

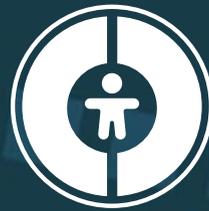
Child Sexual Abuse Images: Summary Report

An Analysis of Websites by **cybertip!ca**[®]

November 2009



CANADIAN CENTRE *for*
CHILD PROTECTION™



CANADIAN CENTRE *for* CHILD PROTECTION™
Helping families. Protecting children.

NOVEMBER 2009

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Canadian Centre for Child Protection

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Printed for the Canadian Centre for Child Protection by
Premier Printing
One Beghin Avenue
Winnipeg, MB R2J 3X5

Publications Mail Agreement #PM40044804

Return Undeliverable Canadian Addresses to:
Canadian Centre for Child Protection
1415 Church Avenue
Winnipeg, MB R2X 1G5

The **Child Sexual Abuse Images Research Report** and **Summary Report** are
available for download at www.cybertip.ca/research.



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Aussi disponible en français

This research report was written by Kelly Bunzeluk, in collaboration with other staff at the Canadian Centre for Child Protection.

The views expressed in this report are those of the author and do not necessarily reflect those of Bell Canada, our supporters, or any individual who provided feedback and comments.



CANADIAN CENTRE *for* CHILD PROTECTION™

THE CANADIAN CENTRE FOR CHILD PROTECTION is a national charitable organization dedicated to the personal safety of all children. Our goal is to reduce child victimization by providing programs and services to the Canadian public. Our mission is to:

- ▶ Reduce the incidence of missing and sexually exploited children
- ▶ Educate the public on child personal safety and sexual exploitation
- ▶ Assist in the location of missing children
- ▶ Advocate for and increase awareness about issues relating to child sexual exploitation

cybertip!ca
WWW.CYBERTIP.CA

Cybertip.ca is Canada's tipline for reporting online child sexual exploitation, in particular child pornography (child sexual abuse material), online luring, children exploited through prostitution, travelling sex offenders, and child trafficking.

Cybertip.ca was launched as a provincial pilot program in September 2002, and in May 2004, along with the RCMP's National Child Exploitation Coordination Centre, became part of the Government of Canada's National Strategy to Protect Children from Sexual Exploitation on the Internet.



This report could not have been possible without a generous contribution from Bell Canada. Their willingness to support research has allowed us to share the findings of this important report and put forward recommendations that will assist in better protecting Canadian children.

SUMMARY REPORT

CHILD PORNOGRAPHY IS A PERMANENT RECORD OF THE SEXUAL ABUSE OF A CHILD.

It can be an image, an audio recording, a video, a drawing, or a story about the sexual assault of a child. It is created deliberately and can be shared easily through the Internet, online platforms, and portable technology devices. Child sexual abuse is a crime and a significant problem that the public cannot ignore.

This report provides an in-depth analysis of reports to Cybertip.ca, Canada's tipline for reporting child sexual exploitation. It focuses on child sexual abuse images on websites and provides an overview of the scope of the problem from the tipline's perspective. Of the 35,111 website incidents¹ processed by Cybertip.ca between September 26, 2002, and March 31, 2009, 15,662 involved sites hosting child pornography and were examined for this report. As a result of this analysis, this report also provides a series of recommendations for educators, policy makers, non-governmental organizations and other stakeholders working to reduce the online sexual abuse and exploitation of children.

The reality is that 82.1% of the images analyzed by Cybertip.ca depict very young, pre-pubescent children under 12 years old. Most concerning is the severity of abuse depicted, with over 35% of all images showing serious sexual assaults. Even more alarming are the extreme sexual assaults which occur against children under 8 years old. This statistic does not distinguish the many images depicting the sexual assaults of infants and toddlers, and raises concerns surrounding the demand for sexual abuse images involving young children.

Of the 4,110 unique images assessed by analysts, over 35% show sexual assaults against children.



15,662 incidents relating to websites hosting child sexual abuse images and 4,110 unique images were assessed and described for this report.



82.1% of the images analyzed by Cybertip.ca depict very young, pre-pubescent children under 12 years old.



¹ Incidents: one public report may contain information about an email and a website. This would be considered two separate incidents, as they have to be analyzed independently.



Special attention should be given to educating children 12 years and under on the subject of child sexual abuse.

Emphasis needs to be placed on helping these young children recognize signs of abuse. Education in this area must be comprehensive, and provide children with both the skills and confidence to possibly disrupt and disclose abuse. Additionally, consideration should be given to the challenges of how to educate pre-school children on this sensitive subject matter.

These statistics challenge the misconception that child pornography consists largely of innocent or harmless nude photographs of children. Of particular note:

- ▶ **35.9%** of the images depicted sexual assaults against the child and **64.1%** depicted the children posed deliberately in a sexualized way.
- ▶ **77.6%** of webpages had at least one child abuse image of a child less than 8 years of age, with many showing infants or toddlers being assaulted. When the images were reviewed independently, **57.4%** depicted children under 8 years old and an additional **24.7%** depicted children between 8 and 12 years old.
- ▶ Images of children less than 8 years old most often depicted them being abused through sexual assaults (**37.2%**). This is different than images of older children, which most often depicted the children posed nude or in a sexualized way.
- ▶ Children abused through extreme sexual assaults including bestiality, bondage, torture, and degrading acts such as defecation, mostly (**68.5%**) occurred against children under 8 years old.
- ▶ **83.0%** of the images were of girl children.

There appears to be a marketing component to many websites hosting child sexual abuse images. These site layouts are designed to focus on the images (39.5% thumbnail galleries, 19.7% portal pages, and 13.3% image hosting websites), and they generally (70.2%) focus on a variety of children. The messaging on these sites is overtly sexual in nature and promotes child sexual abuse. Some of the most observed words include “preteen” and “young.” While we cannot include the most common phrases due to their graphic and searchable nature, an analysis of the alt text (added intentionally to describe an image) revealed the words “lolita” and “free” over 4,000 times each. Typical examples of text used to describe images included “free rape,” “nymphets land,” “preteen lolita pics,” and “free underage incest stories.”

The frequent use of legal adult pornography terminology (hot videos, sexy, hardcore, porn) and sexual marketing tactics are attempts to normalize the consumption of these child sexual abuse images.

It is not only the text on the page that appears to be marketed towards a broad audience; they appeal to consumers with various deviant preferences. Most websites (70.2%) focused on multiple children rather than an individual child (29.8%), and had images of children of a variety of ages (58.6%). The number of images on the page ranged from 1 to 467 images, but pages tended to have between 20 and 30 images. This variation in the layout of child sexual abuse websites appears to also be true for commercial websites, which purportedly sell access to additional child abuse material.



An examination of the 800 commercial websites reported to Cybertip.ca reveals that they tended to use one of three themes: **innocence, adult sexuality and pornography, or darkness and depravity.**

COMMON THEMES - COMMERCIAL WEBSITES

INNOCENCE	Demonstrated with pastel or bright colours, toys, cartoon images and words like “angel,” “innocent,” “virgin,” and “pure.” These websites tend to have younger children, toddlers to elementary school age, and are associated with children’s interests. If clothing is seen, it tends to be age-appropriate. Children tend to be posing and are less likely to be abused through sex acts.
ADULT SEXUALITY AND PORNOGRAPHY	Demonstrated with vivid colours, lewd language like “slut,” “Lolita,” “juicy,” “tight,” “nymphet” and settings and clothing similar to what is seen in adult pornography. Clothing tends to be sexualized, with heavy make-up, lingerie and show-girl type costumes figuring prominently. These sites endeavour to portray the children as young, willing, and promiscuous. Posing is more overtly sexual, and the sites can also contain images of children being abused through sex acts.
DARKNESS AND DEPRAVITY	Uses a lot of black, grey, red, or camouflage patterns, and language like “dark desires,” “pedophile,” and “sick.” These websites tend to have children abused through sex acts with each other or with adults. These sites may also depict extreme sexual abuse of toddlers and sometimes babies.



Research is required to better understand the role of the sexual marketing and advertising of children, its impact on societal attitudes, and how this may increase demand for this material. There is a need for further analysis of how these tactics promote cognitive distortions, fuel fantasies and potentially incite offenders. Consideration should also be given to the commercial aspects of child sexual abuse and how exploitative child modelling may be connected to child pornography.

Since July 2007, Cybertip.ca has been tracking the payment types being advertised by commercial child sexual abuse websites. In that time, analysts noted 27 different payment types being accepted, most of which would be considered online payment systems. However, in 54.8% of instances, the websites still claimed to accept traditional credit cards for payment. The majority (85.1%) sold memberships, with recurring monthly payments ranging from \$4 to \$490 (average \$53 per month). DVDs were also sold (5.8%) for as much as \$1900, as were a variety of packages (4.7%), image sets (3.1%), videos (1.1%), and websites (0.2%). The availability of commercial child sexual abuse websites underscores the market value and demand for this type of content.

50.2% of commercial child abuse websites purport to accept at least one form of traditional credit card payment.

Unfortunately, very few countries in the world can consider themselves exempt from the issue of online child sexual abuse. A review of the website and image host country(ies), based on a geographic IP lookup at the time of analysis, revealed that nearly 60 countries were hosting this type of content.

TABLE 1 Top 5 countries hosting websites with child sexual abuse images

12,696 website incidents		
1	United States	49.2%
2	Russia	20.4%
3	Canada	9.0%
4	Japan	4.3%
5	South Korea	3.6%

TABLE 2 Top 5 countries hosting images of child sexual abuse

4,110 unique images		
1	United States	57.3%
2	Canada	12.6%
3	Russia	7.5%
4	Netherlands	3.6%
5	Spain	3.4%

TABLE 3 Top 5 countries selling material on child sexual abuse websites

800 commercial websites		
1	United States	65.6%
2	Canada	8.7%
3	Russia	5.6%
4	Netherlands	2.9%
5	Germany	1.8%

There are a number of technological challenges that exist in dealing with child sexual abuse images on the Internet. The reality is that this illegal content is widely and publicly available and regularly moves in an effort to avoid being shut down. Over a 48-hour period, Cybertip.ca observed one website cycle through 212 unique IP addresses, located in 16 different countries.

Strategies to address illegal images and their movement, once they become available on the Internet, are essential. Not only do these sites impact the child victims within the imagery, but they also assist in creating a market for this type of material. These sites negatively impact societal beliefs and attitudes towards children by showcasing them as sexual objects. Constant movement and challenges in accurately identifying site operators require the need for additional solutions to better address this problem. Some disruption examples include:

- ▶ Working with ICANN and others to adopt standards for ensuring the validity of the registrant’s personal information
- ▶ Working with domain registrars, internationally, to have domains known to host illegal content discarded from use
- ▶ Examining notice and takedown options
- ▶ Working with payment providers and financial institutions to track and eliminate payment options
- ▶ Working with stakeholders to internationally share data (i.e. title bar information, SHA-1 values, common domain names hosting illegal content)



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Over a 48 hour period, Cybertip.ca observed one website cycle through **212 unique IP addresses**, located in 16 different countries.

This report highlights the seriousness of this issue, while acknowledging that we still know very little about the child victims in the images that analysts see every day. While global efforts are being made to identify these children, the challenges to do so are immense. Like many other organizations working in this area, our agency is deeply concerned about the children abused within these images. Beyond the primary goal in removing children from abusive environments, there is much to be learned from the identified children of sexual abuse imagery. This information is important as it would assist in providing better treatment, help understand the type and degree of harm, and how best to support these victims through the criminal justice system. There is a need to coordinate with front-line professionals, such as those in child welfare, to assist in the early identification and removal of children from abusive environments.

There needs to be a shift in the way we view the problem and solutions of child abuse images on the Internet. The truth is that sexual abuse begins in the offline world. Efforts should be focused on preventing child sexual abuse from occurring in homes and communities. By doing so, we reduce the likelihood of these images circulating on the Internet. For this to occur, adults around children need to be educated about the abuse process, how to recognize inappropriate behaviour, interrupt sexual abuse, and facilitate disclosures by children. Efforts should be targeted toward those who work with children outside of the home environment.

“Child pornography not only harms its immediate victims, the children whose abuse is at its center, but also harms other children through the actions and attitudes of its consumers.” (King, 2008)

For example, teachers, child care workers, child welfare workers, and those groups offering extra-curricular activities should be trained on the issue of child sexual abuse. Finally, organizations and professionals working in this area should realize that by co-mingling Internet safety advice with the issue of child pornography (child sexual abuse), we are doing a disservice to the recipients of this education.

In conclusion, the issue of child abuse images needs to remain a national priority. All components—from the social aspects to the technical ones—must be considered when developing effective strategies and solutions. Cybertip.ca will continue to collect data and publish research on the scope of the problem from the tipline’s perspective. With more information, we hope to further clarify the issue and provide constructive recommendations, ultimately protecting children by preventing sexual abuse. We remain optimistic that this is possible.



There is a need to coordinate with front-line professionals, such as those in child welfare, to **assist in the early identification and removal of children from abusive environments.**



RECOMMENDATIONS

The following twelve recommendations provide suggestions for advancement in the areas of education and public awareness, technical and policy development, and research opportunities.

- 1** **RECOMMENDATION:** With the majority of child sexual abuse images depicting children 12 years old and under, sexual abuse education is critical for this age group. Education should be provided to help these young children recognize signs of the abuse process and disclose to a trusted adult if they are being abused or photographed inappropriately. This is particularly important for pre-school children because it is less likely that they will recognize that the behaviour is not normal (they do not have much experience outside of the home and can be convinced easily). This point is underscored by the age of the children viewed by Cybertip.ca analysts in the vast majority of child sexual abuse images. Clearly, parents, grandparents, child care workers, neighbours, medical professionals, and other adults also need to learn to recognize possible signs of abuse. Education in this area has to be comprehensive and build life skills in the children. Tools should be provided to caregivers in the areas of healthy parenting and understanding and recognizing signs of sexual abuse.
- 2** **RECOMMENDATION:** Collaboration between hotlines around the world to begin tracking infants and toddlers in child abuse imagery. This will provide a better breakdown of the age of the children in images and assist in providing accurate numbers about whether there is a growing audience for images of very young children being abused. This could prompt important dialogue regarding prevention strategies to better protect pre-school children.
- 3** **RECOMMENDATION:** Consideration should be given to gender-related education. With an over-representation of girl children in sexual abuse images, supplementary prevention material should be created for them, and should specifically target girl-centered environments (i.e. Girl Guides). This may help in the effort to educate girls about sexual abuse, how to recognize it and to report abusive behaviour.
- 4** **RECOMMENDATION:** Explore additional opportunities to work with law enforcement and Internet service and content providers to remove illegal content from Canadian servers.
- 5** **RECOMMENDATION:** Establish international standards for the personal information a registrant is required to provide when registering a new domain name. This could include proof of name and address, residency in a particular country, and contact information. This information could be valuable in the event of an investigation, assisting in determining the owner of a child pornography website, and potentially rescuing children from ongoing sexual abuse. This would require collaboration with the Internet Corporation for Assigned Names and Numbers.
- 6** **RECOMMENDATION:** Partner with domain name registrants to have domains hosting illegal content discarded from use. This would prevent new website owners from purchasing domains known to host child pornography and reusing for the same purpose. Due to the fact that the domain names become important marketing tools, and become well-known to consumers of child abuse images, steps need to be taken to remove them permanently from circulation.

- 7** **RECOMMENDATION:** Further research is needed on the impact of child sexual abuse on victims and whether the Internet has changed the nature and extent of their trauma and their healing process. Are victims impacted differently if they know photographs have permanently recorded their abuse? What if they are aware that the images are being distributed and propagated on the Internet? Understanding the impacts could provide better treatment for victims, and guide how victims should be supported and managed through the criminal justice system.
- 8** **RECOMMENDATION:** Further collaboration and data sharing is needed between organizations dealing with this content area. Assessment of images by tiplines is likely duplicated given the high percentage of child sexual abuse images analyzed on more than one occasion. A collaborative database of SHA-1 values (centralized or decentralized) could have a significant impact on reducing resource requirements and exposure to imagery.
- 9** **RECOMMENDATION:** Further research is needed to determine how words are being used on websites hosting child sexual abuse images. Websites containing child abuse material could be automatically identified using this word data set and a probabilistic algorithm. This data set could also be queried for new and emerging terms/words used amongst individuals who seek or trade child sexual abuse content.
- 10** **RECOMMENDATION:** Carefully track the use of unique title bars on websites hosting child abuse images. Following the movement of these websites will provide a clearer picture of how content moves on the Internet.
- 11** **RECOMMENDATION:** Establish a coalition of stakeholders, similar to the Financial Coalition in the US, to develop solutions to the commercial aspects of child sexual abuse images. This would involve working with partners in law enforcement, the financial industry, and Internet service and content providers to follow the websites to their source and eradicate the problem.
- 12** **RECOMMENDATION:** When a site has been identified as fast flux,² it is possible to determine which IP addresses are being used to serve the content. Tiplines around the world could work with Internet service providers to notify them of compromised computers on their network. An Internet service provider could choose to suspend the customer's service until the infected machine is fixed.



² Fast flux is a method used to make the taking down of a website more difficult. This is accomplished using DNS and a constantly changing set of compromised hosts.

PRIORITIES FOR EDUCATION

Children and Youth	Educating children on sexual abuse and how to recognize inappropriate behaviour
	Promoting disclosure to trusted adults
	Knowing the difference between healthy and unhealthy relationships
	Understanding the permanence of images distributed online or through other means (cell phones, web cameras, thumb drives, etc.)
Parents	Learning how to educate children about sexual abuse and promoting disclosures
	Recognizing the signs of child sexual abuse
	Reinforcing the obligation to report suspected abuse
	Encouraging early intervention with experts if their child has been abused
Adults who work with children (teachers, child care workers, community clubs, etc.)	Learning about child sexual abuse and how to recognize inappropriate adult behaviour
	Learning how to educate children about sexual abuse
	Creating environments that promote child disclosures and adult reporting of abuse and inappropriate behaviour
	Incorporating tools over and above criminal record and child abuse registry checks
Child welfare agencies	Recognizing how child sexual abuse has broadened in scope through the use of the Internet
	Exploring the connection between offenders who access or possess child abuse images and the commission of sexual offences against children
	Adapting sexual abuse interviews with children to determine whether the abuse has been recorded (i.e. photographs, videos, audio)
Industry	Financial: Understanding the financial aspects of child sexual abuse and how money can be exchanged between offenders
	Internet: Establishing standards for the registration of Internet domain names
	Internet: Expanding and enhancing technical or collaborative solutions to remove illegal content from the Internet
	Academia and research: Conducting and sharing research on exploitative child modelling and its potential connection to child sexual abuse images
General public	Understanding what child pornography is—the harm, the permanence, the age of the children, and the fact that it is a record of child sexual abuse
	Dispelling myths about the harm of child sexual abuse images and stereotypical sex offenders (tying a person's character to whether or not s/he may or may not have a sexual interest in children)
	Separating Internet safety education from child sexual abuse prevention
	Recognizing the importance of reporting suspected child sexual exploitation, particularly as it relates to possible offenders or child victims



protectchildren.ca