Towards Effective Responses to Protect the Future Occupants of Former Drug Production Properties in British Columbia

A Report Prepared for the BC Real Estate Association

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Executive Summary

British Columbia is currently facing problems with marijuana growing operations and clandestine drug laboratories that put the public at risk. Relative to other jurisdictions, British Columbia's problem with indoor marijuana growing operations is particularly troublesome, with estimates ranging from 13,000 to over 18,000 illegal commercial operations and figures suggesting over 12,000 licensed operations. While there may be some significant overlap between those that are licensed and those that are illegal, the numbers suggest a problem on a scale that is unrivalled by almost all other jurisdictions examined. British Columbia does not face a clandestine drug problem to the same extent as it does with growing operations, and indeed not nearly to the extent seen in some jurisdictions in the United States. However, taken together, the province has a sizeable problem with drug production that has left many properties in various states that present risks to future occupants.

There are a number of risks to the future occupants of former drug production properties. Occupants of these properties, whether they are new owners, renters or landlords, face financial costs, health hazards and the threat of further criminal activity. The nature and extent of these risks will vary depending on whether the property was used to grow marijuana or manufacture methamphetamines or other drugs, but both types of drug production operations pose serious risks.

There are several protections currently in place across British Columbia. These include attempts to encourage the disclosure of information about former drug production properties during real estate transactions, through the use of the Property Disclosure Statement. Additionally, there are a number of municipal bylaws in place across the province to identify and remediate properties that have housed drug production operations. Provincial legislation has also been enacted to facilitate the use of these bylaws and other local strategies. Additionally, there are some publicly-accessible registries that exist to provide some information to the public regarding former drug production properties.

Given the extent of the problem presented by former drug production properties, the lack of clear rules, and the inconsistent application of many of the available protections, improvements in the responses to this problem are necessary. This report reviews a wide variety of legislation, documents, websites and other media to uncover the trends that exist in how other jurisdictions are responding to the problems presented by former drug production properties. The trends explored include disclosure rules and legislation, registration strategies and other innovative responses like developing incentives for owners to report drug production on their properties, providing specialized training to home inspectors, holding accountable lenders who sell foreclosures through tighter inspection and disclosure requirements, and establishing informative websites. Looking at these trends within the context of British Columbia, this report discusses some of the key questions and concerns that need to be addressed to move British Columbia toward more effective responses that can protect future occupants of former drug production properties.

Based on the documents reviewed and the information presented throughout the report, six policy options are outlined. They are intended as options that would be considered in addition to the recommendations previously put forward by the BC Real Estate Association. The adoption of some

or all of these policy options would move British Columbia toward being an international leader in protecting citizens from the risks of occupying a former drug production property. These policy options include:

1. A provincial, publicly-accessible registry of all cases of indoor drug production identified by police and other relevant authorities.
2. Provincial legislation that would require the registration of drug production history on the land title.
3. A set of provincially-approved questions that British Columbians can bring to their municipal governments to inquire about a property's history of drug production without a freedom of information request.
4. Provincially-approved training and standards for home inspectors regarding former drug production properties.
5. A provincial program to recognize and compensate owners of properties used in drug production.
6. A province-wide public awareness program about the measures in place to protect occupants of former drug production properties.

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Introduction

The production of illegal drugs is a multi-faceted problem in British Columbia. Drug production across BC supplies local drug markets with substances such as marijuana and other drugs, like methamphetamine and ecstasy (MDMA), that can pose a serious risk to those who consume them (see Canadian Centre on Substance Abuse, 2010; Diplock, Plecas & Garris, 2012). The Royal Canadian Mounted Police (RCMP, 2010) reported that drug production fuels organized crime groups whose violent conflicts in recent years have been of considerable concern for British Columbians (Stop the Violence, 2011). Locally-produced drugs are also trafficked to other parts of Canada and internationally (RCMP, 2010). The United Nations Office of Drugs and Crime (2009), in its World Drug Report, identified Canada as a source country for illicit drugs, many of which originate in British Columbia.

In addition to the issues involving the drug trade itself, the problems of drug production spill into other arenas of daily life that may pose a greater likelihood of risk to the average British Columbian. One such arena involves the sale and purchase of real estate. Due to the illegal nature of drug production, producers cultivate and manufacture their illicit products inside private dwellings in residential neighbourhoods to evade law enforcement efforts. In some cases, indoor production is done on a relatively small scale by users who "cook" or "grow" primarily for their own consumption; however, in many cases, operations are set up indoors for the purpose of generating large profits and can involve multiple rooms or entire residences. The profitability of drug production on a commercial scale has led to the proliferation of indoor marijuana growing operations and, to a lesser extent, clandestine drug laboratories across the province. With the large number of properties used for drug production, many of which may have never come to the attention of police, there are many properties that have been or will be found within the real estate market that were once used for the production of drugs.

Drug production in and around residential homes creates a number of hazards that remain even after the production process has stopped and the property is occupied by other people (Plecas, Diplock & Garris, 2012). In cases where buyers purchase homes that were formerly used for the production of drugs, they can face many risks and costs of which they were unaware when making the purchase. Similar risks may be faced by new renters and landlords in cases where former tenants had used rental properties to produce drugs. These risks include, but are not limited to, those related to health, threats of criminal activity and financial loss (Plecas et al., 2012). In many ways, some of the most serious consequences associated with drug production in British Columbia are being assumed by the general public when trying to buy, rent, rent out and sell real estate.

The issue of grow op properties has been at the forefront for legislators in Alberta. In 2012, the cabinet appointed Member of the Legislative Assembly Rick Fraser to lead Grow Op Free Alberta (Fraser, 2014). Fraser (2014) conducted consultations with a broad range of stakeholders across the province to better understand the issues around detection and remediation, how dismantled grow operations were being dealt with, the barriers Alberta faced in addressing marijuana grow operations and what action the Government of Alberta could take on these issues. In 2014, Fraser released the

Grow Op Free Alberta Final Recommendations Report, which put forth 37 recommendations for a province-wide approach to addressing marijuana grow operations-related issues. While the focus in Alberta, as in other parts of Canada, including British Columbia, has been primarily on the impacts of indoor marijuana cultivation, the focus of those in the United States has been almost exclusively on protecting homebuyers from the dangers of methamphetamine production.

The purpose of this report is to explore the ways in which other jurisdictions have attempted to protect their citizens from dangers inherent in purchasing or otherwise occupying homes that have been previously used for the production of drugs. Additionally, the report examines whether those jurisdictions with disclosure regimes have evaluated the effectiveness of their programs. The research involves reviewing and analyzing English-language documents, legislation and written media related to this topic area. As the majority of responses have been in the form of public policies related to the disclosure of the histories of drug production properties for real estate purposes, specific attention is paid to ways in which such disclosure has been achieved. The majority of documents and research reviewed originate from Canada and the United States, though some attention has been paid to the responses to the issue in other countries.

The research focuses exclusively on the use of residential properties used to house marijuana growing operations and clandestine drug labs that produce drugs like methamphetamines, ecstasy, other "club drugs" and hash oil (THC extraction). While the issue of remediation standards is closely linked to the topic and may be discussed throughout, it is beyond the scope of this report to provide a meaningful contribution to the discussion about the rules surrounding the remediation of properties and the regulation of companies that conduct this type of work.

The remainder of this report begins by providing some background on the existing research related to indoor illicit drug production. This section explores the extent of the problem in British Columbia and elsewhere, highlights the main risks faced by those who occupy residences formerly used in drug production and outlines some of the responses to these issues currently in place in British Columbia. Following that, the methodology section provides the details of how the research for this report was conducted. Next, the report presents the main findings from the research, outlining the main trends in how other jurisdictions are protecting the public from the hazards of occupying former drug production properties. This section identifies these trends and explores which aspects of the responses reviewed appear to be effective and which do not. In the subsequent section, there is a discussion of how the research findings can be better understood within the context of British Columbia. The report concludes with six specific policy options that could be considered in British Columbia, along with their respective advantages and disadvantages.

Background

Extent of Drug Production in British Columbia and Elsewhere

Drug Production in British Columbia

The production of illegal drugs has been a particular problem for BC communities for more than two decades. This problem has been one predominated by the marijuana cultivation industry, with clandestine drug laboratories representing a small but serious threat. Between 1997 and 2000, British Columbia experienced a rapid growth in the number, size and sophistication of marijuana growing operations coming to the attention of police, followed by several years of stability in the number of operations but continued increases in the size and sophistication (Plecas, Malm & Kinney, 2005).

At the beginning of the twenty-first century, Easton (2004) estimated that there were approximately 17,500 marijuana growing operations running in the province. More recent estimates by Plecas et al. (2012) and Diplock & Plecas (2011) suggested the number of growing operations in 2010 was between 13,200 and 18,500. While the number of marijuana growing operations across the province has stagnated to some degree, evidence from police investigation for seized or "founded"[1] growing operations suggests that the size and sophistication of these operations continues to grow, and that growers are moving these large-scale operations to less populated communities in the province to avoid the greater levels of police resources in urban centres (Chaisson, Plecas, Garis & Snow, 2011). Additionally, Health Canada's (2013) figures indicated there were 11,601 licenses to produce marijuana for medical use in British Columbia in December 2012, a rapid increase from the 4,169 licenses in January of the same year.

Compared to the relatively large number of marijuana growing operations that has been a consistent problem in British Columbia since at least the early 1990s, clandestine drug laboratories have been much less numerous. A report by Diplock, Kirkland, Malm and Plecas (2005) reported that, in a two-year span from 2003 to 2005, police in British Columbia had seized 33 clandestine drug laboratories in addition to five chemical dump sites, four chemical storage sites and six THC extraction labs from 16 policing jurisdictions. While not all clandestine drug labs come to the attention of police, the 33 labs that were discovered in two years pale in comparison to the 2,360 marijuana growing operations that were discovered by police in 2003 alone (Plecas et al., 2005). Bouchard et al. (2012) used a variety of methods to estimate the size Canada's methamphetamine and ecstasy market, concluding that Canada may have somewhere between 560 and 1,400 clandestine drug laboratories. As British Columbia experienced more than 1/3 of police seizures of clandestine drug laboratories in 2009 (16 of 45 [RCMP, 2010]), it is possible that there are between 180 and 500 clandestine drug labs operating in the province.

Drug Production Across Canada

Although, for many years, British Columbia has had greater numbers and rates of drug production than the rest of Canada, other provinces have had problems with illicit drug production, as well.

[1] The term "founded" refers to the fact that the drug production operation has been confirmed by police or another investigating agency.

Dauvergne's (2009) report on trends in police-reported drug offences indicated that, although British Columbia had a larger rate per population, Quebec had the largest number of drug offences within the category of "production, importation, and exportation" in 2007, with a total of 3,421. Ontario, with 2,335, had a number of drug offences within this category similar to that of British Columbia (2,643), but had a much lower rate per population (18.2 per 100,000 population versus 60.3 per 100,000 population respectively; Dauvergne, 2009). Of all the provinces, Alberta had the lowest rate of offences within this category per population (4.0 per 100,000 population; Dauvergne, 2009).

Table 1: Rates of Drug Production and Related Offences in Canadian Provinces, 2007

Province	Rate of drug production, importation and exportation offenses per population (per 100,000 people)
BC	60.3
Quebec	44.4
Ontario	18.2
Alberta	4.0
Canada	27.8

Source: Dauvergne (2009), Table 7

Other parts of Canada face the problem of indoor marijuana growing operations, with estimates in some provinces rivalling those in British Columbia. A report by Plecas and Diplock (2007) found that the annual number of founded growing operations in Alberta ranged between 211 and 292 between 1997 and 2004. Of those growing operations found in Alberta, 90% were in residential buildings and another 7% were located within other outbuildings located on properties (Plecas & Diplock, 2007). Moreover, from 2007 to 2011 there were 662 confirmed grow operations in Edmonton and Calgary (Government of Alberta, 2014). While only about 1/8 the number found in British Columbia, the research demonstrated that the issue was not limited to the borders of BC. Research on drug production in Quebec has also indicated a sizeable marijuana production problem there, similar in scale to that seen in British Columbia (Bouchard, 2007). Using a capture-recapture model, Bouchard (2007) estimated that there were approximately 13,000 marijuana growing operations in Quebec between 2000 and 2001. Bouchard's (2007) estimates indicated that only approximately 25% of those growing operations in Quebec were located indoors using soil-based or hydroponic growing techniques. In Ontario, estimates of the number of indoor growing operations in 2002 were as high as 15,000 (La Barge & Noakes, 2005). However, while other provinces may have problems with illicit indoor marijuana production comparable to British Columbia, no province appears to have as many licenses for the production of medical marijuana (Health Canada, 2013).

In estimating the size of the "amphetamine-type stimulants"[2] drug market in Canada, Bouchard et al. (2012) were unable to use the capture-recapture method to estimate the number of labs in Canada or

[2] Amphetamine-type stimulants (ATS) is the term used by the United Nations Office of Drugs and Organized Crime to refer to methamphetamine, MDMA and other similar drugs.

in any of the specific provinces. However, relying on an economic model to estimate the number of labs, they concluded that there were between 560 and 1,400 labs across the country in 2009 (Bouchard et al., 2012). Given that the RCMP (2010) indicated that Ontario had the same number (16) of seized clandestine drug labs in 2009 as did British Columbia, it is likely that Ontario has a problem with the illicit production of methamphetamines and other drugs on residential properties on a scale comparable to BC. There were lab seizures in Alberta (7), Quebec (5) and Manitoba (1), but with each having fewer than half of the seizures of British Columbia and Ontario (RCMP, 2010), it is likely that no other provinces experience the problem to the same degree.

Drug Production Internationally

Relative to other jurisdictions internationally, British Columbia's marijuana production industry is considerable. This is particularly true of indoor marijuana cultivation. In the United States in 2012, law enforcement eradication efforts "busted" 9,066 marijuana cultivation sites, only 2,596 of which were indoor operations (US Drug Enforcement Administration [DEA], 2013a). Compared to the approximately 2,100 indoor growing operations discovered by police in just the province of British Columbia in 2010 (Plecas et al., 2012), there is little evidence to suggest that the United States experiences this problem to the same extent as British Columbia.

California has the largest marijuana production industry (Gettman, 2006; US DEA, 2013a). Gettman (2006), in his large-scale report on the marijuana production industry in the United States, provided estimates of the number of marijuana plants produced rather than the number of growing operations for each state. His estimates indicated that, in 2006, California produced 8.6 million pounds of marijuana worth approximately $13.85 billion. Of that production, indoor marijuana growing was only a fraction, representing 930,788 pounds worth nearly $1.50 billion. In contrast, a recent estimate for British Columbia's indoor commercial marijuana growing industry was 1,452,660 pounds worth $2.6 billion domestically (Plecas et al., 2012). Given that California's population of over 37 million (US Census Bureau, 2010) is substantially larger than the population of approximately 4.6 million in British Columbia (Statistics Canada, 2012), it is probable that the marijuana production industry affects a much greater proportion of residential properties in British Columbia than it does in California.

In the United Kingdom, indoor marijuana cultivation has become an increasing problem. According to a report from the Association of Chief Police Officers (ACPO, 2012), the number of discovered commercial-scale marijuana production "factories" or "farms" has increased from 3,032 in 2007/2008 to a projected 7,865 in 2011/2012. The report only described marijuana cultivation "factories" in terms that suggested indoor production methods. These figures were not intended to include small-scale production for personal use, and included only those operations with 25 or more plants or those in which "[t]he premises ha[d] been adapted to such an extent that normal use would be inhibited [...]" (ACPO, 2012, p. 6). While these figures seem large and are growing, the United Kingdom has a population of over 63.2 million (Office for National Statistics, 2012), approximately 13.5 times the size of the population in British Columbia, which would indicate that British

Columbia has a rate of indoor growing operations per population of more than 3.5 times that found in the United Kingdom.[3]

While British Columbia seems to have a much more substantial problem with indoor marijuana production than do other jurisdictions, the opposite is true for clandestine laboratories. The United States has experienced a substantially higher level of production of methamphetamine and other similar illicit drugs. The US DEA's (2013b) website displays maps of the United States displaying the number of seized labs, dumpsites and storage sites in each of the 50 states from 2004 to 2012. Although the numbers for each state have fluctuated, sometimes substantially, more than half of the states have consistently had more than the 16 seizures experienced in British Columbia in 2009 (RCMP, 2010). Some states, such as Missouri, Indiana and Tennessee, have consistently had over 1,000 seizures per year (US DEA, 2013b). It is probable that, in most states, residential properties are affected by clandestine drug labs to a much greater extent that they are in British Columbia.

Australia and New Zealand are also experiencing problems with the production of methamphetamines and similar drugs, though not nearly to the extent as is seen in the United States. Caldicott, Pigou, Beattie and Edwards (2005) reported that, between 1999 and 2004, Australia experienced a rapid increase in the number of clandestine drug labs. In the year between September 2003 and September 2004, Australian police detected 346 clandestine labs, with the state of Queensland having 162 detected labs. Five of the eight states and territories had a greater number of seizures of clandestine drug labs in 2003-2004 than did British Columbia in 2009 (Caldicott et al., 2005). New Zealand experienced a growth from 41 labs detected in 2001 to 211 in 2006, although the numbers have declined since 2006 (New Zealand Drug Detection Agency [NZDDA], n.d.). Although it is difficult to compare with certainty, given that Australia has a smaller population than Canada,[4] and New Zealand's population is similar to that of British Columbia,[5] it is likely that the true number of clandestine drug labs, and therefore the number of residential properties affected, in these countries is greater than it is in British Columbia.

Summary

Table 2 provides a summary of the key data provided in the discussion above. Caution is needed in drawing direct comparisons between British Columbia and other jurisdictions, given that the data available was collected at different times. However, in general, it can be concluded that BC has a considerable problem with residential properties being used for illicit drug production, as compared to other jurisdictions. The province faces greater numbers and rates per population of indoor

[3] With 2,100 founded indoor growing operations in British Columbia in 2010 (Plecas et al., 2012) and a population of approximately 4.6 million (Statistics Canada, 2012), British Columbia has a rate of approximately 45.65 indoor growing operations per 100,000 population. The 7,865 commercial indoor growing operations in the United Kingdom (ACPO, 2012) and its population of approximately 63.2 million (Office for National Statistics, 2012) results in a rate of 12.45 indoor growing operations per 100,000 population.

[4] The population of Australia is approximately 23 million (Australian Bureau of Statistic, 2013), while the population of Canada is approximately 34.8 million (Statistics Canada, 2012).

[5] The population of New Zealand is approximately 4.5 million (Statistics New Zealand, 2013), while the population of British Columbia is approximately 4.6 million (BC Stats, 2013).

marijuana production sites than most other jurisdictions, but is generally less afflicted by the problem of clandestine drug laboratories.

Despite having some ability to estimate based on police seizures (Bouchard et al., 2012; Plecas et al., 2012), the size of this problem cannot be known with any true certainty. However, the relative size of this problem, and the potentially large number of British Columbians who could be negatively affected, suggests that finding adequate responses to protect the public is warranted.

Table 2: Summary of Drug Production Data for British Columbia and Elsewhere

	Recent population	Marijuana production			Clandestine meth/MDMA production		
		Annual police seizures	Rate of annual police seizures/ 100,000 pop.	Estimated total indoor operations	Annual police seizures	Rate of annual police seizures/ 100,000 pop.	Estimated total operations
BC	4,622,573	2,100	45.43	13,200-18,500	16	0.35	180-500
Canada	34,880,491	x	x	X	45	0.13	560-1,400
Alberta	3,873,745	292	7.54	X	7	0.18	x
Quebec	8,054,756	x	x	3,250	5	0.06	x
Ontario	13,505,900	x	x	15,000	16	0.12	x
US	315,796,746	2,596	0.82	X	11,210	3.55	x
California	37,254,956	505	1.36	X	79	0.21	x
UK	63,182,000	7,865	12.45	X	x	x	x
Australia	23,017,265	x	x	X	345	1.50	x
New Zealand	4,464,060	x	x	X	211	4.73	x

NOTE: Data comes from many different years. Caution should be used in making direct comparisons.

Risks and Harms to Occupants of Former Drug Production Properties

There are numerous risks faced by those who occupy former drug production properties. Although estimates and police seizures would suggest that British Columbians have a much greater risk of finding themselves in and around former marijuana growing operations, the greatest attention on this topic has been focused on former clandestine drug laboratories. While there has been some research on the risks and harms associated with former indoor marijuana growing operations, the problem is overshadowed by that of methamphetamine production in the United States, and much more discussion and literature exists specifically related to clandestine drug labs. In some cases, the risks will be very similar, but there are also particular risks that are specific to the methods used to produce the different drugs.

Harms of Indoor Marijuana Production

Indoor marijuana growing operations present some specific health and safety risks. According to research by Plecas et al. (2012), illegal marijuana production on a commercial scale results in some sort of structural hazard or contamination in nearly all cases. It has also been warned that many of the hazards associated to criminal marijuana production are shared by those operations that were licensed under Canada's medical marijuana protocols (Garis & Clare, 2011). As houses are not originally designed to be ideal for indoor plant growing on this scale, buildings require substantial modifications to achieve suitable environments. Plecas et al. (2012) listed a number of extensive modifications required including increased electrical power, altered ventilation, structural changes, added watering apparatuses, increased air flow, dehumidification, increased levels of carbon dioxide, added cooling units and anti-detection measures. Johnson and Miller (2011) reported a particularly dangerous trend of growers disconnecting the furnace and re-venting the exhaust to rooms used for growing marijuana. These various modifications can cost many thousands of dollars for the average production site (Plecas et al., 2012). The clandestine nature of this criminal enterprise results in growers circumventing the legal systems in place for making these types of modifications to buildings, which often require specific training, certification and inspection to ensure safety standards are met. The substantially altered residence can present a number of hazards to those living in close proximity, as well as those who will occupy it after.

Fire has been identified as one of the most serious risks associated with indoor marijuana operations (Garis, 2008). This risk is generally a result of the high power consumption required for the growing lights and the inadequate electrical protection or improper installation of electrical systems when modifications are made (Garis, 2008). If these dangerous modifications are not remediated to meet proper standards after a growing operation has been vacated, future occupants likely face a risk of serious shock and house fire. Plecas et al. (2012) conservatively estimated that the risk of fires was at least five times greater for residences used in marijuana growing than in regular homes.

Additionally, moulds and chemical residues are likely to be left behind in former indoor growing operations (Plecas et al., 2012). The high levels of humidity created during the growing process create a moist environment that allows for moulds to grow, often extensively (Johnson & Miller, 2011). Growers also use chemicals such as pesticides, herbicides and fertilizers during production, which are often found in high concentrations on surfaces within the residence (Blair & Wedman, 2009). Most former growing operations also display signs of chemical spillage and dumping (Blair & Wedman, 2009). Although in most cases the extent of the contamination from moulds and chemicals has not been found to be particularly threatening, without remediation these hazards can negatively affect the health of those who may occupy the residence afterwards (Blair & Wedman, 2009; Johnson & Miller, 2011). Additionally, as moulds can grow in places within the residence that make them difficult to detect, and dumped chemicals will often contaminate the surrounding soil and ground water, these problems may not be readily apparent upon an initial inspection after even only a superficial cleaning (Garis & Clare, 2011).

Harms of Clandestine Production of Methamphetamine and Similar Drugs

Clandestine methamphetamine and similar drug labs present their own specific health and safety risks. Whereas a decade ago in British Columbia the trend was to set up large sites, or "superlabs," in commercial buildings and warehouses (Diplock et al., 2005), some suggest that strict laws regulating the possession and sale of the chemicals required to produce these drugs have caused producers to move to smaller set ups, often in residential properties (Rhett Miller, 2012). While these labs are often smaller in size and require much fewer modifications to their environment to be set up, they involve the storage and use of many dangerous chemicals. For legal use of chemicals in the ways done by criminal "cooks," trained operators would require a strictly-regulated environment and would have to follow specific safety procedures (Caldicott et al., 2005). Obviously, for the illegal clandestine drug laboratories operating in residential neighbourhoods, these safety standards are not in place. The chemicals used in the production of drugs like methamphetamine and ecstasy often cause serious harms from fires, chemical burns, explosions and toxic fumes to the producers themselves (Scott, 2002; Thrasher, Von Derau & Burgess, 2009). In assuming these substantial risks themselves, these drug producers also pass along a number of risks to those living nearby and those who may occupy the sites later.

The list of hazardous chemicals is long and, when mixed together, they create not only an immediate risk, but also dangerous chemical waste. It is claimed that for every one pound of methamphetamine produced, five to seven pounds of toxic waste is created and poisonous gases are released (Diplock et al., 2005; Scott, 2002). The waste that results may be dumped down household drains, outside on other parts of the property, or collected in containers to be transported and left elsewhere. Throughout the process of manufacturing illegal drugs, these harmful chemicals can potentially contaminate the walls, ceilings, floors, carpets, windows, air ducts, appliances, other surfaces of, and even the environment around, the production site (US Environmental Protection Agency [EPA], 2013).

While the likelihood of severe injury for adults and children occupying a residence formerly used as a drug lab is likely lower than that of the producers themselves while mixing chemicals, Thrasher et al. (2009), in their research on case reports of negative health effects from methamphetamine lab exposure in Washington, found that adults and children exposed to former labs can experience a number of negative health symptoms. The most common symptoms among adults were headaches, nausea and vomiting, dizziness, breathing difficulties, coughing and eye irritation. The exposure was almost exclusively through inhalation. For children exposed to former lab sites, the most common symptoms involved coughing, and throat and skin irritation, typically as a result of exposure through the skin (Thrasher et al., 2009).

Financial Risks

Occupying a house that puts a person or a family at risk is not likely to be acceptable for many British Columbians. However, the costs associated with remediating a property that was used for drug production are substantial in many cases. The cost of remediating the average home showing signs of being a former growing operation in British Columbia and other parts of Canada has been estimated at $25,000 to $30,000 (Plecas et al., 2012; CBC News, 2009), and as high as $100,000

(Holmes, 2010). The US EPA (2013) provided an estimated cost for the average remediation of a clandestine drug lab to be between $5,000 and $150,000. These costs may be prohibitive for those who have recently purchased the property. Moreover, upon discovering the history of the property, the value of the property may decline, even if the appropriate remediation steps are taken (Lampert, 2013).

Risks of Associated Criminality

Due to the lucrative nature of the illicit drug industry, drug production is associated with risks related to violent criminality. There have been numerous cases in British Columbia where drug production has attracted violence to residential neighbourhoods, particularly in the form of home invasions (Plecas et al., 2012). Home invasions for the purpose of stealing drugs, money and weapons, referred to as "grow rips" when targeting marijuana growing operations, sometimes involve serious violence and the use of weapons and physical restraints. While, in most cases, it is active drug production properties that are targeted by other criminals set on "ripping" the growing operation, there are cases in which neighbours and other properties that are not associated with growing have been victimized by mistake (Plecas et al., 2012). Licensed growing operations are not immune from this violence. Whether the result of home invasions or other violence related to the drug trade, it is possible that the homes formerly used in drug production may still attract this type of violence upon the new occupants or the surrounding neighbourhood.

Risks to Other Occupants

Taken together, there are extensive risks that new homeowners assume when they move into a home that was formerly used in drug production. However, as has been alluded to briefly, the problems of drug production and the associated risks are also a reality for tenants and landlords. Research by Plecas et al. (2005) and Diplock et al. (2005) indicated that 8% of marijuana growing operations were reported by landlords[6] and nearly 90% of clandestine drug labs founded in residential properties were rented at the time. Therefore, landlords are facing these risks and harms to a large extent and, in cases where landlords are not taking the necessary precautions and disclosing the possibility of risk to future tenants, the population of those at risk increases further. Again, while those living in former drug production properties are likely at greatest risk, others living in close proximity are also assuming some level of risk.

Current Protections in Place in British Columbia

The problems associated with drug production in and around residential properties are not new, and there are a number of responses to the problem in place to protect those who may later occupy a former drug production property. These responses have involved eliciting appropriate disclosure from sellers involved in real estate transactions, enacting and enforcing municipal bylaws, providing police information to the public and creating new provincial statutes and regulations. While more

[6] Plecas et al. (2005) did not collect information on whether a property housing a marijuana growing operation was rented or owned. The percentage of operations reported by landlords is likely much lower than the percentage of operations that were discovered in rental properties.

may be needed, there are many in British Columbia who have put considerable thought and effort into responding to this problem.

Attempts to Encourage Disclosure

In 1991, the British Columbia Real Estate Association (BCREA) introduced the Property Disclosure Statement (PDS). It provides a list of questions that ask property sellers to indicate to potential buyers whether any of a number of potential problems might exist. In 2004, the disclosure of former marijuana growing operation or other drug production was added to the PDS, allowing buyers to get information about whether the existing owner of a property is aware of such activities in the property's past. While completion of the PDS is not required by law, there is an obligation on the part of the seller to disclose any material latent defects that would, among other things, make the home unsafe to live in or be of great expense to remedy (Real Estate Council of BC [RECBC], n.d.). The use of a property for producing marijuana or other drugs may be considered to be a material latent defect. However, no established rules have been legislated or established through court rulings to determine under which circumstances this would apply.

While the PDS and the obligation to disclose material latent defects provide some level of protection to buyers, there are some considerable limitations. These protections rely on both the honesty and the awareness of the seller. While buyers of former drug production properties may have some legal recourse if a seller fails to disclose the history, particularly if a PDS was included in the contract, such a route is not guaranteed to work. There is no onus on owners selling their property to make additional effort to determine if the property has a history of drug production of which they are unaware. While this could be an issue in a number of situations, it is perhaps most relevant in cases in which a property owner is selling his or her rental property and indicates no awareness of any such issues due to the fact that he or she lacks sufficient knowledge of activities in which any previous tenants may have been involved (Stewart, 2010). Additionally, these means of compelling sellers to disclose to buyers are not available to those seeking to rent or lease properties. In essence, even with these protections in place, it remains a case of "buyer (or renter) beware."

Use of Bylaws to Combat Drug Production

Across British Columbia, and notably in the Lower Mainland, municipalities have used bylaws to respond to the problems posed by the use of residential properties for drug production. A number of BC municipalities have enacted and enforced bylaws that better enable the discovery and remediation of properties being used to produce drugs (Garis, Plecas, Cohen & McCormick, 2009). In practice, these bylaws enable a general process, starting with a site inspection, followed by a notice to prohibit occupancy, then the establishment of a timeline for remediation and upon, completion of the required remediation, the occupancy prohibition is lifted; all of this is at the owner's expense (Garis & Clare, 2011). Garis et al. (2009) provided evidence indicating that these responses had largely reduced indoor marijuana growing around the province and in the Lower Mainland, in particular.

Additionally, Garis and Clare (2011) reported on some of the strategies being employed by municipalities in the province to help protect prospective homebuyers from purchasing properties

formerly used for drug production. Following the discovery of a property being used for drug production, the notice to prohibit occupancy provides for the necessary disclosure during remediation. Afterwards however, with the exception of the City of Surrey, most municipalities have refrained from applying any type of permanent method to disclose the history of remediation (Garis & Clare, 2011). The unique situation in Surrey requires owners of a residence with a history of drug production to disclose that history and its remediation status to any future occupant. At this point, this requirement passes to all future owners into perpetuity, and a notice is included with the property tax documentation. Other municipalities appear to remove records of a property's drug production history after remediation, keep only a listing of these properties at city hall, or make the history of a property available only upon a freedom of information request (Garis & Clare, 2011).

While demonstrably beneficial at helping identify and remediate properties that have been used for drug production (Garis et al., 2009), there are several issues with the level of protection afforded by these bylaw strategies from the perspective of achieving adequate disclosure. Primarily, they represent a patchwork of responses across the province that provides different guidelines for those affected, and different levels of protection to the public. There has been much more focus on identifying, remediating and penalizing violators than there has been on protecting future occupants from the risks presented by these properties.

In British Columbia, these bylaws, in seeking to both create an incentive to report drug production and recoup costs, often place a strict onus on owners to notify the city of suspected violations, at the risk of assuming all the costs associated to inspection and remediation. This form of "responsibilization,"[7] targeted primarily at landlords and property managers, while likely achieving its goals,[8] has the potential to create serious added burdens on the direct victims of this crime. To avoid the potential costs and stigma associated with a violation and the ensuing remediation, owners who had nothing to do with the drug production may take measures to deal with situations themselves and cover up the illegal activity. While there is no evidence of this behaviour, there is still a strong possibility that placing an onus on owners to cover the costs of inspection and remediation will reduce the likelihood that owners will report the presence of drug production if they discover it on their properties.

There are many critics of these bylaws. It has been argued that city "safety bylaws" are used to bypass legal protections homeowners are guaranteed from unlawful searches by police (e.g., Carter, 2009). There have been media accounts of large inspection fees being charged on those who claim that no evidence of drug production was found on their properties (Matas, 2011). These bylaw strategies represent an important and effective tool to protect British Columbians from the harms associated to drug production and the risks of occupying a residence that formerly housed such activity. However, given the criticism and potential for the rights of British Columbians to be

[7] "Responsibilization" is a term used to describe neo-liberal public policies and government agency practices that have been used to offload the responsibility for providing security from the state to the public (Garland, 2001).
[8] Matas (2011) reported that the City of Surrey recouped over $5 million from the fees applied to homeowners in violation of its bylaws since its inception, and that the City of Mission collected over $1 million in fees as a result of inspections since 2008.

jeopardized, further consideration might be needed toward finding an appropriate balance of the need to protect the public on one hand, and the potential for innocent people and victims to be penalized unnecessarily on the other.

It is also important to note that, without provincial standards for remediation, that responsibility has fallen to municipalities. The practices put in place to inspect reported properties and have them cleaned vary from one municipality to another. Often, since cities have placed the onus on owners to remediate their properties, many of the decisions made in the remediation process are done with the owner's interests in mind and not that of public safety. According to Garis (2010), the processes in place across British Columbia have led to inconsistent results. When a property is said to have been "remediated," it is very possible that it means different things in different places. Many observers, including Garis (2010) and BCREA (2015), have suggested that there is a need for centralized consistent standards for remediation, rather than relying on individual municipal bylaws, to ensure there is confidence in the remediation process and the protection it affords to future occupants of former drug production properties.

Use of Provincial Legislation to Combat Drug Production

While efforts from the municipalities through bylaws have spearheaded efforts to address the public safety issues of drug production properties, changes to provincial legislation have made many of these efforts possible. In 2006, the *Safety Standards Amendment Act* was passed by the Government of British Columbia, which enabled information from BC Hydro identifying properties exhibiting overconsumption of electricity to be provided to municipalities for the purposes of inspecting and ensuring the safety of the property. This legislation provided clarity on the legality of many of the safety bylaws that had been and are now still being used to identify and remediate drug production properties (Garis et al., 2009).

Additionally, in 2009, changes were made to the Contaminated Sites Regulation under the *Environmental Management Act*. The changes created a requirement for the remediation of drug production sites at the property owner's expense. This change has enabled municipalities to prohibit occupancy of the property until confirmation has been received from the Ministry of Environment that remediation has been completed. It has also enabled remediated drug properties to be recorded on an online registry available to the public at BC OnLine (www.bconline.gov.bc.ca).

More recently, the Government of British Columbia passed the *Community Safety Act* (2013). According to the Government of British Columbia, the new act will create a new provincial unit to handle confidential complaints from British Columbians and follow up by investigations, working with the property owners, and potentially applying for community safety orders to respond to "threatening and dangerous activities" (BC Government, 2013). The legislation is said to target drug production properties (BC Government, 2013), but at present, it is difficult to determine whether such legislation, if enacted, would enable new responses to this problem that are currently not available. As of March 2015, the *Community Safety Act* had not been implemented.

Additional Sources of Public Information on Former Drug Production Properties

In addition to disclosure rules during real estate transactions and the means provided by municipal bylaws and provincial legislation, there are some additional methods the public can use to more easily access information a property's potential drug production history. As was previously mentioned, the BC Ministry of Environment has a registry of sites that have been ordered remediated, and the site is available online. This registry is publicly accessible and is said to contain entries related to former drug production sites remediated by the ministry. There is a cost associated to a search of the registry, with the fee ranging from $25 to $100 depending on the method of search and the level of detail desired (BC Ministry of Environment, 2006). There is an ability to search for properties by address or by area, and BC OnLine can provide advice and assistance with searches (BC Ministry of Environment, 2006).

While potentially offering some protection, it is unclear to what extent former drug production properties are listed on the Contaminated Site Registry. Without consistent standards with regard to remediation and in what situations it is required, it is possible that there is variation by municipality on the likelihood of a former drug production property being included on the registry. Also, as the registry contains information on many types of contamination, it is not exclusive to former drug production properties, which could create some added confusion for searchers looking for this information specifically. While the searching capability and the ability to get advice and help with searches may make the tool valuable,[9] the cost of making a search on the registry and the requirement to register for BC OnLine with a deposit would likely dissuade some potential users. This, of course, prevents the use of the registry purely out of interest, but may not make it particularly appealing to those in the search for new property or for renters.

Another source of registries for discovered drug production properties is the Royal Canadian Mounted Police's website for the Marijuana Grow Initiative (2013).[10] The website provides lists of the locations of growing operations and clandestine labs dismantled by the RCMP across Canada. The information provided is detailed, providing the address, date of seizure, type and quantity of drugs, and even the location on the property (residence, outbuilding, etc.) where the drug production took place. The information for British Columbia only dates back to March 2012, is not searchable, does not provide information on remediation and only provides details of seizures by the RCMP. Although the RCMP in BC provides policing services to the majority of the province, there are a number of large municipalities, such as the cities of Vancouver and Victoria, that receive municipal policing services from other police forces. Additionally, the website is controlled by the RCMP, and it is unclear how long properties will remain on the list and whether this service will be provided on a continuing basis. Despite these and other limitations, once it has been operating for a sufficient time, and if it continues, this tool could be a useful and free way for some British Columbians to determine whether a property in question has been involved in a police seizure as a result of drug production. While the RCMP website does not list any other police forces in British

[9] The author did not attempt to make a search.

[10] The website for the Marijuana Grow Initiative is www.rcmp-grc.gc.ca/drugs-drogues/mgi-ircm/index-eng.htm.

Columbia as providing this information, there are other police forces that offer similar public information about drug production sites (RCMP, 2013).

Summary

While there are currently a number of responses being used to protect British Columbians from the risks of occupying a former drug production property, there is more that can be done to improve the protection offered, the coordination of these strategies, and the scope of the population they reach. BCREA (2015) has identified the need for more to be done to protect future occupants of former drug production properties and has made the following three recommendations in line with recommendations from Garis and Clare (2011):

1. Develop a centralized, consistent process for the disclosure of property history information[;]
2. Describe a healthy building and then develop a centralized, consistent process for remediation of buildings used in drug operations[; and]
3. Define a "drug operation" in a meaningful way. (BCREA, 2015, p. 1)

Although remediation is beyond the scope of this report, these recommendations represent a starting point for the research work presented in the following sections. The remainder of this report explores the responses used in other jurisdictions to address the problems presented by former drug production properties to determine what lessons can be applied to British Columbia. While there appears to be a scarcity of academic literature investigating this specific topic, the research methods used provide for a preliminary look at the trends that exist, which themselves can be used to inform policy in British Columbia.

Findings: Trends in Responses from Other Jurisdictions

The results of the research conducted identified two major trends for protecting the public from occupying former drug production properties. The first, and most common, involved legislation and practices related to disclosure during real estate transactions. The second involved the registration of former drug production properties. These trends are explored in detail below. Additionally, some other innovative responses are also discussed. These include developing incentives for owners to report drug production on their properties, providing specialized training to home inspectors, holding accountable lenders who sell foreclosures through tighter inspection and disclosure requirements and establishing informative websites.

Legislation and Practices Related to Disclosure of Former Drug Production Properties

Disclosure Trends

The most common trend in how the public is protected from occupying former drug production properties is to include the disclosure of past drug production as a necessary part of a real estate transaction. Like British Columbia, other provinces have practices regarding the disclosure of former drug production properties. Ontario, Quebec and Alberta have notable disclosure practices. Similarly, across the United States, there are at least 20 states that have explicit rules in place that

require sellers to disclose information about past drug production in and around the property. In some jurisdictions, disclosure must be written and then acknowledged in writing by the buyer, while in others it is done as part of a disclosure form similar to the PDS in British Columbia. The various states in Australia exhibit a range of rules about disclosure during the sale of real estate, but the issue of disclosing drug production history does not yet appear to have garnered much attention. The same can be said for England and New Zealand.

In general, the most notable trend in disclosure is activity targeted. In Canada, for example, even though methamphetamine production is much less common than marijuana growing, disclosure requirements usually include both activities. Quebec's mandatory "Declarations by the Seller of the Immovable" form includes a question that specifically identifies the history of production of "cannabis" and "any other drug, chemical, or hazardous material" as requiring disclosure (Organisme d'Autoreglementation du Courtage Immobilier du Quebec [OACIQ], 2010). Ontario's Seller Property Information Statement asks for the disclosure of the history of "growth or manufacturing of illicit substances" (OREA, 2006).

Similarly, Washington and Oregon require sellers to disclose whether their property has been used for the manufacturing of "illegal drugs" (*Oregon Revised Statutes*, 2011; *Revised Code of Washington*, 2012). In other parts of the United States, however, where methamphetamine production is the prominent threat, the disclosure requirement may only explicitly refer to methamphetamine labs. This appears to be the case in states like Missouri, Texas, Arizona, Tennessee and South Dakota. For example, Missouri law, which perhaps has the strictest disclosure rules that currently exist,[11] only makes mention of methamphetamines (*Missouri Revised Statutes*, 2012).

Additionally, there are other jurisdictions where drug production is not explicitly stated in law or included on disclosure forms. In these jurisdictions, the history of such activity may still be considered a latent material defect, as methamphetamine production is in the state of Florida (Florida REALTORS®, 2013).

However, in some other states that do not explicitly list drug production within their disclosure rules, it is unclear whether the history of such activity would be considered a latent material defect (Privett, 2006). This is particularly the case with marijuana production, which has received much less attention in the United States. There are also variations, jurisdiction by jurisdiction, in the obligations of sellers when a buyer specifically asks about the history of drug production (Edmiston, 2011).

Only a few jurisdictions make it mandatory to disclose the full known history of drug production. In Canada, Quebec's disclosure rules are particularly onerous if sellers want to avoid being liable under the province's Civil Code. The same can be said of the laws in Missouri, which require owners to

[11] In addition to requiring the disclosure of previous methamphetamine production to the best of their knowledge, owners are required to disclose if they knew, or should have known, that a person convicted of crime related to methamphetamine resided in the property (*Missouri Revised Statutes*, 2008). These requirements may be so stringent because Missouri does not have specified remediation requirements, even though it had more reported meth labs than any other state in 2012 (Rollins, 2013).

disclose to the best of their knowledge whether or not a methamphetamine lab was ever present in the property, even if the owner was not involved and the person was never convicted (*Missouri Revised Statutes,* 2012). South Dakota's "Property Condition Disclosure Statement," which includes a question about past methamphetamine production, provides another example of how some states are making the disclosure of a property's full known drug production history mandatory (*South Dakota Codified Law*, 2013). The State of Washington also legislated the use of a disclosure statement that asks the seller to declare whether illegal drugs had ever been produced in the property. This form is mandatory in all but a select few real estate transactions (*Revised Code of Washington*, 2012). West Virginia laws require the seller to disclose the property's drug production history along with the certificate of completed remediation.

In Ontario, the disclosure practices are more similar to those in British Columbia, requiring the disclosure of latent material defects, which is generally viewed as a requirement to disclose any history of drug production, even if the property has been remediated (Lampert, 2013). There has been much debate in Ontario over the extent to which disclosure for former drug properties is legally required, as completion of the Seller Property Information Statement is not mandatory. In 2007, a bill that would have required property owners and real estate agents in Ontario to disclose a property's full history of marijuana growing went through the first reading (*Grow Op Disclosure Act*, 2007), but did not move beyond that stage.

In most other jurisdictions with explicit rules, the disclosure of former drug production activity is only required for properties that have not been remediated. In California, if the police identify or suspect methamphetamine production on a property, they will inform a health officer who, upon the determination of contamination, will issue an order prohibiting habitation. In order to sell that property, the owner must notify any prospective buyers of the order, provide a copy, and get the buyer to provide in writing the acknowledgement of receipt (State of California Real Estate Department, 2005). This onus is gone upon receiving a notice from the health officer that no further remediation action is required.

Oregon's law is similar, stating that "[u]nless determined fit for use, [...] no person shall transfer, sell, use or rent any property knowing or having reasonable grounds to believe it was used as an illegal drug manufacturing site" (*Oregon Revised Statutes*, 2011, s.453.867). Much like California, the Oregon law does allow for the sale of the property without remediation if full disclosure is provided to the buyer. Arizona and Nevada have similar disclosure rules in place. In New Zealand, where there appears to be no explicit requirement to disclose whether a property housed a methamphetamine lab, the only protection for buyers comes from the fact that any cleaning or closing order applied after a lab is discovered would legally have to be provided (Ferris, 2009). Once the property has been remediated, there would no longer be such a requirement.

The Real Estate Council of Alberta (RECA, 2012) indicates that, once a marijuana growing operation has been remediated, the history is no longer considered to be a latent material defect and does not need to be disclosed. If the buyer asks specifically about the history of drug production in a

remediated property, the seller may choose not to provide an answer, though if an answer is provided, it must be truthful (RECA, 2012).

Some disclosure rules extend not only during the sale of property to prospective buyers, but also to lessees and future tenants. This is much less common than disclosure during the sale of property, although many jurisdictions require remediation before the property can be reoccupied. Nine US states are listed as requiring disclosure to tenants, with all but two requiring disclosure only until the property has been remediated (the Network for Public Health Law, 2012). Missouri's law places the same requirement on landlords as it does on sellers, requiring the disclosure of any known history of methamphetamine production (*Missouri Revised Statutes*, 2012). A member of the Texas Legislature, Bill Leibowitz, proposed a bill to require landlords in Texas to disclose past methamphetamine production to their tenants, but the bill was not passed (Grise, 2012). Similarly, the 2007 proposal of what would have been Ontario's *Grow Op Disclosure Act* would have also extended the protection of disclosure to tenants.

Disclosure Practices: What's Working?

When considering what works about disclosure, for many commentators (e.g., Bettendorf, 2005; Vogt, 2002), disclosure rules themselves are simply viewed as a necessary, minimum level of protection for the public. This is particularly true of rules that only require disclosure of properties that have not been remediated (Land Levine, 2005). In jurisdictions that do not have explicit rules requiring disclosure, it is questionable whether buyers would have any real recourse in the event that they purchased a former drug production property (Privett, 2006). For some, rules that require full disclosure of a property's drug production history are viewed as a part of best practice, as this level of disclosure allows buyers to make their own determination about safety rather than put their trust in a remediation process. Particularly in jurisdictions that do not legislate strict qualifications for those who perform remediation, the awareness of a property's drug production past provided by full disclosure is seen an added level of protection (Land Levine, 2005). Additionally, while rare, rules that extend the requirement for disclosure to landlords provide additional protection to tenants who, although making much less of an investment than homebuyers, are also put at risk by former drug production properties.

When it comes to how to provide disclosure, it appears that simple, standardized forms for written disclosure are likely best. Some jurisdictions, like Quebec, Washington and South Dakota, mandate the use of specific legislated forms that contain at least one statement related to past drug production. Research on what works for real estate disclosure in Australia (Miller et al., 2006) suggested that checklist forms work for the general public, who may not read disclosure forms filled with complex "legalese." These standardized checklists, although having the potential to also be too cumbersome and all inclusive (MacDonald, 2007), may provide more protection to the average buyer than rules requiring the owner to simply provide written disclosure.

Disclosure Practices: What's Not Working?

There are also several issues that limit the ability of most disclosure rules to protect the public. The most obvious is that these rules can hardly provide protection from the risks of those properties that

did not in some way come to the attention of authorities. Even in those cases where drug production was discovered, if there is notice or record, disclosure rules can still be limited. Most disclosure rules cannot effectively be enforced if there is no way to prove that the seller had knowledge of the drug production (Privett, 2006). Even the law in Missouri, which requires disclosure even in the cases where there were no convictions, making the case that a seller was aware would be difficult. This is of course a necessary requirement, as disclosure is intended to protect the seller from liability, as well as protect the buyer. But disclosure rules alone, without some way for future occupants to easily prove whether the previous owner or landlord knew of the drug production, may lead to a false sense of security in the limited protection actually afforded.

Another issue with disclosure rules in the United States that has received considerable attention is that they do not extend to lending companies selling foreclosures. While the sale of foreclosed properties has not been as prominent in Canada, real estate markets in the United States have experienced an increase in foreclosure sales since the economic recession in 2008. Foreclosed properties in these jurisdictions are sold "as is" and are exempt from the requirement to disclose the potential risks. For example, the State of Washington lists the sale of foreclosed properties as an exemption in its law for the disclosure of former drug production properties (*Revised Code of Washington*, 2012). A number of the most widely-shared stories about families who unknowingly purchased unremediated homes that were formerly used in methamphetamine production involve the sale of foreclosed properties (Steadman, 2013). As these properties are often accompanied by the allure of reduced sales prices, the lack of disclosure protection puts many who may think they have found an affordable house at risk.

A third and prominent limitation to disclosure rules is the reason why many jurisdictions do not put them in place or do not establish as strict rules as they could: stigma. Christensen, Duncan and Stickley (2007) point out that disclosure allows for purchasers to be informed of aspects of the property that help to negotiate down the price, often at additional cost to the seller. If the risks associated with occupying a former drug production property are not viewed as substantially greater than with any other property, or if it is felt that owners of properties used for the production of drugs are most often victims themselves, the requirement to explicitly disclose the history of this activity can be seen as adding an unreasonable burden to sellers and jeopardizing the real estate market.

In most jurisdictions, that does not appear to be the case. As was discussed by Edmiston (2011), without proper cleaning, drug production can leave substantial health risks in a property that would not be easily detected by a buyer, and there is usually a feeling that property owners, at least at the time when drug production was ongoing, were likely "complicit in or perhaps culpably blind to the stigmatizing events" (p. 313). There are, however, fewer jurisdictions that consider such history relevant after proper remediation. In jurisdictions, like Alberta, that do not require disclosure after remediation (RECA, 2012), the view is that the latent material defect has been corrected and that, following that correction, the history simply represents a stigma that does not require disclosure.

Similarly, in Texas, the disclosure rules that offer protection to buyers do not extend to renters,[12] as those in the apartment industry lobbied against a bill that would have put such requirements in place, claiming that they would be damaging to the rental market (Grise, 2012).

In addition, an exhaustive examination in 2015 of internet search engines, governmental and inter-governmental sources, as well as phone conversations with representatives of ten jurisdictions has revealed a serious gap in research pertaining to the effectiveness of disclosure programs. None of the jurisdictions examined in this report have conducted an evaluation relating to the effectiveness of their disclosure program. Without have an evaluation of the methods used by different jurisdictions, it is very difficult to determine best practices and develop a consistent approach to dealing with disclosure of former drug production properties.

Registration of Former Drug Production Properties

Registration Trends

In addition to disclosure laws and practices, some jurisdictions require the registration of properties used in drug production. Registration strategies are in use in jurisdictions across the United States, Australia and in New Zealand. Registration does not appear to be as common in the United States as having disclosure rules, with 14 states having some type of listed registry. In some cases, registration is used to augment the protection offered by disclosure rules while, in other cases, registries exist even in the absence of disclosure rules. In Ontario, an opposition Member of the Provincial Parliament introduced a bill in 2013 that would have created a system for the registration of former drug production properties (*Clandestine Drug Operation Prevention Act*, 2013), but the bill only received first reading.

Registration responses appear to exist in two major trends. The first is that, upon discovery by police and subsequent notification to an authority responsible for overseeing remediation, some type of notice is registered to the property. These notices become part of the property record and may be made available to potential buyers. Drug production properties in Washington are registered to a list that is made available only to specific groups such as "health associations, landlord and realtor organizations, prosecutors, and other interested groups" (*Revised Code of Washington*, 2012, s.64.44.020). The second trend is for the police or another relevant authority to list the addresses of former drug production properties in a registry that is accessible to the public. Tennessee, Idaho, Michigan, Alaska, Indiana and Oregon are examples of states with this type of registry. Some jurisdictions, like Tennessee, have responses that include both types of registration.

Regardless of whether the registration is done through the addition of a notification on land title or the creation of a list of addresses, for registration to occur there must be some sharing of information. The information is commonly shared with a central government department that has responsibility for the registration of former drug production properties. In states like Alaska,

[12] The situation in Texas for renters is perhaps more serious than in other jurisdictions, because there are no rules in place to require properties that once housed methamphetamine labs to be remediated before being reoccupied (Grise, 2012).

Arkansas, Louisiana, Montana, New Mexico and Tennessee, the government department responsible for environmental conservation and protection creates the list of addresses, makes it available and removes properties when appropriate.

In other states, like Idaho, Michigan, Utah and Washington, the government department that oversees health issues administers the registration process. Alberta Health Services administers lists of properties that have been reported by public health inspectors to have been used for the production of illegal drugs (Alberta Health Services, 2013). In Oregon, the Department of Consumer and Business Services oversees the registry. Alternatively, the proposed bill in Ontario would have required building code inspectors to register an order against a land title after an inspection (precipitated by police information or otherwise) confirmed drug production on the property (*Clandestine Drug Operation Prevention Act*, 2013). This is similar to the situation in Tennessee, where law enforcement agencies must file a notice of quarantine with the office of the county register upon discovery of clandestine drug production, as well as inform the Department of Environment and Conservation (*Tennessee Code*, 2010).

Different jurisdictions have different requirements for sharing drug production information with the department responsible for registration. Generally, in those jurisdictions with legislated registration, the police are obligated to inform the specific government department when they discover drug production on a property. Legislation in other jurisdictions also requires reporting from other government agencies and their officers. This information is used to establish an entry for registration. In some jurisdictions the investigating police agency reports the drug production to the department; in other jurisdictions, a state department responsible for police services will do the reporting. In Idaho, the legislation states that "[n]o property may be listed unless the reporting law enforcement agency certifies [...] that it is more likely than not that the property has been contaminated through the use as a clandestine drug laboratory" (*Idaho Administrative Code*, 2013, s.16.02.24.120.01). In contrast, Arkansas requires reporting to the department by homeowners and property managers directly, and the department then must make the list of addresses available to law enforcement (*Arkansas Code*, 2010).

There is additional information sharing to have properties removed from registries. In those jurisdictions where the department responsible for registration also oversees remediation, there may be only a small number of steps needed to remove a property from the registry. However, in jurisdictions where the responsibility for these tasks involves multiple agencies, the process may require more information sharing. In Tennessee, the responsible government department will remove properties from the list only after they receive confirmation from law enforcement that the property is no longer requiring quarantine (*Tennessee Code*, 2010). Additionally, the law enforcement agencies themselves may require information from another organization or government agency to verify that the property has been remediated. Similarly, in Oregon, the department must receive a request from the property owner along with certification of decontamination from the Oregon Health Authority in order to have the property removed from the registry (*Oregon Revised Statutes*,

2011). Therefore, depending on where responsibility for registration and remediation lie, there may be more or less steps requiring information to be shared between different agencies.

Again, as is the case with disclosure rules, the registration appears to be specific to the drug production issue considered the greatest threat to the jurisdiction. As indoor marijuana growing operations are largely overshadowed by the prevalence of clandestine drug labs in the United States, Australia and New Zealand, the registration responses only refer to methamphetamine and other drug labs. Unlike most responses elsewhere, the proposed legislation in Ontario would have required the registration of properties used in either the growing of marijuana or the production of other drugs (*Clandestine Drug Operation Prevention Act*, 2013).

In most cases, registration of a property only exists until the property has been remediated. Ten of the jurisdictions in the United States remove properties that have been remediated from registration. In Tennessee, once a homeowner receives the documentation of remediation and a notice from the police to lift the quarantine, he or she can apply to have the property removed from the online registry and have the notice of quarantine removed from the deed (*Tennessee Code*, 2010). Ontario's proposed law (*Clandestine Drug Operation Prevention Act*, 2013) would also have registered an order against the title on the land on which a drug production property was located, which would have been discharged when the required remediation was completed. Similarly, Oregon's online list of properties that were formerly used in the production of methamphetamine only contains those properties that have not received a "certificate of fitness" (*Oregon Revised Statutes*, 2011).

However, some registration practices may not remove properties that have been remediated. The US DEA's National Clandestine Laboratory Register is also supposed to include only those properties that have not been remediated, but the DEA receives its information from local police departments across the country and does not guarantee the accuracy of its data (DEA, 2012). In Alaska, a property stays accessible on the online illegal drug manufacturing sites list for five years after remediation (*Alaska Statutes,* 2011). In Michigan, the listing is permanent, but the list indicates when the property has been remediated (*Michigan Compiled Laws,* 2006). In New Zealand, while there does not appear to be any explicit disclosure rules and no publicly-accessible registry of properties formerly used to manufacture drugs, there are some local governments that have chosen to permanently record the history of clandestine drug manufacturing on properties' Land Information Memorandum (Neville, 2010).

Registration: What's Working?

The obvious benefit of registries is that they augment disclosure requirements. According to the Ontario Real Estate Association (2011), having former drug production properties registered using the land title system would allow real estate agents to determine whether a drug production operation was discovered within the property and better comply with disclosure requirements. This extends the protections afforded to real estate buyers, giving them and their real estate agents a greater level of confidence in making real estate transactions. Furthermore, if the public has access to an online registry, as is available in Tennessee, Oregon and Idaho, or through the DEA website, individual members of the public can look for themselves. This allows renters and neighbours to be

aware of potential risks, as well. In jurisdictions where disclosure is required, particularly of unremediated properties, a publicly-accessible registry of former drug production properties can help to hold sellers accountable and inform buyers, and they can also extend some added protection to those looking to rent.

Registration: What's Not Working?

Not all aspects of strategies to register former drug production properties are effective. Much like disclosure rules in general, registration will not protect the public from drug production properties that have not been identified by the police or another authority. In addition to being limited by including only those properties within which drug production was discovered by authorities, there are other potential issues with registration, including accuracy. As data is often passed from one agency to another for entry into and removal from registration systems, there are a number of steps in which data recording and entry errors can take place. In establishing a National Clandestine Laboratory Register, the US DEA (2012) has recognized the very real possibility of errors occurring, and specifically outlines this possibility on the tool itself. The risks inherent in information sharing are likely most prominent in jurisdictions that require collaboration between law enforcement or other agencies that discover and report drug production, a department that is responsible for registering properties, and another department or organization responsible for ensuring proper remediation.

Also, as was discussed with disclosure rules, having the ability to access a registry may cause buyers to rely too heavily on it, rather than take added precautions such as inspecting more closely or approaching the subject with the sellers. It is also possible that some sellers who are aware of past drug production on their properties may feel more confident in failing to disclose that fact if they are certain that their property is not listed on a registry that the buyer would likely access. Land Levine (2005) discussed this issue when a proposed law in the State of Minnesota would have included a requirement for owners who had knowledge that their property was used in methamphetamine production, but had not been discovered by authorities to record an affidavit to the title. While the proposed law to register these drug production properties would have augmented disclosure laws, as Land Levine (2005) described, this situation puts the buyers "at the mercy of the seller" (p. 1627).

Additionally, most of the registries provide only limited data such as the city, address and date of entry. While knowing if a property housed a drug production operation is very valuable, the lack of details related to the size of the operation, the location on the property, the extent of damage, or the possibility of involvement on the part of organized crime groups can leave potential buyers with more questions than answers. These are the risks that make disclosure valuable to the buyer (Edmiston, 2011) and, as was quoted in Lampert's (2013) article on disclosure rules, these schemes fail to "[...] make the distinction between a home with two or 30 plants [...]" (para. 42). If buyers know about the history of a drug production property but lack the details, they may not realize the true risks that the property presents, potentially underestimating those risks to their own detriment or, on the other hand, overestimating the risks to the detriment of the seller.

The issue of stigma is also relevant to registration schemes. Some commentators (Horne, 2013) have argued that having this information available to those not party to a real estate transaction, like mortgage lenders and insurance companies, can increase the costs to both current owners and future ones. Again, the argument that registries place an unreasonable burden on sellers is more likely to apply in situations where the property has been fully remediated to the appropriate standards, and yet the information must still be made available. But, even in cases where the property has not been remediated, there are concerns about the stigma associated with having the property listed on the registries available on publicly-accessible websites. For homeowners who were the victims of clandestine drug production activities, these publicly-accessible lists advertise their misfortunes to not only potential home buyers and renters, but anyone in the general public with curiosity.

Other Innovative Potential Responses

Incentives to Report Drug Production

One interesting finding was that very few jurisdictions created any incentives for owners to report drug production, or suspicion of drug production, on their properties. In fact, with most jurisdictions requiring owners to bear the full costs of remediating a property with few, if any, options for compensation, they have in many ways created a large disincentive to report any past or present illegal drug production discovered on the property. In most jurisdictions, there is a reliance on the threat of liability in the event an occupant of the property becomes ill to compel homeowners to report drug production and follow through with remediation (Vogt, 2002). However, with the burden of proving that the homeowner knew about the production of drugs, the threat of liability has the same limitations as do disclosure requirements.

In some jurisdictions, like Arizona, Ohio, Oregon, North Carolina and Iowa, the producers of illicit drugs can be forced to pay the costs of remediation, as is the case in Texas and Indiana, among other states, where a convicted drug producer is liable for clean up. But if, as Vogt (2002) indicated, "[t]he chances of getting the money from the drug manufacturer are slim, as are the chances of getting the homeowner's insurance company to pay for clean up," there may in fact be no incentive at all. Even if remediation costs are covered, in jurisdictions with a requirement to disclose the full drug production history of the property, the value of the property will almost certainly go down and the costs of future insurance will likely increase (Lampert, 2013).

In Kentucky, while the homeowner is required to cover the full costs of remediation, there is a program by the Kentucky Housing Corporation to provide some funding to compensate low- or medium-income homeowners who were not involved in or who were willfully blind to the drug production (Kentucky Energy & Environment Cabinet, 2009). One commentator (Krause, 2007) suggested that it would be more appropriate for jurisdictions to develop a fund to cover the costs of remediation for "innocent homeowners" in situations where the drug production was caused entirely by a third party and the owner lacked any knowledge of it and could not have foreseen it. Privett (2006) also discussed the concept of the "innocent owner" who could be protected from criminal forfeiture actions if he or she was unaware of and willfully blind to the crime, and took

appropriate action upon discovering the crime. Perhaps if the concept of the "innocent owner" was adopted for drug production in jurisdictions, there would be a greater incentive for owners to report drug production activity when it is discovered or suspected, which would in turn strengthen disclosure and registration strategies.

Training for Home Inspectors

Another innovative response to the issue of protecting the public from occupying former drug production properties, that does not appear to have been utilized in many jurisdictions, is to provide or require specialized training for home inspectors. A web search identifies several organizations, like The Merit Group (n.d.), that offer training on methamphetamine lab awareness and safety to home inspectors and real estate agents. Some commentators (e.g., Forensic Applications Consulting Technologies, 2007) have discussed the idea that it should be a role of home inspectors to identify whether a property formerly housed a drug production operation. While the main argument against it is typically lack of training, the health risks and other dangers associated with former drug production operations are also a concern. However, as home inspectors are just as likely to unknowingly inspect a former drug production property regardless of whether they have the necessary training to identify them, they are, in all likelihood, already facing such risks. In fact, appropriate training may make inspecting these properties safer and be of benefit to both home inspectors and buyers.

Home inspection prior to completing a sale of property is considered by many to be an important step for buyers. Taking such a step, if the home inspector was appropriately trained, could not only help in the discovery of a history of drug production before the purchase, but it could also be seen as due diligence on the part of the buyer if the property is later discovered to have been used for drug production and the buyer wishes to seek compensation. While buyers may have access to information or do-it-yourself testing kits that could help in the identification of former drug production properties, properly trained home inspectors or other professionals may be in a better position to administer and interpret the tests.

Of course, as clandestine drug production is just that—clandestine—home inspectors may be apprehensive about training, given the potential risk posed by the prospect of having errors in identifying past drug production result in liability on their part. There have been cases in British Columbia and in other jurisdictions where home inspectors have been held liable for errors in their inspections where it was believed they should have identified a defect (e.g., Mucalov, 2012; Weisleder, 2012), and it may follow that, if they have been trained to identify past drug production, they risk greater liability in cases where they fail to discover the history of drug production where it exists. With increased liability and thus insurance costs to home inspectors, buyers may face increased costs for such inspections.

Remediation and Disclosure Laws for Foreclosed Sales

Another idea that has received attention in the United States is to use legislation to increase the accountability of lending companies that sell foreclosed properties. Given the fact that most

jurisdictions make exemptions on disclosure rules to companies selling foreclosed properties, there have been calls by some for greater protection in these situations (Steadman, 2013). As was previously discussed, there have been a number of cases where unsuspecting buyers have purchased foreclosed properties that were previously used for producing drugs and had not been remediated. In 2012, there was a petition in the United States, started by Jonathan Hankins, the goal of which was to hold companies accountable for remediating and disclosing on foreclosure sales involving former drug production properties.

Some commentators (e.g., Steadman, 2013) have argued that legislation requiring inspection and subsequent disclosure would help to protect many buyers. However, legislation of this sort would not be well received by lenders, who already sell foreclosures at lower prices than other properties (Steadman, 2013). The inspection and any required remediation would greatly increase the costs that these companies would face in selling their foreclosed properties, and the stigma associated to former drug production properties would likely force the price down further.

Informative Websites

A final trend uncovered through this research was the establishment of informative websites. While many government agencies have developed information on websites to explain some of the procedures in place in their jurisdictions, good information to help members of the public to protect themselves from occupying former drug production properties is not always easily available from these governments.

Fraser (2014) discovered the necessity of an awareness campaign concerning the dangers of marijuana grows. After conducting consultations with stakeholders across the province of Alberta, Fraser found that Albertans are not aware of the dangers to health and safety posed by the marijuana-growing environment. The lack of awareness is a serious issue, because it is causing Albertans to not report marijuana grows when they know or suspect a residence in their community (Fraser, 2014). Many Albertans believe growing marijuana is a victimless crime, and do not understand the various dangers a grow operation can generate (Fraser, 2014).

Government agencies will often produce written documents to spread awareness during an information campaign. However, these typically lengthy documents may be less likely to appeal to information seekers, because they cannot be navigated like a website, and may have specific titles that make them more difficult to find.

The most comprehensive informative websites appear to be privately operated, often by individuals or groups that are passionate about public protection.[13] The benefits of these websites are that they are easily searchable, provide awareness and offer some protective advice, and they can be used to share ideas around effective responses and advocate for change. When these sites are designed well and operated by credible and knowledgeable people, they provide a valuable service to the public. Conversely, because the information on these websites cannot be regulated, there is no way to guarantee that the information made available to the public through private websites is accurate.

[13] Examples include www.growopsolutions.ca and www.methlabhomes.com.

When sites are not maintained by those who are truly knowledgeable about the rules and protections offered in a specific jurisdiction, they may not be useful and may even spread misinformation.

Discussion: Lessons Learned for British Columbia

Upon reviewing the trends in how other jurisdictions have responded to the problem presented by former drug production properties, it appears that British Columbia is further ahead than most other jurisdictions, but could also greatly benefit from a greater level of clarity in some areas and innovative thinking in others. While there are some key lessons that can be learned from other jurisdictions, it is important to avoid some of the pitfalls of adopting policies from other jurisdictions without fully understanding how they work elsewhere, what crucial elements exist to make them work, and what differences in context exist here that could render them incompatible (Dolowitz & Marsh, 2000). There is always some risk that policies that work in one jurisdiction may not translate into working policies in another.

In the case of this specific public policy problem, it is important to recognize that while these jurisdictions share a common problem with British Columbia, that of indoor drug production putting future occupants of former drug production properties at risk, unlike many jurisdictions considered, British Columbia's predominant problem is with marijuana growing operations and not clandestine drug labs. Moreover, the size of the indoor drug production problem in British Columbia, particularly for the size of its population, is on a scale that is nearly unmatched by other jurisdictions reviewed through this research.

That said, this section discusses where British Columbia sits relative to other jurisdictions, and identifies some key issues of concern and outstanding questions that need to be addressed in this area to better protect British Columbians from the risks associated with occupying former drug production properties.

Key Issues Around Disclosure

Based on the findings from the research presented in the previous section, British Columbia arguably has more practices in place to protect future occupants of drug production properties than many other jurisdictions. However, of key concern for British Columbians is the lack of clear and consistent rules on disclosure. The PDS provides an opportunity for home buyers to request disclosure, buts its use is voluntary, unlike similar forms that are mandatory in jurisdictions like Quebec and South Dakota. Drug production may be considered a material latent defect and, while it appears to be common practice to seek disclosure of former drug production properties, without clear rules in place, situations that do and do not require disclosure are open to interpretation. For example, definitive policy on whether disclosure is required after remediation is lacking. Most jurisdictions in the United States that have disclosure rules have a much greater level of clarity on this question. In Minnesota, it is clear in legislation that any history of methamphetamine production

requires disclosure, as it is clear in other jurisdictions, like California, that disclosure is required only until the property has been properly remediated. Quebec also provides much more clarity than does British Columbia, as the disclosure form used in that province is mandatory. RECA (2012) in Alberta, has taken a strong stance that properly remediated properties are not considered to have a material latent defect. In British Columbia, more clarity on disclosure, ideally through provincial legislation, would be beneficial.

Clarity on disclosure might start with legislation that requires disclosure and provides a clear definition of what counts as drug production that needs to be disclosed to future occupants. While there may be some risks inherent in all drug production, as Lampert's (2013) article points out, there may be substantial differences between the harms of occupying a property that was used for a large-scale commercial marijuana growing operation and one in which only a small number of plants were grown. In the absence of clear rules and definitions specific to drug production, the current requirement to disclose latent material defects might not encompass very small-scale production activities. Since the goal of disclosure is to provide future occupants with the information they need to make informed choices, it could be argued that the requirement to disclose past drug production should not extend to situations that do not pose a risk to future occupants. If this argument is to be adopted, clear decisions should be made about what, if any, scale of drug production activity is exempt from disclosure. More accurately, the issue is less about size of the operation than it is about the presence of structural and functional changes and the likelihood of contamination. Therefore, a definition, if not encompassing the entire spectrum of drug production, should refer to the size of an operation, the presence of structural and functional changes, and the risk of contamination.

Questions also remain about whether a fully-remediated property should carry the stigma of requiring disclosure from the seller. The research done in this report demonstrates that most other jurisdictions do not believe it should. Protections for sellers from the disclosure of stigmas are put in place to protect their financial interests and privacy, as many are either victims of the crime or otherwise not associated with it. These protections ensure that sellers are not further disadvantaged by information that would not be relevant to the buyer (Edmiston, 2011), particularly since they have already likely faced costs associated with remediation. The key question here is, if there is trust in remediation professionals, what benefit is disclosure into perpetuity?

The first half of that question presents an important assumption that elicits another question: should there be trust in the remediation practices that exist in British Columbia? Approximately a dozen jurisdictions in the United States have developed standards for remediation and, while the public information explicitly states that they do not guarantee the removal of all potential risks to human health (e.g., Kentucky Energy & Environment Cabinet, 2009), many do not legislate the disclosure of the history of drug production after remediation. While it is beyond the scope of this report to determine whether current remediation practices in British Columbia are effective or what, if any, steps should be taken to improve them, research by Garis (2010) argued that British Columbia needed provincial standards to protect against what was described as inconsistent processes and

varied results (p. 3). Based on the fact BCREA was still recommending consistent remediation standards in 2015, the answer to the questions of whether trust exists is likely no.

This suggests that, even after remediation, British Columbians occupying former drug production properties may still be at risk. Therefore, disclosure of the full history of any drug production in and around the property could be warranted into perpetuity. Additionally, as was discussed in the background section, while the main risks of occupying a former drug production property are to the health of occupants, there may also be risks associated with criminality. And, while the passing of time alone does not necessarily indicate a reduction in risk, it is generally considered that more time since the property was used for criminal activity will reduce the likelihood of harm befalling the new occupants (Edmiston, 2011). Therefore, providing awareness to potential future occupants for a period of time after its criminal involvement has ended would be appropriate. Whether the length of time disclosure is required should be indefinite, however, should depend on the quality of remediation standards, as the risk of harm from criminality as a result of the property's past will likely be minimal after several years.

There is also a need for disclosure to extend to renters. In the context of properties formerly used for methamphetamine production in the United States, nine states require disclosure to tenants and lessees. In these states, this requirement is an additional component to the disclosure requirements for real estate transactions, and therefore applies to remediated properties only if it also does for the sale of property. While tenants will generally have much less risk financially in occupying a former drug production property, they are exposed to the same health and criminal hazards as buyers, and deserve to be made aware of these potential risks. Also, the lower investment and the fact that an owner's permission may be required may make tenants less likely to take steps to determine if risks exist. For example, renters may not choose to hire a home inspector to look over the rental. Despite the potential for some landlords and property management companies to disagree with the need for additional disclosure, there are few good reasons why the protection afforded by disclosure should be provided to home buyers and not renters. Therefore, the clear and consistent rules, however they address the issue of disclosure for properties remediated and not, should apply to both prospective sellers and landlords.

Key Issues Around Registration

There are also many jurisdictions in the United States that have policies in place to register former drug production properties. Again, in most cases, registration only lasts until these properties have been fully remediated. While not all states that have registries require disclosure from sellers and not all states requiring disclosure have registries, there are ten states that do have both responses in place. This brings up questions for British Columbia about the necessity of both responses. If disclosure becomes a clear requirement, is registration necessary and/or useful? And, if a registration response is put into practice, should disclosure be required of sellers? The discussion up to this point suggests that something is needed to inform potential home buyers whether or not a risk exists, but it is important to determine whether both together are necessary.

The answer to this question is likely yes. In order for disclosure to provide adequate protection to buyers, there needs to be registration response in place. A registry, whether publicly-accessible online or only available to specific groups through a land title or other property record search, provides something against which to assess the accuracy of the disclosure. It would also provide protection for some buyers in situations where the sellers are unaware of the property's history, while also providing a mechanism to encourage honesty from sellers who may have something to hide. Despite requiring additional resources to implement, establishing some type of registration response would augment the protections provided to home buyers prior to purchasing and occupying a former drug production property.

In terms of the question of whether disclosure is still necessary if a registry is in place, the answer is also likely yes. A registry can only provide information on those former drug production properties that have come to the attention of the applicable authorities. Without disclosure requirements in place, there is no recourse against sellers who are aware of past drug production on their properties, yet fail to disclose, knowing it has not been discovered by or reported to the authorities. Although proving knowledge and recovering any costs may not have a high likelihood (Privett, 2006), there should still be a rule in place to encourage disclosure from sellers who are aware of drug production history even when it has not been reported. Additionally, combining disclosure rules and registration would be beneficial to renters, as they may be less likely to use a real estate agent or gain access to property records. A registry alone, unless publicly accessible, would provide no protection to this group of potential occupants.

There are currently registries that contain information about former drug production properties available in British Columbia. As was briefly described in the background section of this report, there is registry for contaminated sites available on BC OnLine. However, its accessibility to the general public is questionable. Given the BCREA's (2015) recommendation to "[d]evelop a centralized, consistent process for disclosure of property history information" (p. 1), it is likely that the contaminated sites registry, which is publicly available and searchable for a fee, has one or more of the following issues: 1) there is not enough awareness among those who could use it for this particular purpose; 2) the costs to use it for this purpose are prohibitive; and 3) the value or quality of the information provided is not suitable for this purpose. While the truth of these assumptions must be tested before this registry is considered to be ineffective for the purpose of protecting future occupants of drug production properties, the fact that it is not currently viewed as offering acceptable protection is enough to conclude that something more is likely needed.

If there was a greater level of trust in the consistency and outcomes of remediation for former drug production properties, the contaminated sites registry would perhaps be a resource for those who desired to know of any past history of fully remediated properties. However, given the very real risks associated with occupying a former drug production property, the history of any unremediated former drug production properties that have come to the attention of authorities ought to be easily accessible to the public. Furthermore, until there are provincial standards in place to create a greater

level of trust in the outcomes of remediations, even the histories of fully-remediated properties should be made publicly available for use by buyers, renters and real estate agents who assist them.

The existing registry made available by the RCMP is also a valuable contribution to protecting the public, but it cannot be expected to suffice as the sole publicly-accessible registry of former drug production properties in the province of British Columbia. At the risk of duplicating efforts and confusing the public with multiple registries, there is a need for a full registry of at least all unremediated former drug production properties. The RCMP (2013) registry website does not yet list any clandestine labs, although the information provided on the site suggests that it likely will. Also, the list provided by the RCMP Marihuana Grow Op initiative only includes the information from seizures made in RCMP-policed jurisdictions, and provides no cases prior to 2012, though it is not clear whether the site will ever provide older information. It is also unclear about whether the properties will ever be removed from this site or how long into the future the national police force will continue to offer this website.

There are several components of a publicly-accessible register of former drug production properties that would make it most beneficial. Primarily, it should be comprehensive in that it provides information on all confirmed drug production properties found by cities, investigated by police forces, or reported by the public to any authority across the province. The registry should be searchable using a variety of specifications. This would reduce the likelihood of people scanning lists simply out of curiosity, and would also save searchers the time and effort involved in trying to pick out an address from a lengthy list. The registry should contain as many relevant details as are legally permitted without providing unnecessary stigma. This information should, if possible, include the size/amount of drugs, the extent of damage, the location of drug production in or on premises (particularly for large rental buildings), the date of discovery, and the presence of links to organized crime. When information is unknown by authorities, that should be clearly stated.

Additionally, the issue of populating the registry with known former drug production properties from existing data sources should be given strong consideration, rather than simply building the registry with new cases from the date of its implementation. Given the number of discovered cases of drug production in the province over the years, there are likely many properties, both remediated and not, with the potential to be rented out or sold in the future. This would increase the resources needed to establish the registry, and may make it susceptible to some data quality errors, but it would make the registry valuable almost immediately.

Additional Issues Relevant to the Context of British Columbia

Freedom of Information and Privacy Protection Act

In making disclosure more clear and consistent, it is evident that the province of British Columbia also requires further clarity around the applicability of the *Freedom of Information and Privacy Protection Act* (*FIPPA*) to the issue of disclosing information about former drug production properties. While clear and consistent disclosure rules in combination with an accessible registry of former drug production properties may ultimately make redundant the need for municipalities and other

authorities to disclose information to individuals, there is still a need for clarity in order to facilitate the sharing of information to create a registry. Garis and Bond (2010) found that much of the inconsistency in the disclosure practices of municipalities around the province was the result of confusion over their liability under *FIPPA*. If the Government of British Columbia provided the necessary guidance on this issue, it would allow municipalities to have greater confidence in the legality of their action in situations where they choose to release information about the history of a property. Garis and Bond (2010) suggested that the provincial government could approve a set of standard yes/no questions to which municipalities could provide answers. At the very least, these questions could help verify disclosure and provide a starting point for buyers and renters to decide what additional steps may be needed.

Medical Marijuana Production Licences

Another matter that needs to be considered in forming effective policy responses to this issue in British Columbia is that of the licensed medical marijuana grow operations. Health Canada (2014) ended the Marihuana Medical Access Program (MMAP) on April 1, 2014. The MMAP allowed any individual with a medical marijuana licence to grow their marijuana at home (Health Canada, 2014). Under the MMAP program, many licensed marijuana growing operations have been operating in violation of zoning, fire and safety bylaws (Jessop & Garis, 2008).

The Marihuana for Medical Purposes Regulations (MMPR) were adopted in 2014 and were supposed to ensure that the only way to access marijuana for medical purposes would be through commercial, licensed producers (Health Canada, 2014). In addition, the MMPR introduced restrictions on how close a grow op can be to schools and residential areas, similar to Arizona, where state legislators recently passed bill HB 2056 (Fischer, 2015). The bill puts restrictions on where marijuana can be cultivated, regardless of a property's zoning and the opinions of local officials (Fischer, 2015). Marijuana cannot be cultivated within 1,000 feet of areas zoned for residential use, and there is an additional 1,320-foot buffer for properties with churches and public or private schools (Fischer, 2015).

In Canada, a group of patients who need medicinal marijuana has challenged the new MMPR in Federal Court (Keller, 2014). In the spring of 2014, a Federal Court judge issued an injunction that allows patients who were authorized to grow and possess marijuana under the MMAP to continue to do so until the case is resolved (Keller, 2014).

The public policy responses adopted in BC need to respect the needs of medical marijuana users, and recognize that the MMAP operated for many years without the necessary systems in place to ensure safety (Jessop & Garis, 2008). Table 3 illustrates that, in just five Lower Mainland cities, there were 4,226-licenced medical marijuana grow operations (MMGO) in 2014 (Zacharias, 2015). Whereas, there were only 283 MMGOs in the entire state of Oregon (Oregon Live, 2014), Oregon can afford to limit the number of licenses they issue, because most of the operations in the state employ large-scale medical marijuana grow sites (Oregon Live, 2914). In other words, Oregon is employing a program similar to the MMPR. By limiting the number of licensed marijuana grow operations, but allowing individuals to grow on a larger scale, Health Canada is hoping to reduce the

number of MMGOs that are operating unsafely. In addition, by reducing the number of licences being issued, Health Canada would effectively reduce the number of homes being contaminated by MMGOs.

Many of the 4,226 licenced MMGOs in the Lower Mainland are located in residential properties, and there is a need to consider how these growing operations can be discovered. Health Canada has issued the aforementioned licences, but will not disclose the location of the MMGOs to provincial or municipal officials, to protect the privacy of licensees (Robinson & Hager, 2013). Additionally, Health Canada will only disclose the location of an MMGO to local police once officers are about to execute a search warrant (Robinson & Hager, 2013). Currently, the only way a city learns of an MMGO is if the property owner willfully discloses the information. However, after learning that a property was used to operate an MMGO, the city would be need to inspect the property to ensure it was safe, and any remediation costs would fall to the property owner. In other words, there is no incentive for property owners to ever disclose the existence of an MMGO. Thus, there is little chance that any of the 4,226 MMGO operators in the Lower Mainland will disclose the existence of their operations to landlords or prospective buyers.

Table 3: Approximate Number of Medical Marijuana Grow Operations, 2014

Jurisdiction	Medical Marijuana Grow Operations
Abbotsford	829
Chilliwack	580
Langley Township	600
Mission	917
Surrey	1,300
Portland	64
Oregon State	282

Sources: Oregon Live (2014) & Zacharias (2015)

Increasing the Likelihood of Discovery

The final concern that should be addressed is that no policy responses will be as effective as possible if there is no mechanism to increase the likelihood of discovery of active and former drug production properties. There are two main methods that can be used to achieve an increase in the likelihood of discovering active and former drug production properties. The first requires governments and police forces in British Columbia to continue to be innovative in how they identify and dismantle drug production operations. The second is to provide incentives, particularly for owners of properties used for drug production, to report this activity.

Governments and police forces should use available measures and develop innovative strategies to identify active drug production properties. In many ways, the provincial government could provide guidance and additional tools to enable police and other agencies to identify these properties. There may be promise in existing bylaws (e.g., Electrical Fire Safety Inspection) and provincial legislation (e.g., the *Community Safety Act, 2013*). Continued effort in this direction is warranted. In order to

provide effective protections to future occupants of former drug production properties, and indeed the general public, indoor drug production operations need to be identified.

However, policing strategies concerning drug production operations appear to be changing in a way that is resulting in fewer drug production properties being discovered and remediated. Plecas et al. (2012) reported that, between 1997 and 2003, the likelihood of police performing a full investigation on a reported marijuana growing operation decreased from 91% to 52%, and the likelihood that no action was taken increased from 7% to 22%. In addition, from the late 1990s to the period between 2006 and 2010, the likelihood of any action being taken after a report of marijuana growing fell from 82% to 49% (Plecas et al., 2012). Thus, it can be argued that police are no longer aggressively investigating and dismantling drug production operations.

Table 4 illustrates that, in 2014, the RCMP dismantled a total of ten marijuana grows and 14 clandestine labs in BC (Royal Canadian Mounted Police, 2014). Yet, Plecas et al. (2012) estimated that in 2012 there were 13,200-18,500 total indoor marijuana production operations and 180-500 clandestine labs in BC. Admittedly, a large number of the drug production properties in BC are located in cities where the RCMP has no jurisdiction. Nonetheless, it is reasonable to expect the RCMP to have discovered and dismantled more than ten marijuana grow operations out of the thousands Plecas et al. (2012) estimated are operating in BC.

Table 4: Number of Medical Marijuana Grow Operations and Clandestine Labs Dismantled by the RCMP in Canada, 2014

Province	Marijuana grow ops dismantled by RCMP	Clandestine labs dismantled by RCMP
British Columbia	10	14
Alberta	2	1
Saskatchewan	0	0
Manitoba	2	0
Ontario	0	1
Quebec	2	0
New Brunswick	2	1
Prince Edward Island	0	1
Nova Scotia	21	0
Newfoundland and Labrador	0	0

Source: Royal Canadian Mounted Police (2014)

As it stands in British Columbia, other than the threat of liability and the assumption of complicity in the crime, there are few incentives for owners to report drug production activity that they discover if they determine they would be able to stop the activities without involving the police or other authorities. Even the recent *Community Safety Act* (BC Government, 2013), while including language about "working with" property owners, continues the trend of holding the property owner accountable for the misuse of their property, even in cases where they are likely victims. If home owners in these difficult positions had more support, particularly financial support and recognition of the harm that has come to them and their property, responses to improve disclosure, and thus the protection afforded to future occupants, would likely be more effective in the long term.

Potential Policy Options

This section outlines six general policy options that could be adopted in British Columbia to address the need for protecting future occupants from former drug production properties. The advantages and disadvantages of each option are discussed. These policy options should be considered in addition to the three recommendations already put forward by BCREA (2015).

In order for these policy options to be viable in British Columbia, there is a need for clear and consistent disclosure rules for the sale of former drug production properties to be included in existing provincial legislation. Changes to legislation would need to articulate how these rules can be applied by municipal governments, real estate professionals, and other groups in the context of the *FIPPA*. These rules should define what is meant by drug production for the purposes of mandatory disclosure, perhaps in terms of size, potential for contamination and/or structural and functional changes to the property. The rules should also identify whether remediated properties need to be disclosed, and if so, whether there is a period after which disclosure is no longer required. Parallel disclosure rules for tenancy agreements should also be established. Without this clarity, many of the policy options presented below would create added confusion.

Additionally, in line with BCREA's (2015) second recommendation, some policy options would require the establishment of clear and consistent provincial remediation standards that produce trust in the remediation process. These standards could inform the definition of what constitutes drug production for the purpose of mandatory disclosure, as well as provide a framework for determining what needs to be tested and remediated, how, and by whom before there is full confidence in the safety of the property. This confidence will allow for informed decisions to be made about the requirement to disclose fully-remediated properties which, in turn, would inform the specifics of some of the policy options presented below.

Policy Option 1: The establishment of a provincial, no-fee, publicly-accessible registry, providing all legal and relevant information on all founded cases of indoor drug production in the province coming to the attention of police and other relevant authorities. This registry could be in the form of a searchable database or simply an online list of properties that contained information specifically identifying all former drug production properties. Cases would remain on the registry until remediated, for a specified time after remediation with a notice of remediation, or into perpetuity with a noting of whether it has been remediated. This registry could begin being populated upon implementation with only new cases, or could be implemented populated with historical cases.

> **Advantages:** This policy option would make available to future home buyers, lessees and renters information that could be useful in verifying disclosure information about the drug production history of a property and other properties in close proximity. The no-cost, online accessibility and potential searchability would make the tool more likely to be used than what is currently available. The registry would also be useful for research evaluating other policy responses to drug production in the province. A registry exclusively dedicated to former drug production properties would also remove any potential confusion that could exist with

these properties being registered along with other types of contaminated properties. This information would be valuable for protecting the public from the risks associated with drug production and occupying a former drug production property.

Disadvantages: The major limitation is that only discovered operations get on the list, perhaps only around 10% of affected properties, potentially giving the impression that more protection is afforded than is actually available. Also, particularly if it requires registration into perpetuity, a registry will create or add to stigma on properties that formerly housed drug production operations. Regardless of whether information is eventually removed from the registry, if a full listing is provided, any organization with the interest could use the publicly-accessible information to maintain its own records of these properties. The stigma could prevent the sale of these properties, as well as increase costs for mortgages and insurance. The stigma and the increased costs it represents for landlords, property managers and other owners would produce disincentives to report and remediate appropriately in the event there is a discovery of drug production that has not come to the attention of authorities. Also, given the requirement for multiple sources to supply data, the quality of the information present on the registry may not always be accurate. Additionally, there would be increased costs to various partners to set up and maintain the registry.

Policy Option 2: The establishment of provincial legislation that would require the registration of drug production history on the land title. Such legislation could be modelled after the bill proposed in Ontario. The information on property records would allow REALTORS® to pass it on to home buyers. The information could be removed upon remediation or could remain with a record of remediation following the corrective action.

Advantages: This policy option would allow REALTORS® to assist their clients in verifying disclosure information. The Government of British Columbia would have the proposed bill in Ontario to guide the development of this response. Given the more restricted access, this form of registration would likely produce a lesser stigma on former drug production properties, as REALTORS® would be able to present the information in context to their clients. This policy option would provide valuable protection to home buyers.

Disadvantages: This policy option offers protection to a narrower segment of the population of future occupants than a publicly-accessible registry. This option is less likely to provide protection to renters and would be less likely to allow buyers and renters to assess the risks present in their prospective neighbourhoods. Many of the same stigmas would apply as apply to a publicly accessible registry, particularly if the information was not removed from the record after remediation.

Policy Option 3: The establishment of a set of provincially-approved questions that British Columbians can bring to their municipal governments to inquire about a property's history of drug production, without submitting a freedom of information request. The approval of questions would enable municipalities to release information in full compliance with *FIPPA*. This may need to be

accompanied by the development of an associated privacy waiver for sellers. Details on what such an option may look like have been discussed by Garis and Bond (2010) and Garis and Clare (2011).

> **Advantages:** In the absence of registration requirements and clear, legislated disclosure rules, this policy option would provide clear guidance to municipal governments to help protect prospective home buyers, while complying with *FIPPA*. This policy option would allow for municipalities to provide additional protection to those who may occupy a former drug production property. It would also reduce the potential for stigma, as requests for the information on each property would have to be made to the municipal government individually.
>
> **Disadvantages:** This policy option would provide the opportunity for municipalities to provide information, but it would not necessarily guarantee consistent use around the province. Given the effort required to make a request to the municipal government, there is a low likelihood that renters will use this option, if available. Also, the use of yes/no questions, while ensuring compliance with *FIPPA*, does not provide the detailed information necessary to ensure buyers are fully informed, requiring them to take additional steps to access that information, if it is available.

Policy Option 4: The development of provincially-approved training and standards for home inspectors regarding former drug production properties. This policy option could result in mandatory training or simply the availability of recognized training. Trained home inspectors may be required to conduct some specialized tests for the main signs of past drug production including mould, specific chemicals and pesticides/herbicides, structural changes, electrical changes and signs of dumping. Trained home inspectors may also be required to report "suspected" former production properties meeting specific criteria to municipalities for follow up.

> **Advantages:** This policy option would provide valuable information for home inspectors to not only offer additional service to their clients, but to also keep them safe from potential hazards. Training would help in identifying former drug production properties which, in turn, can protect buyers and ensure such properties get remediated. Reporting from non-biased sources with access to properties would increase the effectiveness of other disclosure and registration responses in place.
>
> **Disadvantages:** This policy option, particularly if the training was made mandatory, would put additional burdens on home inspectors. There is the risk that with this additional training and standards would come increased liability for errors, both in cases where home inspectors did not uncover past drug production and where they erroneously reported a property that was not used for drug production. Overall, the increased requirements on home inspectors and the increased liability will likely increase the costs of all home inspections.

Policy Option 5: The establishment of a provincial program to recognize and compensate victims of drug production. This program would recognize that landlords, property managers, other property owners, new owners and new renters who are negatively affected by previous drug

production on a property through no fault of their own, are victims. These victims should be entitled to some compensation for the actual financial costs that result. It is likely that, to access compensation, victims would need to demonstrate that they suffered or will suffer loss as a result of drug production, were not involved in the crime, showed due diligence in preventing the loss (i.e., registry search[es], home inspection, checked on their rental regularly, etc.), and have reasonable remediation costs. Funding would ideally be found from civil penalties to producers and restitution orders from court. This program could also advocate for the use of increased restitution requirements for convicted drug producers and provide federal prosecutors with accurate information on the costs to victims. Additionally, the program could enforce penalties on "negligent" home owners who try to sell or rent to others without demonstrating reasonable steps to report when they suspect a past history of drug production in and around the property.

> **Advantages:** This policy option would protect the most direct victims from some of the financial harm associated with occupying a former drug production property. It may also provide incentives for those who suspect past drug production to report it to authorities rather than try to cover it up to avoid the costs. If such incentives work, disclosure and registration responses will be even more effective.
>
> **Disadvantages:** If costs are not adequately passed on to producers, the costs of establishing this program and providing adequate compensation will ultimately burden tax payers. Figures from Plecas et al. (2005) indicated that for charges of production of marijuana convictions, which themselves were uncommon, restitution ordered was, on average, only $886, and fines, on average, were only $2,218. As relatively few offenders are convicted for the number of drug production properties discovered, much higher restitution orders and other innovative strategies to hold producers financially accountable will be required.

Policy Option 6: The development of a provincial, wide-reaching public awareness program to inform the public of the measures that are in place to protect occupants of former drug production properties. This may involve a well-designed, interactive informative website and an advertising campaign. In order for other policy responses to achieve their intended effects, it is important to ensure an adequate level of public awareness of the risks of occupying former drug production properties and the protections afforded to them when looking to buy or rent in British Columbia.

> **Advantages:** This policy option would help to ensure that the resources spent on developing and implementing responses can benefit the public to the greatest extent possible. Having easily accessible information and the awareness created by advertising would be particularly helpful to renters and those buying homes without the assistance of REALTORS®.
>
> **Disadvantages:** One disadvantage of this policy option is the cost in terms of money and resources to develop the materials, create website resources, and advertise. Additionally, this policy option would be ineffective if implemented in absence of the implementation of other

policy options, as alone it would not address many of the issues relevant to protecting the public.

Appendix: Methodology

The general research methodology chosen for this report was a thematic content analysis of a wide variety of media related to the topic of protecting the public from the risks of occupying real estate property that has previously been used for the production of illicit substances. The focus was primarily on public policy responses to better disclosure information about former drug production properties to the general public. Specifically, the activities considered to be "drug production" for the purposes of this report include the indoor cultivation of marijuana and the manufacturing of drugs such as methamphetamine and ecstasy. The media reviewed included academic research literature, legal commentaries, legislation and regulations, governmental reports and websites, online news media, and the websites of private companies and individuals. These documents and other media were reviewed looking to answer three specific questions:

1) What are the various responses historically and currently used in jurisdictions outside of British Columbia to protect the general public from occupying former drug production properties?
2) What about these responses appears to be working?
3) What about these responses does not appear to be working or has been controversial?

The research began with a review of publicly-available, English-language statistical information from governmental and inter-governmental sources to identify jurisdictions. Searching for relevant Canadian responses to the issue began by identifying the Canadian provinces with the highest number of incidents of drug production. Ontario and Quebec were identified as strong starting points for the search based on Dauvergne's (2009) table of the number of offences and rates per population of drug production, importation, and exportation crimes. The American states used to start the search were identified through two sources: 1) the US DEA's National Meth Lab Registry website; and 2) Gettman's (2006) listing of the top ten states with the largest indoor marijuana cultivation problems. Based on this information, several states, including California, Indiana, Missouri, Tennessee, Kentucky, Washington, Florida, Oregon, Texas and Ohio were identified as starting points for the search due to their relatively high levels of either marijuana production, past and present meth production, or both. Australia, New Zealand and the United Kingdom were chosen as starting points for the review of other international responses as a result of identified problems with indoor marijuana production (ACPO, 2012) and clandestine drug labs (Caldicott et al., 2005) in residential properties.

Once a list of jurisdictions was established, English-language documents and other media were identified through internet search engines, primarily Google and Google Scholar. Several keyword searches were conducted involving combinations of the terms "marijuana production," "real estate," "disclosure," "meth labs," "former," "homes," "laws" and the names of provinces, states and countries. This step was used to identify the general trends in the responses being used in these jurisdictions. Once the general themes began to emerge, the search criteria were refined to search for additional documents, primarily academic research literature, online newspaper articles and other written commentaries, that were used to identify the themes around what is working and what is

not. All of the documents were examined in an effort to identify references to unique responses used in jurisdictions that had not been previously considered.[14]

Additionally, during the review process, a survey by the Network for Public Health Law (2012) of all the laws and regulations related to clandestine methamphetamine laws for all 50 American states was found. The wealth of data provided by this document enabled a broader review of responses than was initially expected. No such data was found for other countries.

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