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How to Determine Whether Fentanyl Exposed Homes are Clean Enough for Children to Reside In and the Implications for Child Welfare Workers

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Abstract

The purpose of this research project is to aid child welfare workers in determining whether a home where fentanyl has been located would be environmentally safe for a child to reside in. The project's focus included liaising collaboratively with community organizations and professionals such as first responders, health care workers or waste management companies. The research findings will help child welfare workers increase the wellbeing and safety of children and families and provide education to the public around the safety procedures and dangers of fentanyl. The method of data collection used was purposive and non-probability sampling when recruiting participants. A specific population was targeted to participate in the study such as MCFD employees and/or professionals who have a working relationship with MCFD. Snowball sampling was also utilized to allow for the recruited participants to inform other eligible individuals to participate in the research project. There was an inclusion criteria for this research project to ensure relevant participants and data were received. Participants were recruited using a recruitment poster and information letters sent by MCFD through the internal MCFD email to eligible participants. Data was collected both quantitatively and qualitatively through in depth interviews and anonymous online surveys. Both the interviews and surveys had separate inclusion criteria. For data collection there were eighteen surveys and four in-depth semi-structured interviews completed. The results revealed a lack of training/knowledge on fentanyl among MCFD staff, roles were unclear with respect to assessing the safety of fentanyl exposed homes, and there was a need for further collaboration and teamwork in the remediation of homes used as clandestine fentanyl laboratories where children were also residing or returning to. The results also showed that there is no designated team for the remediation of fentanyl exposed homes or guidelines for home assessments. The limitations of this research project were the lack of prior research regarding the remediation of clandestine fentanyl laboratories or any research regarding the child welfare implications of fentanyl exposes homes. The time frame in which the research was conducted was limited and therefore did not allow for broader recruitment opportunities. As recruitment for the research was MCFD-led, this further limited the ability of the researchers to connect and communication with non-MCFD partners for their relevant input and information. Some of the research findings suggested that other community agencies had already developed procedures and policies around the assessment and remediation of clandestine fentanyl laboratories which MCFD could utilize in order to inform their own specific policy development. The research findings also demonstrated the lack of a uniform, multi-agency approach to addressing the remediation of residences where fentanyl (or a clandestine lab) had been located or cross-agency policy identifying roles and responsibilities of each partner agency. The findings further showed a lack of education of MCFD staff on fentanyl, the risks to children, families and staff as well on how to manage and mitigate these risks effectively. It is recommended that further knowledge, training and education be developed and implemented by MCFD province-wide in order to ensure consistency across practice and the safety of child welfare staff and the children and families that they work with.

Keywords: Fentanyl, child safety, child welfare workers, assessment, remediation of homes



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Introduction

The focus of this research project is to provide child welfare workers and policy makers a better understanding of what would be deemed a safe environment for children to be returned to, where fentanyl had been located at a residence. Specifically, our research question is “how do we determine whether fentanyl exposed homes are clean enough for children to reside in and what implications does it have for child welfare workers?” The research entails determining how child welfare workers can assess when a home where there was a presence of fentanyl is safe enough for children to reside in, determining the role of social workers in completing this assessment, and how the Ministry of Children and Family Development (MCFD) can best liaise and collaborate with other agencies in this process for the purpose of implementing guidelines and policies. Ideally, this research will be able to inform and promote effective collaboration between child protection workers and other professionals (including but not limited to police, policy makers, and waste management employees) around the implementation of evidence-based guidelines for such safety.

Over the past fifty years fentanyl has been used to manage symptoms of chronic pain however, in today's society it has become an opioid misused for recreational activities. Different forms of fentanyl were utilized in patient pain prevention, patient recovery and to help ease problematic symptoms. Fentanyl has evolved into various uses, beginning with aiding pain symptoms for individuals with cancer, to being chemically manipulated to form different strains of the opioid to help patients with other medical diagnoses via pain relief (Stanley, 2014). Although fentanyl was created with the intent to aid with chronic pain symptoms, it was proven difficult to be approved by the Food and Drug Administration (FDA) in the United States in the 1960s. Through the decades, fentanyl progressed from a pain relief opioid to a misused substance which, like most substances, has side effects (Stanley, 2014). As stated, fentanyl usage has been rapidly increasing in communities which can lead to individual abuse and accidental overdose leading to death, causing an increase in

concern for family dynamics, safety, and functioning when this drug is used.

Although there is substantial research regarding the history, dangers, and negative impacts of fentanyl and opioids, there is a lack of evidence-informed research as to the role and responsibility of child welfare workers in determining whether a fentanyl exposed home is safe enough for a child to return to. Research has occurred in the area of remediation and management of homes used in the production and processing of methamphetamines, but there is little direct research on how to manage homes used specifically in fentanyl production and processing. Therefore, the purpose of this research project is to aid child welfare workers in determining whether a home where fentanyl packing has occurred would be environmentally safe for a child to be residing. The project will also entail learning how to liaise with other organizations and/or professionals who would come across similar situations (e.g. police, waste management companies, border security) and developing a unified understanding around the safety measures in dealing with this matter. This unified approach will promote effective collaboration among child welfare workers and other professionals, in helping bring greater awareness and safety to the community. The research findings may enable social workers to better support families impacted by fentanyl, and increase the wellbeing and safety of children by determining whether fentanyl exposed homes are safe to reside in. Overall, the research findings will help child welfare workers increase the wellbeing and safety of children and families and provide education to the public around the safety procedures and dangers of fentanyl.

Literature Review

Hayashi, Milloy, Lysyshyn, DeBeck, Nosova, Wood, and Kerr (2018) explored the opioid overdose crisis in a cohort study (n = 669) and data collection of people who use illicit drugs located in Vancouver, B.C. Between June and October 2016, a multi-panel urinalysis screening test was completed with participants who used illicit drugs. The urinalysis' purpose was to screen for not only fentanyl use but to identify eight other substances that were used in the

past six months leading up to the testing. Hayashi et al. (2018) found that fifteen percent of the individuals included in the data collection tested positive for fentanyl while the other substance use included cocaine, morphine, heroin or methamphetamines. Similarly, Jones, Jang, Panenka, Barr, MacEwan, Thornton, and Honer (2018) observed a rapid increase of fentanyl usage with a decrease in usage of other opioids. Data was collected over a period of five months on residents of Vancouver, B.C. in a low socio-economic status neighbourhood. It was reported that 91% of participants who reported non-prescription opioid use produced at least one positive fentanyl sample.

As stated, fentanyl is a substance whose prevalence has been rapidly increasing in communities, leading to abuse, accidental overdose causing death, and an increase in concern for family dynamics and functioning. Ghertner, Waters, Radel and Crouse (2018) research details the rise in children being brought into care due to parental substance abuse; particularly opioid misuse. The study detailed the association between child welfare cases and substance abuse related hospitalizations and substance overdoses leading to death. Ghertner et al.'s (2018) study was completed between 2001-2011 with a focus on the correlation between parental misuse of fentanyl (opioids) and the danger posed to children in the homes, across different US states. "Substance use can have damaging effects on families, and research has generally found strong relationships between parental substance use and child maltreatment" (Ghertner et al., 2018, p. 83). As stated, there is strong research and evidence regarding the dangers of exposure to fentanyl and opioids, and the dramatic rise in fentanyl use.

As this research project focuses on children, literature regarding the impact of opioid exposure to children were also reviewed. Sachdeva and Stadnyk (2005) completed a study focusing on the ingestion of prescribed opioids by children under the age of six. Symptoms among children who ingested opioids include respiratory depression, comatose and seizures. Through a comprehensive literature review, Sachdeva and Stadnyk (2005) summarized the

treatment recommendations for children ingesting a certain amount of an opioid. The recommendations ranged from observing the child for several hours at home to admitting them to hospital. The authors recommended that children exposed to any amount of fentanyl should be observed in the hospital's emergency department and children exposed to any amount of methadone should be observed for six hours and that hospital admission should also be considered. The U.S. Food and Drug Administration (FDA) have also advised that the fentanyl patch can be fatal to children if ingested or placed on their skin as this can slow breathing and increase the levels of carbon dioxide in the blood (The U.S. Food and Drug Administration, 2013). They further report that since 1997, there have been thirty-two cases of accidental exposure to fentanyl with the majority of these cases involving children under the age of two, among which twelve have resulted in death (FDA, 2013).

Goldberger, Martin, and Gold (2010) completed a two-year study in Afghanistan given the country's significant involvement in the production of the world's opium supply. The goal of the study was to evaluate the indoor environment of numerous homes where opioids were abused, and to determine whether the non-users in the home (primarily the mothers and children) were involuntarily exposed to opioids. It was found that the concentration of opium products detected in the air samples were significant and were also found on multiple surfaces accessible by children such as their bedding, toys, and eating utensils. Another significant and startling finding was that high levels of opium and heroin were found in their samples obtained from children in these homes (Goldberger et al., 2010). The opium residue found on various surfaces and household items is considered "third-hand exposure", and the negative implications it may have on a child's development is extremely concerning and will require further and ongoing research.

Despite Goldberger et al.'s (2010) findings that children can be exposed to opioids indirectly, there is a gap in knowledge regarding how to appropriately manage homes and environments where opioids and fentanyl have been found. Given the current opioid crisis, Alberta is one of the first provinces to

have taken steps towards developing comprehensive guidelines around the cleanup of properties contaminated by fentanyl though there is no present timeframe as to when this might be completed (Edmonton Journal, 2018). There are guidelines for handling marijuana grow operations and methamphetamine contaminated sites which provide insight, but are inadequate when dealing with an opioid such as fentanyl. At present, each organization or individual is left to determine how best to respond to such an issue, leading to various responses and inconsistent outcomes (Edmonton Journal, 2018). The St. Albert Gazette (2017) provided a detailed article on how a local cleaning company was called to clean a home involved in fentanyl production. The clean up process included vacuuming, decontamination, and spraying the entire home with a fentanyl neutralizing product. Although the routine seems rigorous and thorough, Alberta Health Services have advised that there is no industry-certified test that can determine whether any fentanyl residue is left in a home (The St. Albert Gazette, 2017).

As the nature of fentanyl and risk to children have been discussed, attention is also required in terms of how to determine the safety of a home after fentanyl has been discovered. Two recent articles specific to fentanyl production and packaging/processing speak to some of the current response systems in place in Alberta and British Columbia. Global News (2018) reported that Alberta Law Enforcement Response Teams (ALERT) and investigators with Edmonton Police Service's Clandestine Lab Team discovered a lab in a residential home producing fentanyl to look like heroin. In this instance, Alberta Health Services deemed that it was likely that some of the substances involved in the manufacturing and production may have been dispersed through the housing premises and the public were alerted of a biohazard scene at the home. In addition, CBC News B.C. (2016) referenced the discovery of a fentanyl packaging/processing laboratory in a Burnaby residential complex. Responding to this discovery were the RCMP's federally funded Clandestine Laboratory Enforcement and Response (CLEAR) team, in cooperation with Burnaby Fire Department's hazardous materials team

and paramedics with B.C. Emergency Health Service. These articles speak to the collaborative and multi-agency response when it comes to the discovery of a fentanyl laboratory, making it apparent that there are differences in response across jurisdictions.

Unfortunately, there is little defined research specific to fentanyl laboratories in the current literature. What is present tends to focus on addressing the safety and remediation of methamphetamine laboratories, as these tend to be more prevalent. Al-Obaidi and Fletcher's (2014) research discusses the problem of clandestine drug laboratories (CDL's) from an Australian perspective. The authors note that "there is limited regulation and direction in the management of clean-up of contaminated properties" in the country thus far (p.2). Consistent with other literature examined for this review, was that current research in Australia was noted to be specific to law enforcement, health effects and outcomes of illicit drug use with a disconnect noted between the current research goals of combating the threat posed by illicit drugs as opposed to assisting those on the front lines (2014). New Zealand's "Guidelines for the Remediation of Clandestine Methamphetamine Laboratory Sites" (2010) is one of the better examples of an extensive framework on the issue of methamphetamines. It is also one of the rare examples of a current national policy on the matter, falling under the Ministry of Health. It can be seen as a guiding framework in terms of addressing the scope of the problem, the risks involved, and how to identify the appropriate roles and responsibilities in pre and post remediation, should a similar framework with respect to fentanyl be established in future.

The final piece of research discovered in the literature review is a study completed by Schenk, Geuze and McCormick (2018). They noted that there are currently no provincial policy frameworks in B.C. on the remediation of homes used in marijuana or synthetic drug production and that it is typically left to the municipalities to determine these processes. Schenk et al. (2018) proposed a remediation process in their research which includes the discovery of a home laboratory, a first inspection, remediation,

secondary inspection and then a designation that a home is safe for habitation, as well as outlining those responsible at each step. The authors go on to note that many municipalities have adopted local bylaws with respect to the discovery, reporting and remediation of drug laboratories in residences. Unfortunately, many of these bylaws differ among various municipalities and/or do not speak directly to the need for remediation in some instances (Schenk et al., 2018). While recommendations were suggested for a B.C. Provincial framework to ensuring healthy homes, the research simply puts forth recommendation while there are no known efforts at present for developing any such policies at this time.

Although there is substantial research regarding the history, dangers, and negative impacts of fentanyl and opioids, there are obvious gaps in provincial and national policy frameworks as to how to safely identify and remediate homes that have been contaminated by fentanyl production, processing or packaging. There is also the need to identify a chain of response, roles, and responsibilities for the various agencies and systems that collaborate with one another through the entire process from discovering fentanyl in a home, to designating the home safe for habitation, and in our scope of research, the return of a child to that environment. Furthermore, there is still a lack of evidence-informed research as to the role of child protection workers in determining whether a fentanyl exposed home is safe enough for a child to return to. Therefore, our research questions include how to determine when a home found with the presence of fentanyl is safe enough for children to reside in, determining the role of social workers in completing this assessment, and how we can best liaise and collaborate with other agencies (police and law enforcement, fire department, paramedics, and remediation companies) in a process of implementing guidelines and policies. The investigators hypothesize that the remediation and management of fentanyl exposed homes will be similar as the guidelines for methamphetamine laboratory sites, but with greater precautions and safety procedures given the fatal nature of fentanyl.

Research Framework

From a theoretical perspective, the person-in-environment model may be useful for our research purposes. Akesson, Burns, and Hordyk (2017) described the person-in-environment model as a holistic framework to understand one's environmental interactions but more importantly, how a physical place can mold an individual's identity and their sense of belonging. The person-in-environment model encompasses the interactions between all three levels of social work (micro, mezzo and macro). This framework can be useful for both our participants as well as the clients we serve in our social work practice. For instance, Akesson et al.'s (2017) research found that an important part of our sense of safety and belonging involves our sense of attachment to our physical space. When working with clients in fentanyl-exposed homes, it is important then to consider that their sense of home and safety have now been tainted by drug use, potential overdose, child protection involvement, and potentially their children being removed. While child welfare workers and other professionals may enter a home and deem it simply as a physical space, it is important to use the person-in-environment model to consider what this space represents to children and families. Furthermore, it allows us to realize that the remedial process of fentanyl-exposed homes may not simply be physical cleanliness, but emotional attachment and identity must be considered as well.

Sampling and Recruitment

The sampling and recruitment of participants was completed using purposive, non-probability, and snowball sampling. The reason this sampling method was selected was due to the research topic being fairly specific and therefore, specific populations were targeted. Specifically, populations in relevant occupations who may have relevant work experience were targeted. As our research question and topic was in regards to fentanyl use and child welfare implications, the specific populations of interest were MCFD employees and other professionals who have a working relationship with

MCFD. Participants were recruited using a recruitment poster and information letters. The recruitment poster contained bold visuals with simple, lay language to attract as many participants as possible. The information letter then had detailed information on what the research entailed, the time commitment required to participate, as well as the potential risks to the study. In addition to the internal MCFD e-mail, recruitment posters and information letters were sent out to non-MCFD employees who were known to have a pre-established working relationship with MCFD, due to engaging in relevant collaboration with MCFD in regards to the research topic. These professionals were then welcome to directly contact the researchers if they were interested in participating. To ensure that participants were relevant to our study, participants were required to meet specific inclusion criteria. The inclusion criteria included being MCFD employees and/or a professional with an established working relationship with MCFD. There was also a criteria regarding the extent to which the participants had experience with fentanyl and the research question, depending on the method of participation. This will be discussed in further detail in the following section, as this criteria impacted the way in which the researchers collected data. Finally, the researchers utilized snowball sampling in which the researchers requested the recruited participants to advertise the research to other professionals that may also be interested and/or have relevant experience to share.

Data Collection and Analysis

Data was collected using both qualitative and quantitative methods. For qualitative methods, the researchers conducted in-depth semi-structured interviews with participants. Quantitative data was collected using an anonymous online survey. Both qualitative and quantitative methods were utilized given that the researchers predicted a low number of participants, due to the research topic being fairly new and under-researched, as exemplified in the literature review. Taking this into considerations, the researchers wanted to maximize the amount of data received by using both qualitative and quantitative methods. The interviews and surveys had separate inclusion criteria to ensure the relevance of the

participants as well as the data. For in-depth interviews, the inclusion criteria entailed working for MCFD or being a professional with a working relationship with MCFD, and having relevant working experience to the research question. In other words, interview participants must have had direct work experience with fentanyl remediation and/or cases in which children were exposed to fentanyl. The inclusion criteria for the anonymous online survey was that it was only available to MCFD employees. However, there were no criteria regarding whether or not the employees had working experience with fentanyl as the researchers were interested in the prevalence of the research topic itself, as well as the demography of the participants. The researchers formulated twenty-one questions for the interviews, but as the interviews were semi-structured, it allowed the researchers flexibility to ask follow-up questions and/or clarifying questions. Similar questions were asked in the anonymous only survey in the form of multiple-choice questions, scaling questions, and short answers.

For data analysis, the software program SPSS was used for quantitative data, and NVIVO for qualitative data. The researchers used a thematic analysis framework for the qualitative data, in which the interviews were analyzed, and patterns and themes were identified within the data. The researchers followed Braun and Clarke's (2006) guide in completing thematic analysis. This involved transcribing the interviews, reading each interview multiple times, and then a general list of ideas that came up in the interviews was made. This list would become the initial codes that the researchers would use in NVIVO. Once a substantial list of codes were generated, these codes were organized and combined into what the researchers interpreted as the overarching themes of the data. In addition to Braun and Clarke's (2006) guide, the researchers also implemented an inductive approach in that themes and patterns were sought without trying to fit them into any pre-existing research or into the researchers' personal biases, and without influence from any preconceived notions.

An inductive approach fit well for this research

study, as there is limited research and information around fentanyl remediation and its child welfare implications. The quantitative data was analyzed in the statistical software program SPSS in which univariate and bivariate analyses were completed. A univariate analysis involves exploring the significance of just one variable, for example, how long a participant has been an employee at MCFD. A bivariate analysis explores the relationship and association between two variables, for example, how long a participant has been an employee at MCFD and their working knowledge of fentanyl issues. The use of both quantitative and qualitative methods allowed for a wide range of data, in which the researchers were able to gather important findings.

Findings

In total, the researchers completed four in-depth interviews and received eighteen completed surveys. As stated in the previous section, overarching themes were identified in the interviews using a thematic analysis. The main themes and supporting quotes identified by the researchers can be found in Table 1. Overall, participants discussed a lack of training and knowledge around cases of fentanyl exposure/fentanyl clandestine labs and how to ensure these environments are safe enough for children and families for habitation. Due to this lack of knowledge, there were also reports of child welfare workers' roles being unclear. There was also an emphasis on the need for various systems to work together so that roles are assigned and clear, and that clear policies or guidelines for all working professionals would be helpful in providing consistent and safe services to children and families. Finally, a major gap in service was the lack of designated experts and/or teams that were specifically trained in the remediation of fentanyl exposed homes and fentanyl clandestine labs. Child welfare workers felt that there was a lack of guidelines on how to complete such home assessments and there were no connections to professional cleaning companies that could assist in this process.

Quantitative data from the anonymous online survey revealed similar findings to the qualitative data, and an overall consensus in terms of the

sentiments around the lack of training/knowledge and uniform policies and guidelines. As stated previously, the researchers received eighteen completed surveys, and the survey was made available only to MCFD employees and thus was specific to child welfare. Table 2 demonstrates Likert scale questions, in which participants had to rate how strongly they agreed with a given statement in regards to the research topic. The series of statements in Table 2 provided the strongest consensus among participants. Results from the other survey questions can be found in Appendices C and D.

In congruence with the qualitative data, the survey revealed that child welfare workers did not receive direct training in regards to fentanyl remediation. Fourteen participants identified as receiving relevant training, in which all identified receiving naloxone training. There was also a theme in which training was received in conversation with the community police department as well as an online problematic substance use training provided by MCFD, however, there were no responses that identified any training in relation to completing assessments of fentanyl exposed homes. This lack of training and knowledge was seen across all child welfare roles (e.g. intake, team leaders, practice consultants, etc), regardless of the number of years worker at MCFD. Table 3 depicts the association between years worked and self-report of how knowledgeable the participants were in issues surrounding fentanyl. Similarly, there did not appear to be an association between how long a participant worked for MCFD with their feelings of safety and preparedness in working with fentanyl. A full detailed depiction of this can be found in Appendices C and D.

Discussion

Congruent with the findings from the literature review, the researchers found that the area of fentanyl remediation in homes were very under-researched, particularly in the context of child welfare. This was evident in the feedback provided from participants in that fentanyl appeared to be an ongoing issue and crisis, but completing home assessments to ensure a child's living arrangement is safe was rare. It was to the researcher's relief that such cases are not frequent; however, this created a barrier in gaining more knowledge in this area.

Table 1: Themes and representative quotes from interviews.

Theme	Quote
Lack of training and knowledge	<p><u>Regarding a specific case in which a fentanyl clandestine lab was located in a home:</u> “I think it was... a lack of training, but also a lack of guidelines to tell the MCFD worker what should have happened... and an MCFD person would be better equipped to answer this, but my feeling and understanding... was that they didn’t have any guidelines that would say in a situation where there is a drug being packaged in a home.”</p> <p>“I don’t think that the social worker was equipped to actually understand how to clean up in a sufficient fashion to make recommendations so the family was safe from any potential exposure.”</p> <p><u>Lack of training within MCFD and in the community:</u> “... working with the Ministry is great [but] I think they are very limited in the training they get specifically for how to understand the complexity of harm that some of some of these substances can now cause.”</p> <p>“I am very fortunate that I keep myself somewhat up to date on things that are happening... But most of the people coming out now are brand new [MCFD] staff that don’t have the exposure to any substance use... the new students we’re getting are just appalled by some of the stories we have to share with them and it’s scaring them away.”</p> <p>“There’s lot of times that I’ve worked with families... and they don’t understand the risk of fentanyl... I am surprised by the... lack of information or misinformation that people have about the risks.”</p> <p><u>Training offered in other agencies (police) that MCFD should also receive:</u> “As a police officer, we have received annual and ongoing, updated training on handling controlled substances, specifically fentanyl... our agencies provide those regular updates if there are bad drugs on the streets... so we get lots of training and when fentanyl was announced as a national crisis... you are given training almost immediately. And it included video training that went out nationwide to all police officers and our support staff, particularly in our evidence processing rooms and our lab people on how to recognize and identify what an overdose looked like, what the signs and symptoms in yourself might feel like... how small the exposures can be to cause harm... And I think things that are emerging that are harmful need to be more timely in our agencies and I don’t know but I feel like in the conversations that I’ve had, that isn’t happening in the Ministry and they need to be.”</p>
Unclear roles	<p><u>In regard to the role of the police:</u> “I don’t think that they have any access, in terms, of their ability to assess. I don’t know if they have anybody they can connect with.”</p> <p><u>In regard to whose responsibility it is to assess a fentanyl exposed home:</u> “This particular case we dealt with, the child was born in the hospital, there was allegedly a drug lab in there producing substances including fentanyl, it was cleared out, that was viewed by the police but no one ever went in to kind of clean it. Or determine if it was clean enough, no one knew to ask that question or that anything would be left behind that would present itself as a risk.”</p> <p>“In terms of a professional cleaning, we don’t have a system or role or understanding of what should and should not be done.”</p>
Need for collaboration and unified policies/guidelines	<p><u>How different systems interact with one another:</u> “In that situation where there’s been an exposure... the Ministry is engaged to take care of the family’s interests, whether children need to be removed or make recommendations for the house to be cleaned... we can also call the fire department who has access to hazardous materials handling equipment and at the top level there is also hazmat companies that come in to help us dismantle drug houses. And then there’s by-law enforcement. Like there’s lots of levels as to how we would enforce that.”</p> <p>“Where is the wrap around service that comes with that? Where is the protective element if we are truly a community of partners... providing for the well-being of the child? One extension of the community acted in isolation without the other or others.”</p> <p>“When you’re collaborating around this, you’re just talking with different directors and management around policies of this. Once a policy is in place... we need to connect, [but] that rarely happens... we should have the opportunity to connect with people or have a quick home assessment to determine the level of risk.”</p> <p><u>Need for provincial policies and guidelines to promote collaboration:</u> “I think a provincial guideline for the Ministry would have helped the social worker in understanding the risks and threats associated... My number one advice when anyone is coming out with new policies and procedures... if they don’t have anything already, [is to] reach out to the community partners that they already have relationships with... Don’t reinvent a wheel”.</p>
Lack of designated team/experts to complete and consult with for remediation of fentanyl exposed homes	<p><u>Lack of a professional remediation team/experts:</u> “In terms of a professional cleaning, we don’t have a system or role or understanding of what should and should not be done. I don’t know if this is an anomaly or if this is something that needs to be more thought out... all we can do is [assess] the environment through our eyes and what would be typical for the health and wellbeing of a newborn or a child.”</p> <p>“In that regard, it is directly in the home and unfortunately, we don’t have anybody to assess that, the safety in the home. We just expect a full thorough clean be done. For that [case], they replaced the carpet, got rid of all the furniture. The baby was not allowed to return to the home for multiple weeks... and hoping the family had cleaned it thoroughly... I don’t feel really confident in our capacity to actually thoroughly assess it.”</p> <p>“Overall there wasn’t anybody, unless we were going to pay privately for a company to come in, I was advised that there is no one available to do those... unless the family can pay privately.”</p> <p>“There was not a policy in place that required the house to be cleansed by a trained team of people that could clean it.”</p>

Table 2: Results from Likert scale questions with the strongest consensus

Statement	Strongly agree n (%)	Somewhat agree n (%)	Neither agree nor disagree n (%)	Somewhat disagree n (%)	Strongly disagree n (%)
"I am concerned about the safety and well-being of children who live in homes where traces of fentanyl are found."	17 (94.4%)	1 (5.5%)	0 (0%)	0 (0%)	0 (0%)
"It is important for multiple agencies to work together when dealing with cases of fentanyl for the safety of children and families."	16 (88.9%)	1 (5.5%)	0 (0%)	0 (0%)	1 (5.5%)
"There is collaboration between MCFD and other agencies regarding cases of fentanyl."	3 (16.6%)	10 (55.6%)	1 (5.5%)	1 (5.5%)	3 (16.6%)

Table 3: Years worked at MCFD and knowledge of fentanyl (no response for "not knowledgeable")

Years worked at MCFD	Knowledge of fentanyl		
	Very knowledgeable n (%)	Somewhat knowledgeable n (%)	Neutral n (%)
< 1 year	2 (100%)		
1-2 years		1 (100%)	
3-5 years		4 (100%)	
6-10 years		3 (100%)	
11-15 years		2 (100%)	
16-20 years	1 (33%)	2 (66.7%)	
20 + years	1 (25%)	2 (50%)	1 (25%)

The main theme identified in the research was the lack of training and knowledge around the remediation of fentanyl and the subsequent home assessments that would follow. As the researchers were challenged in finding literature regarding fentanyl remediation, nonetheless how fentanyl remediation impacts child welfare, it is logical that this is a gap in knowledge among MCFD workers as well. Interestingly, a non-MCFD employee commented on the lack of initiative from MCFD to implement such training for their staff, despite such training being readily available and implemented for non-MCFD professionals, such as police officers and emergency respondents. As stated, these trainings may not have been enforced by MCFD due to the lack of research,

but it may also be due to the high rate of turnover in child welfare, and therefore, staff members would be inconsistent in terms of what trainings they have or have not received.

Another major theme was the lack of clarity around who is responsible for what role when it came to cases of fentanyl remediation and child welfare. As there have been no formal guideline or assessment procedure for fentanyl exposed homes, the researchers found that child welfare workers were often unsure of how homes should be cleaned and/or tested, and may have even trusted the parents in ensuring a thorough cleanse. Despite child welfare workers being overall unsure about their specific role in fentanyl remediation home assessments, the researchers found that the perception from a non-MCFD employee was that child welfare workers were the identified professionals in completing these assessments. Although the researchers were conflicted about child welfare workers being assigned this extremely difficult and complex responsibility, it was challenging to refute this perception. This is due to the overwhelming authority that child welfare workers have in regards to implementing interventions with children and families. Even authoritative agencies such as the police are not authorized to complete home assessments and make decisions around removing children from harmful environments, as they would only have jurisdiction around criminal matters. In that case, despite child welfare workers having the most interactions with families' homes and their living environments, child welfare workers receive very little training around fentanyl remediation and home assessments in comparison to other agencies. Despite this lack of training, child welfare workers are expected to take on a magnitude of responsibilities, and arguably the most dangerous responsibilities, given their duties in completing home assessments, and engaging in very personal and contentious work with families.

Lack of collaboration and teamwork was also identified by the researchers as an ongoing issue in this research topic. This included systems working in isolation and making executive decisions, despite a family being a mutual client among all the systems. In

reviewing the literature, there is reason to believe that this barrier in communication is caused by a lack of a uniform and/or provincial guideline for this very under-researched issue. Child welfare, police, and hospitals all have their independent governing policies and it is expected for our roles and responsibilities to be carried out under these policies. Currently, there is no provincial guideline for fentanyl remediation in B.C, however, there have been multiple examples in recent cases where a multi-agency approach was effective in addressing fentanyl clandestine labs. This included the RCMP, hazmat teams, and emergency health services working collaboratively and using their respective skills in addressing a fentanyl clandestine lab case. As eloquently stated by one of the research participants, agencies and systems should collaborate with one another and build their own knowledge by learning from others. Often times, the knowledge and training is available, but workers may not be looking outside of their own agency. For example, the literature review revealed substantial existing research and knowledge regarding the remediation of methamphetamine labs, which may lay the groundwork for fentanyl remediation. Therefore, it is important that different agencies share their experiences and skills, so that knowledge can be combined and built. This suggests that although it may appear that there is a lack of research regarding the remediation of fentanyl, many answers and issues may be addressed if agencies communicate and collaborate more effectively.

Through analyzing the quantitative data via the online survey, the researchers found it interesting that the number of years that participants have worked as a child welfare workers, had very little impact on their sentiments regarding the issues of fentanyl. For instance, child welfare workers that worked for three to five years compared to child welfare workers who have worked for over twenty years, responded similarly in how much knowledge they felt like they had regarding fentanyl. These findings were similar in regard to how participants felt about their preparedness around fentanyl issues and their feelings of safety in dealing with fentanyl. In other words, regardless of how long you have worked for MCFD, there was a lack of knowledge lack of preparedness,

and overall concern for safety when it came to dealing with fentanyl. This again emphasizes that fentanyl and fentanyl clandestine labs are a fairly new phenomenon, that even senior child welfare workers do not have an overt amount of experience with. This suggests an even greater need for updated training and policy given that even the experts in child welfare may not have the readiness required in dealing with fentanyl matters. The literature review revealed preliminary steps in how some agencies are developing comprehensive guidelines regarding fentanyl remediation. The research findings revealed that there are concrete steps that can be taken to promote the development and success of these guidelines, which will be further discussed in the following sections.

Limitations

As researchers beginning this project, it was apparent early on that the topic of clandestine fentanyl labs and the child welfare implications was a fairly recent phenomenon and there was limited prior research on this topic. The literature review involved sources regarding the development of fentanyl from a pain medication to a substance used illicitly, articles with correlations to fentanyl, as in the remediation of marijuana grow operations or methamphetamine laboratories, as well as articles on the risks of fentanyl to families and children and news articles on the discovery of clandestine fentanyl laboratories in the Lower Mainland. As a result of the limited availability of direct research into the remediation of fentanyl laboratories or any findings on the implications of the increased prevalence of fentanyl to child welfare workers, this left the researchers in a position of adding to the research base with respect to our findings and with the challenge of determining the direction of this research.

Another major factor that limited the scope and breadth of our research was the sample size for the semi-structured interviews as well as the online surveys. While the information obtained through these methods was helpful and insightful, MCFD is a large organization and the number of MCFD staff that the online survey was distributed to was large in relation to the number of responses received. The

online survey was distributed via general email to the Coast Fraser Region and specifically within the Service Delivery Areas of North and South Fraser, Vancouver/Richmond and Coast/North Shore (to a more limited extent). In the end, we received 18 completed online survey responses. Of these 18 responses, only 8 were from current front line MCFD staff, either intake workers or family service workers, who are the staff that would encounter fentanyl in homes first hand during child welfare responses.

Other respondents were screening social workers, directors of practice, practice consultants, and team leaders who may have been previous front-line staff but are not at present. While the varied positions of all of the respondents was helpful for gaining differing position insights, based on the sample size, the results are not considered generalizable on a larger scale. Additionally, the researchers recognize that due to the small sample size of respondents to both the surveys and interviews, there is a significant gap with respect to the knowledge not obtained from staff that chose not to participate in this research project. It is also acknowledged that the respondents who participated in the research are presumed to have done so as a result of their knowledge and experience of fentanyl, but this does not then take into account the number of staff that do not have experience with fentanyl or that this issue in respondents was helpful for gaining differing position insights, based on the sample size, the results are not considered generalizable on a larger scale. Additionally, the researchers recognize that due to the small sample size of respondents to both the surveys and interviews, there is a significant gap with respect to the knowledge not obtained from staff that chose not to participate in this research project. It is also acknowledged that the respondents who participated in the research are presumed to have done so as a result of their knowledge and experience of fentanyl, but this does not then take into account the number of staff that do not have experience with fentanyl or that this issue in general may have limited applicability to a large proportion of the work that MCFD child welfare staff do.

The time within which the researchers had to conduct the online surveys was only approximately 4

weeks. The informal, semi-structured interviews were also limited by the researcher's time frames for conducting formal data collection. Had there been additional time to complete data collection, including sending reminders to MCFD staff of the online survey as well as time to schedule semi-structured interviews with MCFD contacts, this may have contributed to a larger sample size and broader representation of perspectives both within MCFD and from external professionals. This project was further limited due to the fact that external research participants were required to have an established working relationship with MCFD and our sponsors in order to participate. This meant that external agencies such as Border Security, Emergency Health Services, fire and paramedic, RCMP, and hazardous waste companies, who may have had relevant and pertinent information to share regarding this project, were not able to be included in this research. As a result our research respondents were almost exclusively MCFD staff.

Implications for Future Practice

Our research findings have resulted in a number of implications and recommendations for future practice as well as directions for the future use of this research. Based on a review of literature available on fentanyl home remediation and on fentanyl in general, we are aware that there is extensive knowledge available on the topic of fentanyl and for the remediation of fentanyl-exposed homes with respect to the current practices of RCMP, fire/paramedic, hazmat and remediation companies. What is unfortunately missing is the definition of whose role it is to ensure the safety of these environments for habitation, particularly when children reside in these homes and child welfare has become involved as a result. As researchers, we see this as a clear need for future collaboration of child welfare staff and these relevant external agencies and partners in developing a seamless policy or procedure on fentanyl remediation and more specifically in defining the roles and responsibilities of each of these key players on this issue.

Survey respondents provided varied answers as to their understanding or knowledge of current policies on working with fentanyl, how to assess the cleanliness of homes, who to liaise with on this issue

and what the roles of other community agencies or partners should be within the larger context. As researchers, we do not see this as a personal deficit of any particular MCFD staff person but a systemic gap in the knowledge, training and tools available to child welfare staff when dealing with fentanyl. What is necessary is improved opportunities for training and education and a clearer understanding of the hazards and lethality of fentanyl in order to realize the importance of safety and risk in properly assessing a home where fentanyl has been located. It is also recommended that MCFD develop comprehensive policies or procedures regarding how to assess the safety of fentanyl-exposed homes. Additionally, MCFD should ensure that all training, education and policies are applicable province-wide in order to ensure consistency in practice across all service delivery areas and regions.

The research findings suggest that other community agencies are already ahead of MCFD in terms of developing procedures and policies around the assessment and remediation of clandestine fentanyl labs, and so it is our recommendation that MCFD build upon this existing knowledge and experience of these community partners in order to inform the development of applicable policy and procedures. It should also identify the role that MCFD should play in the remediation and assessment of fentanyl exposed homes, who to liaise with and where to delegate responsibility at other levels of this process. A multi-agency approach is the best option for future child welfare practice in order to ensure the minimization of gaps across systems and to ensure the safety of children and families where they reside. As identified in the research findings, a crucial step in a multi-agency approach is to build a connection with a designated team of experts (e.g. a cleaning company, hazmat company) in the remediation of fentanyl as they would likely have practical skills and knowledge in how to complete home assessments and deem an environment safe for habitation. It may also be useful that external to MCFD, there are provincial policies and guidelines developed, applicable to multiple agencies to promote communication and

collaboration. If there is a provincial guideline that specifies what agency/system is responsible for what role when it comes to fentanyl remediation and assessments, as well as each agency providing the appropriate training necessary to carry out these responsibilities, the researchers expect that this would be greatly promote teamwork and increase our ability to ensure the safety of children and families.

Finally, due to the limitations around participant recruitment, it was felt that there was further room for research on fentanyl remediation and the child welfare implications yet. Potential further findings could be enhanced with the involvement of more community partners and external agencies to MCFD in order to understand their roles in the discovery, assessment and remediation of clandestine fentanyl labs and the implications that this may have on the clarification and definition of MCFD's role in ensuring the safety of the children and families they are responsible for. These implications and recommendations as a whole are considered to be a strong start in elevating the knowledge and expertise of MCFD and child welfare staff to the level of other more experienced agencies and partners. It is hoped that this will also foster improved and stronger collaboration among child welfare and external agencies as well as future knowledge sharing and strengthening of policy in the area of fentanyl safety.

Conclusion

The research team was very interested and committed to this research project as each has been previously or is still currently employed in front-line child welfare roles. As such, this topic was of personal value to us in our role as social workers as fentanyl touches and impacts on a lot of the families that we work with day to day. As the opioid crisis continues in the Lower Mainland, B.C., and across Canada, the impacts on individuals, families and children is also increasing. From this research, it has been found that the area of clandestine fentanyl laboratories and the child welfare implications is a highly under-researched topic. Thankfully, from our findings, children exposed to fentanyl in homes used in the processing or packaging of fentanyl are few and far between. Unfortunately, as the prevalence of fentanyl is increasing, it should not be

taken for granted that child welfare involvement in clandestine fentanyl laboratories or even from parental fentanyl use may increase as well. A lack of understanding of the risks of fentanyl and education among child welfare staff on this issue is an important finding as it is this knowledge that informs child welfare staff in the determination of the safety of children and families residing in homes where fentanyl has been present. While there may be no concrete solutions as a result of this research project, the findings do support the argument that more attention and work is needed in this area of fentanyl of how child welfare staff can safely and effectively address the hazards and risks associated with this substance in order to ensure the safety of the children and families that they work with. It will be important for MCFD to develop further training and education for their staff on this issue and to utilize and rely upon the already developed policies and procedures that their community partners already have in place in order to inform future policy, procedures or guidelines on this topic. In the end, child welfare and community partners cannot expect to work effectively without communication, cooperation and the sharing of knowledge and expertise on fentanyl and it is the researcher's utmost finding that a coordinated, multi-agency approach to fentanyl identification, remediation and assessment of home safety is necessary to ensure that mistakes are not made and that innocent lives are not placed at risk as a result of systemic gaps.

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References

Akesson, B., Burns, V., Hordyk, S. (2017). The place of place in social work: Rethinking the person-in-environment model in social work education and practice. *Journal of Social Work Education*, 53(3), 372-383. doi:10.1080/1437797.2016.1272512

- Al-Obaidi, T. A., & Fletcher, S. M. (2014). Management of clandestine drug laboratories: need for evidence-based environmental health policies. *Environmental Health and Preventive Medicine*, 19, 1-11. doi: 10.1007/s12199-013-0360-8
- Baker, R. (2016, March 18). Delta police fentanyl investigation leads to Burnaby bust. *CBC News*. Retrieved from <https://www.cbc.ca/news/canada/british-columbia/deltapolice-fentanyl-investigation-leads-to-burnaby-bust-1.3498437>
- Braun, V., & Clarke V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3, 77-101.
- Ghertner, R., Waters, A., Radel, L., & Crouse, G. (2018). The role of substance use in child welfare caseloads. *Children and Youth Services Review*, 90, 83-93.
- Goldberger, B. A., Martin, D. M., & Gold, M. S. (2011). Opium smoke: The study of second-and third-hand exposure in women and children of Afghanistan. *US Department of State's Bureau for International Narcotics and Law Enforcement Affairs*. Folsam, CA: NES, Inc.
- Graney, J. (2018, August 24). Alberta to develop guidelines to clean fentanyl contaminated sites. *Edmonton Journal*. Retrieved from <https://edmontonjournal.com/news/local-news/alberta-to-develop-guidelines-to-clean-fentanyl-contaminated-sites>
- Hayashi, K., Milloy, M. J., Lysyshyn, M., DeBeck, K., Nosova, E., Wood, E., & Kerr, T. (2018). Substance use patterns associated with recent exposure to fentanyl among people who inject drugs in Vancouver, Canada: A cross-sectional urine toxicology screening study. *Drug and Alcohol Dependence*, 183, 1-6.
- Henderson, J. (2017, December 19). Cleaning a fentanyl lab. *St. Albert Gazette*. Retrieved from <https://www.stalbertgazette.com/article/cleaning-fentanyl-lab-20171219>

- Jones, A. A., Jang, K., Panenka, W., Barr, A. M., MacEwan, G. W., Thornton, A. E., & Honer, W. G. (2018). Rapid change in fentanyl prevalence in a community-based high-risk sample, *JAMA Psychiatry*, 75(3), 298-300. doi:10.1001/jamapsychiatry.2017.4432
- Narhi, K., & Matthies, A. L. (2016). The ecosocial approach in social work as a framework for structural social work. *International Social Work*, 61(4), 490-502. doi:http://doi-org.ezproxy.library.ubc.ca/10.1177/0020872816644663
- New Zealand Ministry of Health. (2010). Guidelines for the Remediation of Clandestine Methamphetamine Laboratory Sites. Retrieved from <http://www.moh.govt.nz>
- Schenk, A., Geuze, G., & McCormick, A. (2018). Ensuring Healthy Homes for British Columbians: Toward a Provincial Standard for the Remediation of Residential Properties Used in Drug Production. Retrieved from <http://bcrea.bc.ca/docs/government-relations/ensuring-healthy-homes-for-british-columbians.pdf>
- Sachdeva, D. K., & Stadnyk, J. M. (2004) Are one or two dangerous? Opioid exposure in toddlers. *The Journal of Emergency Medicine*, 29, 77-84.
- Smith, K. (2018, August 16). \$1M drug lab producing fentanyl to look like heroin shut down in southeast Edmonton. *Global News*. Retrieved from <https://globalnews.ca/news/4391753/drug-lab-fentanyl-heroin-shut-down-southeast-edmonton/>
- Stanley, T. (2014). The Fentanyl story. *The Journal of Pain*, 15(12), 1215-1226.
- U.S. Food and Drug Administration. (2013, September 23). Fentanyl patch can be deadly to children. Retrieved from <http://www.fda.gov/ForConsumer/ConsumerUpdates/ucm300803.htm>

Appendix A

Interview Questionnaire

1. What is your gender?
2. What is your age?
3. What is your occupation/position title?
4. How long have you worked in your current position?
5. Have you had experiences in your work where fentanyl impacted the well-being of your clients? If so, please elaborate.
6. How often, when interacting with fentanyl in your job, do you find families and children involved or exposed to fentanyl?
7. Have you ever come across a situation involving fentanyl that required an external agency to intervene in order to assess the safety of a person or environment? If so, which agencies were involved?
8. Have you had successes in which fentanyl was located at a residence, and the children/family's safety was maintained (either they remained at the residence or were moved)? If so, please elaborate.
9. How safe do you feel interacting with clients and/or residences where there is or may be involvement with fentanyl?
10. What role do you and your employer play in the remediation of and determination of the safety of residences where fentanyl labs have been found?
11. How do you and/or your employer determine that a residence is safe for habitation after fentanyl production has occurred in the home.
12. How involved do you think law enforcement (police) should be when dealing with homes where fentanyl is an issue? Why?
13. What professionals do you think need to be involved when dealing with clients/residences where fentanyl is an issue? Why?
14. For non social work employees- have you specifically worked with a social worker in determining or assessing the safety of a home exposed to fentanyl? If so, how did you work together and what role did the social worker play?
15. Are you aware of your agency/organizations' safety standards/guidelines around potential contact with fentanyl? If so, what is your knowledge of this?
16. How do you think that these standards or guidelines (or lack thereof) impact the children and families that you work with?
17. How do you feel these standards and guidelines sufficiently meet and address the occupational hazards of your job?
18. In what ways do these standards and guidelines work in terms of your cooperation with other agency/organizations in the course of your work?
19. Do you feel that a provincial guideline on fentanyl remediation in residential properties would increase the comprehensiveness and effectiveness of responding to such issues?
20. What suggestions do you have in terms of guidelines or safety procedures, when working in worksites (e.g. homes, fentanyl packing labs) where fentanyl has been located?
21. Is there anything else you would like to discuss or provide feedback to in regards to our research topic?

Appendix B

Online Survey Questionnaire

*Note- participants will have the option of expanding on each question via a text box with the statement "Please provide any additional comments".

1. How **often** have you come across the issue of fentanyl in your work? Please provide an approximate number, or type "0" if you have never.
2. What is your age?
 - A.18-24
 - B.25-34
 - C.35-44
 - D.45-54
 - E.55-64
 - F.Over 65
3. What is your gender? (Type answer)
4. What city or office location are you employed? (Type answer)
5. What is your employment category with MCFD?
 - A.Frontline - child protection (intake, family services, youth)
 - B.Resources
 - C.Guardianship/adoption
 - D.Practice Consultant
 - E.District Manager
 - F.Policy/Research
 - G.Administration
 - H.Other (please specify)
6. How long have you worked for MCFD?
 - A.Less than one year
 - B.One to two years
 - C.Three to five years
 - D.Six to ten years
 - E.Eleven to Twenty years
 - F.Over twenty years
7. Have you received training in relation to fentanyl? If yes, please answer question 8. If no, go to question 9.
 - A.Yes
 - B.No

8. What form of fentanyl related training have you received?

- A.Naloxone Training
- B.Information Session
- C.Other (please specify)

9. How important do you think training is in relation to fentanyl?

- A.Extremely important
- B.Very important
- C.Somewhat important
- D.Not very important
- E.Not at all important

10. How knowledgeable are you regarding fentanyl, such as its dangers and safety measures around exposure?

- A.Extremely knowledgeable
- B.Very knowledgeable
- C.Somewhat knowledgeable
- D.Not so knowledgeable
- E.Not at all knowledgeable

11. How concerned are you about the increase of fentanyl usage in British Columbia?

- A.Extremely concerned
- B.Very concerned
- C.Somewhat concerned
- D.Not so concerned
- E.Not at all concerned

12. How **prepared** do you feel in dealing with issues around fentanyl?

- A.Extremely prepared
- B.Very prepared
- C.Somewhat prepared
- D.Not very prepared
- E.Not at all prepared

13. How safe do you feel in dealing with issues around fentanyl?

- A.Extremely safe
- B.Very safe
- C.Somewhat safe
- D.Not very safe
- E.Not at all safe

14. How supported do you feel by MCFD colleagues and/or supervisors when dealing with issues surrounding fentanyl?

- A.Extremely supported
- B.Very supported

- C.Somewhat supported
- D.Not very supported
- E.Not at all supported

15. Please select how much you agree with the following statement: "I am concerned about the safety and well-being of children who live in homes where traces of fentanyl are found."

- A.Strongly agree
- B.Agree
- C.Neither agree nor disagree
- D.Disagree
- E.Strongly disagree

16. Do you know who to consult and liaise with if fentanyl arises as an issue during your work? If yes, please specify who you consult with and provide details around the consultation process. If not, proceed to the next question.

17. Have you ever come across a situation involving fentanyl that required an external agency to intervene in order to assess the safety of a person or environment? If so, which agencies were involved? If not, proceed to the next question.

18. Have you had successes in which fentanyl was located at a residence, and the children/family's safety was maintained (either they remained at the residence or were moved)? If so, please elaborate. If not, proceed to the next question.

19. Do you know what policy/procedures to follow if fentanyl arises as an issue during your work? If so, please specify what policies and/or how you became aware of these procedures. If not, proceed to the next question.

20. Please select how much you agree with the following statement: "There is collaboration between MCFD and other agencies regarding cases of fentanyl."

- A.Strongly agree
- B.Agree
- C.Neither agree nor disagree
- D.Disagree
- E.Strongly disagree

21. Please select how much you agree with the following statement: "It is important for multiple agencies to work together when dealing with cases of fentanyl for the safety of children and families".

- A.Strongly agree
- B.Agree
- C.Neither agree nor disagree
- D.Disagree
- E.Strongly disagree

Appendix C

Years Worked at MCFD and Feeling of Preparedness in Dealing with Fentanyl

Years worked at MCFD	How prepared do you feel in dealing with fentanyl?			
	Very prepared n (%)	Somewhat prepared n (%)	Neutral n (%)	Not very prepared n (%)
< 1 year	1 (50%)	1 (50%)		
1-2 years			1 (100%)	
3-5 years		3 (75%)	1 (25%)	
6-10 years		3 (100%)		
11-15 years		2 (100%)		
16-20 years	1 (33%)	2 (66.7%)		
20 + years		1 (25%)	1 (25%)	2 (50%)

Appendix D

Years Worked at MCFD and Feeling of Safety in Dealing with Fentanyl

Years worked at MCFD	How safe do you feel in dealing with fentanyl?			
	Very safe n (%)	Somewhat safe n (%)	Neutral n (%)	Not very safe n (%)
< 1 year	1 (50%)	1 (50%)		
1-2 years			1 (100%)	
3-5 years		3 (75%)	1 (25%)	
6-10 years		2 (66.7%)	1 (33%)	
11-15 years		1 (50%)	1 (50%)	
16-20 years	1 (33%)	2 (66.7%)		
20 + years		2 (50%)		2 (50%)