Survey 2 mean rating was higher - but not significant (p= 0.064)
I received proper resources and tools required to complete assigned tasks during the COVID-19 response.	3.39	4.0	Survey 2 mean rating was significantly greater (p= 0.007) . Therefore, significantly more respondents in the second staff-survey felt they received proper resources and tools to complete their tasks.
I received clear direction from my manager to complete assigned tasks during the COVID-19 response.	3.37	3.83	Survey 2 mean rating was slightly higher - but not significant (p= 0.089)
I was adequately informed about appropriate use of PPE (based on my role) such as when to use and type to use in different situations.	3.66	3.91	Survey 2 mean rating was slightly higher - but not significant (p= 0.329)
Health and safety protocols and actions were adequate to support measures such as physical distancing in workplace, cleaning and sanitation, screening and signage etc).	3.74	3.98	Survey 2 mean rating was slightly higher - but not significant (p= 0.260).

2. Perceived Support

Question	Survey 1 Mean Rating	Survey 2 Mean Rating	Difference in Mean Rating (p-value)
I have felt supported by my manager to cope with the uncertainty and changes brought on by COVID-19.	4.09	4.20	Survey 2 mean rating was slightly higher - but not significant (p= 0.625).
I have felt supported by my colleagues to cope with the uncertainty and changes brought on by COVID-19.	4.39	4.35	Survey 2 and Survey 1 mean ratings were almost identical (p= 0.851).
I have felt supported by our agency to cope with the uncertainty and changes brought on by COVID-19.	4.13	4.35	Survey 2 mean rating was slightly higher - but not significant (p= 0.243).

3. Perceived workload as being appropriate and manageable

Question	Survey 1 Mean Rating	Survey 2 Mean Rating	Difference in Mean Rating (p-value)
My workload during the COVID-19 response has been appropriate and manageable.	3.77	3.69	Survey 2 mean rating was slightly lower - but not significant (p= 0.742).

4. All-staff Communications

Question	Survey 1 Mean Rating	Survey 2 Mean Rating	Difference in Mean Rating (p-value)
I have been kept informed about new and upcoming changes as much as possible.	3.77	3.88	Survey 2 mean rating was slightly higher - but not significant (p= 0.621).
All-staff communications have been timely (e.g. teleconferences, emails, grand rounds).	3.74	3.85	Survey 2 mean rating was slightly higher - but not significant (p= 0.618).
The amount of information/level of detail provided through all-staff communications has been appropriate.	3.86	3.96	Survey 2 mean rating was slightly higher - but not significant (p= 0.629).

5. Perceived Work Support

Question	Survey 1 Mean Rating	Survey 2 Mean Rating	Difference in Mean Rating (p-value)
I have been able to adjust my work schedule to accommodate changes in my personal situation (e.g. childcare) brought on by COVID-19.	4.24	4.22	Survey 2 and Survey 1 mean ratings were almost identical (p= 0.912).
I have had appropriate access to IT infrastructure (e.g. computers, VPN access, virtual communication platforms and supports) to complete my work.	4.15	4.06	Survey 2 mean rating was slightly lower - but not significant (p= 0.673).
My location of work (e.g. remote or onsite at the office) was suitable to accommodate my personal situation during this pandemic.	4.33	4.23	Survey 2 mean rating was slightly lower - but not significant (p= 0.606).

6. Diversion of resources away from other Public Health work

Question	Survey 1 Mean Rating	Survey 2 Mean Rating	Difference in Mean Rating (p-value)
Essential non-COVID-19 THU programs and services continued during the COVID-19 response.	3.58	3.46	Survey 2 mean rating was slightly lower - but not significant (p= 0.600).
I have been able to continue to support non-COVID-19 related projects with community partners despite the impact of our COVID-19 response.	2.97	3.15	Survey 2 mean rating was slightly higher - but not significant (p= 0.528).
I have been able to continue to support projects assigned to me prior to our COVID-19 response.	2.85	3.09	Survey 2 mean rating was slightly higher - but not significant (p= 0. 0.394).

7. IMS leadership and direction

Question	Survey 1 Mean Rating	Survey 2 Mean Rating	Difference in Mean Rating (p-value)
IMS leadership and direction has effectively guided our local COVID-19 response.	4.0	4.6	Survey 2 mean rating was higher - but not significant (p=0.0636).

Qualitative Findings

Qualitative data offers rich description or insights about a certain topic; it is effectively utilized in developing hypotheses and theories, and describing processes such as decision making or communication processes. In order to make informed decisions, it is important to utilize both quantitative and qualitative methodology so a high degree of comprehensiveness may be achieved when interpreting results. Responses to open-ended questions in this survey were analyzed using an inductive process; the common themes which emerged from this process and comprised the codebook are depicted in **Appendix A**. The themes or codes are discussed in further detail below.

Support for Assigned Tasks

11 (20.4%) respondents provided feedback for this section, where the topics of training and resource support and direction from the manager drew the most comments. 7 out of these 11 (72%) provided recommendations and constructive feedback such as better training and efficient communication between staff and managers, frequent updates regarding COVID-19, and more team meetings. Respondents also mentioned that there were staff not following safety measures, often causing feelings of frustration, and infrequent cleaning and sanitization. One staff did provide positive feedback, mentioning that managers provided the opportunity for training and building new skills as the pandemic response continued.

Support to Cope with Uncertainty and Changes Brought on by COVID-19

9 respondents (17%) provided a lot of feedback in this section, with 6 (67%) stating recommendations such as evaluation or assessment of staff and management in fulfilling their roles and responsibilities, flexibility and adjustment related to staffs' work schedule and need for more virtual interaction and mental health check-ins. 2 respondents out of the 9 (22%) provided positive feedback stating that management did a great job at providing support to staff in all aspects; these comments were expressions of thanks and appreciation.

With respect to supports to cope with the uncertainty and changes brought on by COVID-19, appreciation for supportive policies and management related to sick leave, work from home, and ability to work a modified schedule and flexible hours dominated the comments.

Factors causing Work-Related Stress

Approximately 17 respondents (32% of staff) provided feedback regarding work-related stress. 9 staff reported that their work-related stress was due to various factors such as:

- 1) Unpredictability of COVID-19 response and fluctuating priorities (3 respondents (33%))
- 2) Management practices and lack of support (3 respondents (33%))
- 3) Organization of clinic and scheduling of calls (2 respondents (22%))
- 4) Technical issues (1 respondent (11%))

Recommendations were provided by 10 out of the 17 respondents (59%) around accessibility to mental health services and better support from managers in terms of balancing workload. 4 (24%) respondents also provided positive feedback, mentioning that since the first wave accessibility of COVID-19 updates has improved and that staff appreciate the efforts made by THU to handle this pandemic appropriately while providing opportunities of virtual activities.

Mental Health and Well-Being Support

Approximately 20% (10 respondents) of staff provided feedback about the support they receive from their managers, with most comments related to staff suggesting changes such as:

- 1) Improvement to the employment benefit package (1 respondent (10%)).
- 2) More conversations around mental health support from management (3 respondents (30%)).
- 3) Inclusion of an EAP or other external resources to help support staff and manager mental well-being (4 respondents (40%)).
- 4) Regular meetings, check-ins and virtual activities with other staff (3 respondents (30%)).

A low number of staff provided negative and positive feedback (2 respondents (20%)); one respondent of the two commented on their appreciation of managers who share their own personal experiences offering insight and support, whereas another respondent commented on managers not providing enough support.

Internal Communication and Access to Information

Although only 17% (n=9) of respondents provided comments relating to communication, the theme of effective communication is one that came up frequently in all sections. The top 2 communication concerns which respondents reported were 1) not receiving sufficient details about COVID-19 updates via emails and 2) concerns that the public received updates prior to THU staff, with the latter causing frustration among many staff.

Due to the uncertainty around the pandemic response, 5 of the 9 respondents (55%) provided several recommendations. 1 respondent recommended assigning some important roles to designated staff members. It was suggested that staff members can support busy managers in providing other staff changes in public health updates or guidance.

All other respondents whom provided recommendations also mentioned the need of an organized system of staying updated with all important communication happening between staff and the community as well as frequent updates and sharing of important information from meetings to all staff. 3 respondents (33%) provided positive feedback, mentioning that overall communication within THU has greatly improved in the last 6 months.

Place of Work Supports

Out of the 9 respondents, 2 (22%) provided positive feedback stating that they were appreciative of the opportunity to work from home and adjust their hours to accommodate for personal needs. However, most respondents (5 out of the 9) provided negative feedback pertaining to workplace support, expressing their concerns over IT and technical issues (4 respondents (44%)), and the lack of opportunities to work from home (1 respondent (11%)).

Main Successes of THU's COVID-19 Response and Contributing Factors

Staff were asked an open-ended question regarding the main successes of THU's COVID-19 response during the last 6 months. In addition, staff were invited to describe what contributed to or facilitated these success.

Overall, respondents provided a lot of feedback in this category. There were 34 responses, corresponding to a 63% response rate. There was considerable overlap between responses and themes which emerged. Response themes are stated below, from most mentioned to least mentioned:

Staff teamwork and collaboration emerged as a strong theme (18 respondents (53%)). Respondents frequently mentioned the fact that all staff worked effectively together to tackle problems and were flexible with their time and schedules to share the workload when needed.

Communication emerged as the second strongest theme (15 respondents (44%)). Effective and timely external communications with the public and stakeholders was specified most often, which included several mentions of social media (e.g. MOH videos). Internal communication and general communication were commented on equally.

Low case count and overall case management was also mentioned numerous times as a success (15 respondents (44%)). Respondents frequently praised THU's ability to mitigate risk by keeping control over the pandemic situation through good teamwork and leadership from management.

Other topics noted many times as a success related to THU supporting staff with personal needs and providing successful training (12 respondents (33%)), THU providing good community support and education (9 respondents (26%)), effective contact tracing (7 respondents (21%)), external leadership (3 respondents (9%)), and bilingual information (2 respondents (6%)).

Main Challenges of THU's COVID-19 Response and Contributing Factors

The survey asked an open-ended question regarding the main challenges of THU's COVID-19 response during the last 6 months. Staff were also invited to describe what contributed to challenges.

Overall, respondents provided a lot of feedback in this category. There were 31 responses, corresponding to a 57% response rate. There was considerable overlap between responses and themes which emerged. Response themes are stated below, from most mentioned to least mentioned:

Internal & Provincial communication was the strongest theme as a challenge and a contributing factor with 11 mentions (35%). Of those, several mentions identified more than one communication challenges. Internal communication was specified numerous times as was external communication. Comments related to sufficiency and effectiveness, consistency, timeliness, as well as clarity and plain language. Many expressed how miscommunication was a source of their stress during the pandemic response.

Fluctuating priorities was also frequently mentioned as both a challenge and a contributing factor (9 respondents (29%)). This included comments related to some staff having significant workload and being stretched thin and a couple of comments indicating others could have helped in that regard. Staff also mentioned that the frequent dynamic environment made it difficult to manage other important public health projects.

Although the overall perspective of respondents was that the THU's COVID-19 response was timely and effective, there were some respondents that believed it could have been better had there been more effort given in ensuring **work-life balance and sharing of workload** during the last 6 months of the pandemic.

Communication and outreach with sub-populations in community was mentioned as a common challenge (6 respondents (19%)). There were concerns around the inability to reach more vulnerable populations or those without online access in order to provide updates.

Other, less frequently mentioned challenges were: case management (3 respondents (10%)), confusion on who should be enforcing public health measures (2 respondents (6.5%)), difficulty with COVID line clients (1 respondent (3.22%)), individuals or businesses violating COVID-19 public health measures (2 respondents (6.5%)), vaccine demand and delay (2 respondents (6.5%)) and 3 respondents (10%) reported no challenges at all.

Additional Comments

33% of respondents also provided additional comments in the end of the survey (18 respondents). Most of these comments were related to the positive feedback on THU (67%). Staff expressed their appreciation and gratitude of working at THU, with some praising how THU has handled the pandemic emergency. Staff contributed this success to the amazing group of workers and leadership portrayed through their staff and managers. Others appreciated the flexibility to work from home, mentioning that this was productive and a huge relief of personal stress.

Recommendations provided by staff related to better communication with management, better mental health support, assessing work life balance and having more discussions and opportunities to share constructive feedback.

Conclusion

This evaluation describes perspectives from THU staff on what worked well, challenges and what can be improved in planning for and responding to subsequent waves of the COVID-19 pandemic and potentially other emergency responses. Consistent with reflective and effective public health practice and a culture of continuous improvement, and in alignment with THU's 2019-2023 strategic plan directions to create, share and exchange knowledge and adapt to address the diverse and changing local needs, THU staff generously provided feedback through this survey.

Overall the results indicate that there were many strengths in THUs response and supporting processes and structures during the COVID-19 response period of September 2020 to February 2021. These aspects should continue or be enhanced during resurgence and future waves. Moreover, this survey illuminated internal experiences and lessons learned and staff offered valuable insight regarding opportunities to course correct or pivot internal processes and structures for an improved and sustained THU COVID-19 response.

Findings from the survey have been highlighted throughout this report and will be shared with all levels of THU management, staff and the Board of Health. Evidence generated from this evaluation will be used to inform ongoing planning and decision making and the eventual emergency response after-action debriefs.

Limitations

Due to time and practical limitations, survey creation and data analysis was done by internal employees of THU. This may result in confirmation bias; however, due to the utilization of statistical software for analyzing both quantitative and qualitative data, bias was lessened. Furthermore, recognition of bias in planning the evaluation and three reviewers were used to help offset this risk of bias.

Participants of the survey may also have suffered from recall bias, particularly due to the length of the pandemic response. This means they may not have accurately or completely remembered events, success and challenges as they occurred. Similarly, participants may have a response bias, giving answers they think are correct, or 'most acceptable'. The survey was designed to be anonymous, which may reduce the risk of response bias.

Appendix A

All-Staff Survey Qualitative Analysis Codebook

Codes/Themes

Name	Description/Examples of comments
Additional Comments (Q16) n: 18 Response rate: 33%	<i>This pertains to any extra comments participants wanted to share about their experience as an employee at THU during the last 6 months or what THU should be addressing in the coming months</i>
<ul style="list-style-type: none"> • Negative feedback (n=2) 	<i>Capturing any comments where participants are suggesting changes with negative tones, or express any negative experiences. For additional comments (Q16), negative feedback included:</i> <ol style="list-style-type: none"> 1) <i>“Difficulty to share constructive feedback on some topics”</i> 2) <i>“Some teams and areas for improvement are more supported than others which makes collective improvement for a positive, trusting workplace challenging”</i>
<ul style="list-style-type: none"> • Neutral comments or recommendations (n=4) 	<i>Capturing any comments where participants are either suggesting for changes and are providing constructive feedback, or are noting that the status quo is adequate.</i>
<ul style="list-style-type: none"> ○ Future assessment of Covid-19 vaccine clinics (n=1) 	<i>“Can I ask that we assess the COVID vaccine clinics, I think there are some tweaks that can make it more efficient? I think when you are running the clinic, you are busy, and you may not see that the clinic could be run differently”.</i>
<ul style="list-style-type: none"> ○ Communication with management (n=1) 	<i>Comments suggesting future communication about expectations, work accommodations and any other forthcoming changes to help better plan for the summer.</i>
<ul style="list-style-type: none"> ○ Mental health support (n=1) 	<i>Mental health days, open communication and setting up support systems</i>
<ul style="list-style-type: none"> ○ Work balance (n=1) 	<i>Suggestion to better manage workload with Covid Vaccine clinics</i>

Name	Description/Examples of comments
<ul style="list-style-type: none"> • Positive feedback (n=12) 	<p><i>Capturing any comments where participants are stating positive experiences, accepting THU response as appropriate and overall are understanding of the situation.</i></p>
<ul style="list-style-type: none"> ○ Appreciation of THU (n=5) 	<p><i>General comments of appreciation pertaining to THU as a work place, its dedicated environment and employees.</i></p>
<ul style="list-style-type: none"> ○ Better response to pandemic than first wave response (n=1) 	
<ul style="list-style-type: none"> ○ Great leadership & communication (n=2) 	<p><i>Comments and examples where staff felt that management showed leadership and open communication relating to their workers well-being and personal life</i></p>
<ul style="list-style-type: none"> ○ Great teamwork (n=1) 	
<ul style="list-style-type: none"> ○ Opportunity to work from home is appreciated & productive (n=2) 	<p><i>Comments about staff appreciating the flexibility of hours and benefits of WFH.</i></p>
<ul style="list-style-type: none"> ○ Continuation of updates for communities (n=1) 	<p><i>Comment on communications with the public as being essential to build trust and compliance with public health. Appreciation of the video sessions with Dr. Corneil and recommendation of weekly sessions on the radio stations to update senior population.</i></p> <p><i>This specific comment/reference can also be coded under “Neutral or recommendations”.</i></p>
<p>Communication (Q10) n: 9 Response rate: 17%</p>	
<ul style="list-style-type: none"> • Negative Feedback (n=2) 	
<ul style="list-style-type: none"> ○ Inefficient details given about covid-19 updates (n=1) 	

Name	Description/Examples of comments
<ul style="list-style-type: none"> ○ Timely communication needed (n=2) 	<p><i>Concerns around the public receiving updates on Covid-19 before or at the same time as staff.</i></p>
<ul style="list-style-type: none"> • Neutral comments or Recommendations (n=5) 	
<ul style="list-style-type: none"> ○ Assigning a staff member for management duties (n=1) 	<p><i>Acknowledging that some managers have challenges understanding the VOC guidance or case and contact management guidance. Recommendation having a designated staff member to provide guidance and changes to recommendations to the rest of staff.</i></p>
<ul style="list-style-type: none"> ○ Coherent roadmap relating to correspondence with community & other outside agencies (n=1) 	<p><i>Comment pertaining to better understanding of relations and communications happening at THU with other staff and external members so all staff can stay updated and organized.</i></p>
<ul style="list-style-type: none"> ○ Frequent updates and sharing of information to staff (n=3) 	<p><i>Comments on discussions, meetings & other communications being shared to the staff.</i></p>
<ul style="list-style-type: none"> • Positive Feedback (n=3) 	
<ul style="list-style-type: none"> ○ Improved communication over past 6 months (n=3) 	
<p>IMS related comments (Q18) n=1 Response rate= 1.86%</p>	<p><i>Comments relating to the leadership, communication and decision making made by IMS members as well as perceptions of workload and capacity.</i></p>
<ul style="list-style-type: none"> • IMS leadership & communication has improved since the first half of pandemic response (n=1) 	
<p>Level of Work-Related Stress (Q6) n=17</p>	<p><i>Comments about staff's stress and well-being related to work</i></p>

Name	Description/Examples of comments
Response rate= 31.5%	
<ul style="list-style-type: none"> • Negative Feedback (n=9) 	
<ul style="list-style-type: none"> ○ Stress posed from the unpredictability of the situation (n=3) 	<i>Comments of staffs perceptions of the constant changes and inconsistencies in outbreaks, workload and tasks.</i>
<ul style="list-style-type: none"> ○ Concerns around management practices and lack of support (i.e. flexibility, mental health) (n=3) 	
<ul style="list-style-type: none"> ○ Stress due to scheduling of calls (n=2) 	<i>Staffs experiences with high case calls and inaccurate on-call/clinic schedules.</i>
<ul style="list-style-type: none"> ○ Stress due to technical issues (n=1) 	
<ul style="list-style-type: none"> • Neutral comments or recommendations (n=10) 	
<ul style="list-style-type: none"> ○ Accessibility to mental health services needed (n=2) 	<i>Mental Health services, counsellors, therapists, EAP.</i>
<ul style="list-style-type: none"> ○ Adequate workload provided (n=3) 	
<ul style="list-style-type: none"> ○ Moderate work-related stress (n=2) 	<i>Neutral comments acknowledging the stress is on and off during different times of the month, and this is expected.</i>
<ul style="list-style-type: none"> ○ Need for frequent meetings and check-ins (n=1) 	

Name	Description/Examples of comments
<ul style="list-style-type: none"> ○ Support from managers needed in terms of balancing workload, organizing tasks & providing work from home arrangements (n=3) 	<p><i>Several comments relating to limiting overtime, balancing different projects with case and contract management, updating clinic schedules in a timely fashion, and making sure staff are supported to WFH.</i></p>
<ul style="list-style-type: none"> ● Positive Feedback (n=4) 	
<ul style="list-style-type: none"> ○ Accessibility to COVID-19 updates has improved (n=1) 	
<ul style="list-style-type: none"> ○ Virtual activities/breaks (n=1) 	
<ul style="list-style-type: none"> ○ THU well-managed in handling pandemic response (n=2) 	
<p>Main Challenges of THU's Covid-19 Response (Q15) n=31 Response rate= 57%</p>	
<ul style="list-style-type: none"> ● Case management (n=3) 	<p><i>Comments on the difficulty in balancing influx of Covid-19 cases with other responsibilities and expectations</i></p>
<ul style="list-style-type: none"> ● Communication and outreach with sub-populations in community & stake-holders (n=6) 	<p><i>Challenges in effective communication with vulnerable populations, those with no online access & important stakeholders</i></p>
<ul style="list-style-type: none"> ● Compliance & Education of public (n=1) 	

Name	Description/Examples of comments
<ul style="list-style-type: none"> Confusion on regulation enforcement responsibilities (n=2) 	<p><i>Comments pertaining to regulatory requirements – who should enforce them and how should staff interpret these requirements</i></p>
<ul style="list-style-type: none"> Difficulties with Covid line clients (n=1) 	
<ul style="list-style-type: none"> Fluctuating priorities causing difficulty managing other PH work (n=9) 	
<ul style="list-style-type: none"> Individuals or businesses violating Covid-19 public health measures (n=2) 	<p><i>Also could be coded under “Regulation Enforcement Responsibilities”</i></p>
<ul style="list-style-type: none"> Internal & Provincial communication and updates (n=11) 	<p><i>This sub-code captures comments relating to the miscommunication within THU staff, or between THU and community organizations, leading to stress, extra work, confusion or delayed updates.</i></p>
<ul style="list-style-type: none"> No challenges/ prior challenges have been resolved (n=3) 	<p><i>Prior challenges = Covid communication and unexpected surge of Covid cases in December</i></p>
<ul style="list-style-type: none"> Support from management (n=1) 	
<ul style="list-style-type: none"> Vaccine demands & delays (n=2) 	
<ul style="list-style-type: none"> Work-life balance & well-being of staff (n=6) 	<p><i>This code lets us capture experiences and opinions related to staff’s mental health and well-being and the sources of their stress (workload, work environment, not enough training using different programs (i.e. CCM, COVax), long hours)</i></p>
<ul style="list-style-type: none"> Work-load & organization (n=7) 	<p><i>This code, similar to the one above, focuses solely on comments relating to the challenges in distributing and staying on top of work during busy times.</i></p>

Name	Description/Examples of comments
Manager Support for Mental Health and Well-Being (Q9) n=10 Response rate= 18.5%	
<ul style="list-style-type: none"> • Negative feedback (n=1) 	<i>This comment reflects a participant suggesting change with a negative tone: “Show more empathy”.</i>
<ul style="list-style-type: none"> • Neutral or Recommendations (n=8) 	
<ul style="list-style-type: none"> ○ Improve employment benefit package (n=1) 	
<ul style="list-style-type: none"> ○ Conversations and discussions around mental health support with Management (n=3) 	
<ul style="list-style-type: none"> ○ Improvement from first wave (n=1) 	
<ul style="list-style-type: none"> ○ Inclusion of an EAP or other external resources for mental health support (n=4) 	
<ul style="list-style-type: none"> ○ Regular meetings, check-ins & virtual activities to promote mental well-being (n=3) 	
<ul style="list-style-type: none"> ○ Support for management (n=1) 	<i>Comment relating to the importance of support for managers as well.</i>

Name	Description/Examples of comments
<ul style="list-style-type: none"> • Positive Feedback (n=1) 	
<ul style="list-style-type: none"> ○ Sharing of personal experiences that offer lessons and insights (n=1) 	<p><i>Appreciation of staffs and managers who share their own personal stories and struggles, as it helps others feel united</i></p>
<p>Perceived Support (Q3) n=9 Response rate= 16.7%</p>	
<ul style="list-style-type: none"> • Negative feedback (n=2) 	
<ul style="list-style-type: none"> ○ Lack of engagement with staff and regular check-ins (n=1) 	
<ul style="list-style-type: none"> ○ Lack of support from managers (n=1) 	
<ul style="list-style-type: none"> ○ Un-organization, lack of structure or clear direction provided from management (n=1) 	<p><i>Comments relating to perceived support were mainly focused around management. During busy periods of the Covid response, some staff felt a lack of direction and neglect from management.</i></p>
<ul style="list-style-type: none"> • Neutral or recommendations (n=6) 	
<ul style="list-style-type: none"> ○ Assessing staff and managers' efforts in fulfilling roles & responsibilities (n=1) 	
<ul style="list-style-type: none"> ○ Future discussions about adjustments or changes to 	

Name	Description/Examples of comments
<ul style="list-style-type: none"> • staffs' work arrangements (n=1) 	
<ul style="list-style-type: none"> ○ Need for regular online meetings, interaction with other staff & mental health check-ins (n=6) 	
<ul style="list-style-type: none"> ○ Support from colleagues is adequate (n=1) 	
<ul style="list-style-type: none"> • Positive Feedback (n=2) 	<p><i>Comments relating to staff feeling as if enough support was given from management and fellow colleagues.</i></p>
<p>Question 2- THU Covid Response n=11 Response rate= 20.4%</p>	
<p><u>Health and Safety Protocols</u></p>	
<ul style="list-style-type: none"> • Negative feedback (n=3) 	
<ul style="list-style-type: none"> ○ Infrequent cleaning (n-1) 	
<ul style="list-style-type: none"> ○ Infrequent updates on Covid-19 public health measures (n=1) 	
<ul style="list-style-type: none"> ○ Staff not following safety measures (n=2) 	
<ul style="list-style-type: none"> • Neutral or recommendations (n=1) 	<p><i>Comment referring to direct recommendations for health and safety protocols = “arrows in the hallway and increased cleaning and sanitization”</i></p>

Name	Description/Examples of comments
<u>Training, skills, resources and direction from manager</u>	
<ul style="list-style-type: none"> • Negative feedback (n=5) 	
<ul style="list-style-type: none"> ○ Lack of Communication (n=3) 	<i>Comments relating to the lack of communication/updates within staff, with management or with clients</i>
<ul style="list-style-type: none"> ○ Need of more efficient staff training (n=2) 	<i>Modules, refreshers, COVax training</i>
<ul style="list-style-type: none"> • Neutral and recommendations (n=8) 	
<ul style="list-style-type: none"> ○ Better training (n=1) 	
<ul style="list-style-type: none"> ○ Recommendations to staying updated regarding new information (n=5) 	
<ul style="list-style-type: none"> ○ More team meetings (n=3) 	
<ul style="list-style-type: none"> • Positive feedback (n=1) 	
<ul style="list-style-type: none"> ○ Provided some training and opportunity to build skills (n=1) 	
<p>Successes of THU's Covid-19 Response (Q14) n=34 Response rate= 63%</p>	
<ul style="list-style-type: none"> • Bilingual information was helpful (n=2) 	

Name	Description/Examples of comments
<ul style="list-style-type: none"> • Good community support and education (n=9) 	
<ul style="list-style-type: none"> • Effective communication (n=15) 	
<ul style="list-style-type: none"> • Effective contact tracing (n=7) 	
<ul style="list-style-type: none"> • External leadership (n=3) 	
<ul style="list-style-type: none"> • Good collaboration between staff/ Great teamwork (n=18) 	
<ul style="list-style-type: none"> • Low case count & overall management of cases, clinics & outbreaks (n=15) 	
<ul style="list-style-type: none"> • THU supporting staff with personal needs and providing successful training (n=12) 	
<p>Unintended impacts of not being able to continue to support projects assigned prior to COVID-19 response (Q13) n=13 Response rate= 24%</p>	<p><i>This section reflects comments relating to the effects of resources being diverted away from other Public Health work in order to tackle the pandemic.</i></p>
<ul style="list-style-type: none"> • Decreased support for school community & other clients (n=3) 	
<ul style="list-style-type: none"> • Decreases in number of services provided in other programs (n=3) 	<p><i>Other programs include dental care, sexual health, HBHC program</i></p>
<ul style="list-style-type: none"> • Irregular inspections (n=1) 	

Name	Description/Examples of comments
<ul style="list-style-type: none"> Negative effects on current projects (n=5) 	<p><i>This section reflects comments relating to immediate effects on concurrent projects staff were working on. Such negative effects were as follows: “not up-to-date data for program planning in 2020”, “Projects losing significant momentum” and “project delays”.</i></p>
<p>Workplace Support (Q11) n=9 Response rate= 16.7%</p>	
<ul style="list-style-type: none"> Negative feedback (n=5) <ul style="list-style-type: none"> IT support/technical issues (n=4) No provided opportunities to work from home (n=1) 	
<ul style="list-style-type: none"> Neutral or Recommendations (n=1) <ul style="list-style-type: none"> Access to technology provided from THU (n=1) 	
<ul style="list-style-type: none"> Positive feedback (n=2) <ul style="list-style-type: none"> Given the ability to adjust work-schedule to accommodate personal situation(s) (n=2) 	

Note= not all number of respondents of each sub-category add up to the final count (n). This is because one reference can be coded into multiple codes/themes.

Descriptions and examples are provided when deemed necessary to understand any codes or sub-codes.

Appendix B- TABLES

Table 1. Summary statistics for perceived support for assigned tasks during the COVID-19 pandemic response

Question	Strongly Agree			Agree			Neutral			Disagree			Strongly Disagree		
	n [%]*	SE	95% CI	n [%]	SE	95% CI	n [%]	SE	95% CI	n [%]	SE	95% CI	n [%]	SE	95% CI
I felt I have the competencies and skills to conduct my COVID-19 related work.	12 [24.0%]	6.04%	13.9, 38.0	32 [64.0%]	6.79%	49.58, 76.27	2 [4.0%]	2.77%	0.97, 15.09	1 [2.0%]	1.98%	0.27, 13.45	----		----
I received proper training to complete assigned tasks.	11 [22.0%]	5.86%	12.44, 35.90	25 [50.0%]	7.07%	36.16, 63.84	7 [14.0%]	4.91%	6.70, 26.97	3 [6.0%]	3.36%	1.89, 17.44	2 [4.0%]	2.77%	0.97, 15.09
I received proper resources and tools required to complete assigned tasks.	13 [26.53%]	6.31%	15.85, 40.90	25 [51.02%]	7.14%	36.96, 64.92	4 [8.16%]	3.91%	3.02, 20.24	3 [6.12%]	3.42%	1.93, 17.77	1 [2.04%]	2.02%	0.27, 13.71
I received clear direction from my manager to complete assigned tasks.	15 [30.0%]	6.48%	18.73, 44.35	20 [40.0%]	6.93%	27.18, 54.36	3 [6.0%]	3.36%	1.89, 17.44	7 [14.0%]	4.91%	6.70, 26.97	2 [4.0%]	2.77%	0.97, 15.09
I was adequately informed about appropriate use of PPE...	14 [28.0%]	6.35%	17.12, 42.27	20 [40.0%]	6.93%	27.18, 54.36	5 [10.0%]	4.24%	4.13, 22.27	2 [4.0%]	2.77%	0.97, 15.09	3 [6.0%]	3.36%	1.89, 17.44
Health and safety protocols and actions were adequate to support measures such as....	15 [30.0%]	6.48%	18.73, 44.35	21 [42.0%]	6.98%	28.93, 56.29	6 [12.0%]	4.60%	5.38, 24.64	5 [10.0%]	4.24%	4.13, 22.27	----		-----

* % represent percent respondents (n/total responses x 100)

NOTE= Standard error and 95% Confidence intervals are presented for proportions or percent responses.

Table 2. Summary statistics for perceived support during COVID-19 pandemic response

Question	Strongly Agree			Agree			Neutral			Disagree			Strongly Disagree		
	n [%]*	SE	95% CI	n [%]	SE	95% CI	n [%]	SE	95% CI	n [%]	SE	95% CI	n [%]	SE	95% CI
I have felt supported by my manager to cope with the uncertainty and changes brought on by COVID-19.	26 [53.06%]	7.13	38.87 66.78	15 [30.61]	6.58	19.13 45.14	2 [4.08%]	2.83	0.99 15.38	4 [8.16%]	3.91	3.02 20.24	2 [4.08%]	2.83	0.99 15.38
I have felt supported by my colleagues to cope with the uncertainty and changes brought on by COVID-19.	25 [51.02%]	7.14	36.96 64.92	18 [36.73%]	6.89	24.24 51.30	3 [6.12%]	3.42	1.93 17.77	1 [2.04%]	2.02	0.27 13.71	1 [2.04%]	2.02	0.27 13.71
I have felt supported by our agency to cope with the uncertainty and changes brought on by COVID-19.	24 [48.98%]	7.14	35.08 63.04	20 [40.82%]	7.02	27.77 55.30	3 [6.12%]	3.42	1.93 17.77	2 [4.08%]	2.83	0.99 15.38	-----	-----	-----

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NOTE= Standard error and 95% Confidence intervals are presented for proportions or percent responses.

Table 3. Summary statistics on perceived factors causing work-related stress

Factors causing stress	Not at all (1)			Small (2)			Moderate (3)			Large (4)			Very large (5)		
	n [%]	SE	95% CI	n [%]	SE	95% CI	n [%]	SE	95% CI	n [%]	SE	95% CI	n [%]	SE	95% CI
Heavy workload	3 [6.25%]	3.49	1.97, 18.12	15 [31.25%]	6.69	19.55, 45.96	16 [33.33%]	6.8	21.26 48.07	8 [16.67%]	5.38	8.40, 30.36	5 [10.42%]	4.41	4.30, 23.13
Unreason-able deadlines	23 [46.94%]	7.13	33.22 61.13	11 [22.45%]	5.96	12.70 36.56	7 [14.29%]	5	6.83 27.47	2 [4.08%]	2.83	0.99 15.38	3 [6.12%]	3.42	1.93 17.77
Overtime or long work hours	22 [44.9%]	7.11	31.38 59.21	10 [20.41%]	5.76	11.17 34.34	7 [14.29%]	5	6.83 27.47	3 [6.12%]	3.42	1.93 17.77	4 [8.16%]	3.91	3.02 20.24
Lack of clear expectations	16 [32.65%]	6.7	20.81 47.22	13 [26.53%]	6.31	15.85 40.90	10 [20.41%]	5.76	11.17 34.34	4 [8.16%]	3.91	3.02 20.24	4 [8.16%]	2.83	0.99 15.38
Balancing work and caregiving responsibilities (e.g. children, elderly, family member(s))	12 [25%]	6.25	14.56 39.46	11 [22.92%]	6.07	12.97 37.23	9 [18.75%]	5.63	9.88 32.69	6 [12.5%]	4.77	5.60 25.58	6 [12.5%]	4.77	5.60 25.58
Difficulty accessing my work tools or network (e.g. work email, work device, ergonomic equipment)	18 [36.73%]	6.89	24.24 51.30	15 [30.61%]	6.58	19.13 45.14	9 [18.37%]	5.53	9.68 32.09	3 [6.12%]	3.42	1.93 17.77	1 [2.04%]	2.02	0.27 13.71

* % represent percent respondents (n/total responses x 100)

NOTE= Standard error and 95% Confidence intervals are presented for proportions or percent responses

Table 4. Summary statistics on perceived mental health and well-being support from managers during last 6 months

Question	Strongly Agree			Somewhat Agree			Neither Agree not Disagree			Somewhat Disagree			Strongly Disagree		
	n [%]*	SE	95% CI	n [%]	SE	95% CI	n [%]	SE	95% CI	n [%]	SE	95% CI	n [%]	SE	95% CI
I believe the management team took adequate steps to support the mental health of employees over the last 6 months.	17 [34.69]	6.8	22.51 49.27	19 [38.78%]	7.0	25.99 53.31	9 [18.37%]	5.5	9.68 32.09	2 [4.08%]	2.8	0.99 15.38	1 [2.04%]	2.0	0.27 13.71
I would feel comfortable sharing concerns with my manager about my mental health	23 [46.94]	7.1	33.22 61.13	11 [22.45%]	6.0	12.70 36.56	5 [10.2%]	4.3	4.21 22.69	4 [8.16%]	3.9	3.02 20.24	5 [10.2%]	4.3	4.21 22.69
My manager supports my mental health and well-being	30 [61.22]	6.9	46.69 74.01	10 [20.41%]	5.8	11.17 34.34	6 [12.24%]	4.7	5.49 25.10	1 [2.04%]	2	0.27 13.71	1 [2.04%]	2.	0.27 13.71

* % represent percent respondents (n/total responses x 100)

NOTE= Standard error and 95% Confidence intervals are presented for proportions or percent responses

Table 5. Summary statistics on perceived access to information during last 6 months

Question	Strongly Agree			Agree			Neutral			Disagree			Strongly Disagree		
	n [%]*	SE	95% CI	n [%]	SE	95% CI	n [%]	SE	95% CI	n [%]	SE	95% CI	n [%]	SE	95% CI
I have been kept informed about new and upcoming changes as much as possible.	15 [30.61%]	6.58	19.13 45.14	19 [38.78%]	6.96	25.99 53.31	8 [16.33%]	5.28	8.23 29.80	5 [10.2%]	4.32	4.21 22.69	1 [2.04%]	2.02	0.27 13.71
All-staff communications have been timely	13 [26.53%]	6.31	15.85 40.90	22 [44.9%]	7.11	31.38 59.21	5 [10.2%]	4.32	4.21 22.69	6 [12.24%]	4.68	5.49 25.10	1 [2.04%]	2.02	0.27 13.71
The amount of information /level of detail provided.	15 [30.61%]	6.58	19.13 45.14	21 [42.86%]	7.07	29.56 57.27	6 [12.24%]	4.68	5.49 25.10	4 [8.16%]	3.91	3.02 20.24	1 [2.04%]	2.02	0.27 13.71

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NOTE= Standard error and 95% Confidence intervals are presented for proportions or percent responses.

Table 6. Summary statistics on perceived impact of adjustments in work environment, suitability of work setting and Access to IT support during COVID-19 Pandemic

Question	Strongly Agree			Agree			Neutral			Disagree			Strongly Disagree		
	n [%]*	SE	95% CI	n [%]	SE	95% CI	n [%]	SE	95% CI	n [%]	SE	95% CI	n [%]	SE	95% CI
Essential non-COVID-19 THU programs and services continued during the COVID-19 response.	3 [6.12%]	3.42	1.93 17.77	25 [51.02%]	7.14	36.96 64.92	10 [20.41%]	5.76	11.17 34.34	6 [12.24%]	4.68	5.49 25.10	2 [4.08%]	2.83	0.99 15.38
I have been able to continue to support non-COVID-19 related projects with community partners despite the impact of our COVID-19 response.	4 [8.16%]	3.91	3.02 20.24	16 [32.65%]	6.7	20.81 47.22	8 [16.33%]	5.28	8.23 29.80	8 [16.33%]	5.28	8.23 29.80	5 [10.20%]	4.32	4.21 22.69
I have been able to continue to support projects assigned to me prior to our COVID-19 response.	5 [10.20%]	4.32	4.21 22.69	14 [28.57%]	6.45	17.48 43.03	9 [18.37%]	5.53	9.68 32.09	10 [20.41%]	5.76	11.17 34.34	5 [10.20%]	4.32	4.21 22.69

* % represent percent respondents (n/total responses x 100)

NOTE= Standard error and 95% Confidence intervals are presented for proportions or percent responses

Table 7. Summary statistics of IMS (Incident Management System) Leadership and Direction during last 6 months

Question	Strongly Agree			Agree			Neutral			Disagree		
	n [%]*	SE	95% CI	n [%]	SE	95% CI	n [%]	SE	95% CI	n [%]	SE	95% CI
IMS leadership and direction has effectively guided our COVID-19 response.	7 [70.00%]	14.49	32.88 - 91.75	2 [20.00%]	12.65	4.01 - 59.92	1 [10.00%]	9.49	1.01 - 54.67	-----	-----	-----
In my role as a member of the IMS, I feel I have received sufficient direction through the IMS structure to allow me to effectively carry out my duties in the COVID-19 response.	4 [40.00%]	15.49	13.40 - 74.17	4 [40.00%]	15.49	13.40 - 74.17	-----	-----	-----	2 [20.00%]	12.65	4.01 - 59.92
The information shared through IMS meetings has informed key COVID-19 response decisions.	7 [70.00%]	14.49	32.88 - 91.75	2 [20.00%]	12.65	4.01 - 59.92	1 [10.00%]	9.49	1.01 - 54.67	-----	-----	-----
I have been able to meaningfully contribute during IMS meetings.	4 [40.00%]	15.49	13.40 - 74.17	4 [40.00%]	15.49	13.40 - 74.17	1 [10.00%]	9.49	1.01 - 54.67	1 [10.00%]	9.49	1.01 - 54.67
I have a clear understanding of my role within IMS.	3 [30.00%]	14.49	8.25 - 67.12	4 [40.00%]	15.49	13.4 - 74.17	1 [10.00%]	9.49	1.01 - 54.67	2 [40.00%]	12.65	4.01 - 59.92
The IMS structure is adequate to support informed and timely decisions.	5 [50.00%]	15.81	19.3 - 80.7	2 [20.00%]	12.65	4.01 - 59.92	3 [30.00%]	14.49	8.25 - 67.12	-----	-----	-----

* % represent percent respondents (n/total responses x 100)

NOTE= Standard error and 95% Confidence intervals are presented for proportions or percent responses

Table 8. Summary statistics of IMS Communication during last 6 months of COVID-19 response

Question	Strongly Agree			Agree			Neutral		
	n [%]*	SE	95% CI	n [%]	SE	95% CI	n [%]	SE	95% CI
Communication from IMS leadership has been transparent.	6 [60.00%]	15.49	25.83 - 86.60	3 [30.00%]	14.49	8.25 - 67.12	1 [10.00%]	9.49	1.01 - 54.67
Communication from IMS leadership has been timely.	7 [70.00%]	14.49	32.88 - 91.75	3 [30.00%]	14.49	8.25 - 67.12	-----	-----	-----
Communication between IMS sections has been effective.	6 [60.00%]	15.49	25.83 - 86.60	2 [20.00%]	12.65	4.01 - 59.92	2 [20.00%]	12.65	4.01 - 59.92
Communication between IMS sections has been timely.	6 [60.00%]	15.49	25.83 - 86.60	2 [20.00%]	12.65	4.01 - 59.92	2 [20.00%]	12.65	4.01 - 59.92

* % represent percent respondents (n/total responses x 100)

NOTE= Standard error and 95% Confidence intervals are presented for proportions or percent responses.