TORONTO

STAFF REPORT
ACTION REQUIRED

Improving Infection Control Practices in Personal Services Settings (Tattooing, Piercing and Aesthetic Services)

Date:	May 25, 2011
To:	Board of Health
From:	Medical Officer of Health
Wards:	All
Reference Number:	

SUMMARY

The purpose of this report is to outline issues and corresponding recommendations for improving infection prevention and control practices in Personal Services Settings (PSS).

PSS are defined in the Ministry of Health and Long-Term Care's Infection Prevention and Control in Personal Services Settings Protocol (2008) under the Health Protection and Promotion Act, as settings in which aesthetic services are delivered such as, but not limited to: tattooing and body piercing; electrolysis; acupuncture; hairdressing and barber shops; and various aesthetic services.[1,2] There has been an increasing trend in the public use of PSS over time. In addition to an increase in usage, there has been an increase in the diversity of services being offered with more invasive services such as branding and scarification being offered in some premises.

The delivery of personal services has been associated with the transmission of bloodborne infections such as hepatitis B and hepatitis C, as well as other infectious disease organisms such as *Mycobacterium spp* and *Staphylococcus aureus*.[1,3-9] Disease outbreaks associated with a variety of PSS have been reported globally. Toronto has many exemplary PSS operators who follow effective infection control practices and are found to be in full compliance on routine inspection. However, Toronto Public Health (TPH) has identified outbreaks of infectious disease in PSS, investigated PSS as a potential source of cases of hepatitis B and C, and responded to complaints of inadequate infection prevention and control practices in PSS. Effective infection prevention and control practices are essential in PSS to prevent the spread of communicable diseases.

Currently in Toronto, the only PSS that require a municipal licence are hairdressing/hairstyling establishments and barbershops. Considering the infectious disease risks that have been associated with PSS that offer significantly more invasive services, the current licensing bylaw is not based on a health risk approach. Provincial public health protocols require TPH to inspect all known PSS annually and on complaint to ensure compliance with recommended infection control practices and to educate operators. One of the key challenges faced by the program in the absence of municipal licensing is identifying new PSS in a timely fashion to allow education and inspection to mitigate risks to public health and safety.

Ontario has no provincial regulations that outline minimum training standards for operators who perform these services. This lack of training standards combined with high industry and staff turnover makes it essential for TPH to inspect and educate PSS early on in their operations to be confident that infection control standards are being maintained.

TPH has conducted research and consulted with City partners, including Municipal Licensing and Standards, to inform recommendations for improved infection control in PSS in Toronto. A public survey conducted in Toronto in 2010 found high levels of use of PSS. Respondents also expressed strong support for the licensing of all PSS. In fact, over half of the respondents assumed that all PSS in Toronto already required a licence to operate. Most respondents also supported a public reporting / disclosure model for PSS similar to the award-winning DineSafe program for food premises. This type of disclosure system would promote transparency of PSS infection prevention and control performance for the public and provide an incentive for operator compliance with public health standards. This report proposes amendments to the City of Toronto Municipal Code Chapter 545, Licensing, to improve compliance with infection control in PSS. In addition, Province-wide standards for PSS operator training are recommended.

This report recommends that the Medical Officer of Health conduct stakeholder consultation on amendments to Municipal Code Chapter 545, Licensing, and report to the Board of Health later in 2011 on proposed amendments with an implementation plan.

RECOMMENDATIONS

The Medical Officer of Health recommends that:

1. The Board of Health request the Medical Officer of Health, in consultation with the City Solicitor, the Executive Director of Municipal Licensing and Standards and key stakeholders including operators and the public, to report in late 2011 on proposed amendments to Municipal Code Chapter 545, Licensing, to:
    a. License all personal services settings (PSS) where there is a risk of infectious disease transmission.
    b. Require PSS operators of premises where there is a risk of infectious disease transmission to post inspection results.

c. Require persons who intend to commence to operate PSS to give notification of their intention to the Medical Officer of Health.
d. Require PSS to comply with the Medical Officer of Health's infection prevention and control recommendations.

2. The Board of Health request the Medical Officer of Health to report in late 2011 on costs, timelines, enforcement, quality assurance, and other issues of bylaw implementation.

3. The Board of Health request the Medical Officer of Health work with Toronto Economic Development and Culture to ensure that newly licensed PSS operators are aware of City of Toronto business support services including information on best practices in infection control.

4. The Board of Health request the Ministry of Health and Long-Term Care to establish infection prevention and control training requirements for PSS operators.

5. The Board of Health forward this report to the Licensing and Standards Committee for information.

Financial Impact

There is no financial impact of this report. Any costs related to bylaw implementation will be described on in the next report.

ISSUE BACKGROUND

Receiving PSS services is a common practice throughout North America. A 2001 Health Canada study showed that approximately 25% of Canadians aged 12-19 had at least one piercing and 10% had a tattoo.[9] A survey conducted by Toronto Public Health in 2010 found that 8% of adults in Toronto reported having had a tattoo, 7% had electrolysis, and 41% had ear piercing. As the popularity of these services continues to increase, more invasive procedures, such as branding and scarification (cutting or etching into the skin to create a scar), have started to occur in PSS.[10]

The increase in the prevalence of these services, combined with a growing awareness of potential infectious disease risks has resulted in several jurisdictions implementing guidelines to minimize the risk of disease transmission.[4,5,7,10] These guidelines are based on a growing body of evidence of the link between PSS and infectious disease transmission if proper infection control is not maintained. [11 -15]

A 2010 review found tattooing to be associated with an increased risk of hepatitis C infection.[14] Similarly, body piercing has been associated with viral hepatitis in several studies.[15] The Canadian Blood Services do not allow individuals who have received a tattoo or piercing within the previous six months to donate blood due to their potential exposure to bloodborne infections and therefore potential risks to the blood supply.[16] Disease outbreaks associated with PSS have also been reported. A report from Switzerland in 2010 described 12 cases of lymphadenitis caused by *Mycobacterium*

haemophilum associated with receiving permanent eyebrow makeup from one artist. Outbreaks of *Pseudomonas aeruginosa* and Methicillin Resistant *Staphylococcus aureus*, both causing bacterial infections of the skin, were reported from an ear piercing kiosk in Oregon (2000) and tattoo parlours in Ohio, Vermont and Kentucky (2005), respectively.[17]

Less invasive procedures (such as facials, manicures and pedicures) may also pose a risk of infectious disease transmission. A 2004 Italian study, using data analyzed from a viral hepatitis surveillance system and controlling for other risk factors, showed an association between the risk of acute hepatitis B infection and barbershop shaving.[12] In 2000 in the state of California, over 100 people contracted skin infections likely caused by *Mycobacterium* from footbaths used for pedicures.[18]

The lack of formal surveillance for infections related to PSS makes it difficult to accurately measure the actual risk associated with these procedures. In 2009, TPH received reports of 1271 hepatitis B carriers and 958 hepatitis C cases in Toronto. For the majority of these cases, it is unknown how exactly they acquired their infections because testing normally detects previously acquired infections. However, 4% of acute hepatitis B cases and 28% of hepatitis C cases reported in Toronto in 2009 cited PSS as a risk factor for infection. Many other infections associated with PSS are not legally reportable, so incidence is not comprehensively tracked. In addition, many clients who experience a health complication after receiving an aesthetic service return to their PSS provider as opposed to their health care practitioner. PSS providers are not required to report communicable diseases to their local Medical Officer of Health. All of these factors suggest that the risk of infection associated with PSS is underestimated.

This report makes recommendations to improve infection control practices in PSS and protect public health.

COMMENTS

The Provincial Infection Prevention and Control in Personal Services Settings Protocol (2008) requires local public health units to conduct routine inspections for all PSS where there is a risk of exposure to blood, such as, but not limited to tattooing and body piercing studios, electrolysis, acupuncture, hairdressing and barber shops, and various aesthetic services, at least once per year. In addition to an annual inspection, inspections must also occur in response to a complaint and if non-compliance with infection prevention and control practices are identified on the annual inspection. Public health units must also offer education for PSS operators and the general public on infection prevention and control practices in PSS. [1]

In 2010, there were a total of 2,895 PSS requiring inspection known to TPH in the City of Toronto, and the inspection completion rate was 94%. While there are many exemplary operators who follow recommended infection control practices with no issues observed on inspection, in 2010, 18% of inspected premises, or 514 services required a re-inspection due to substandard infection control practices. In 2009 and 2010, over 100 complaints were received from the public regarding PSS. The range of infection control breaches (or infractions) noted on inspection is broad and includes the failure to follow

procedures to properly reprocess instruments between clients, including ensuring that certain tools are disinfected properly and invasive tools are sterile, as well as the failure to perform hand hygiene and to maintain client records. Under section 13 of the Health Protection and Promotion Act, public health inspectors may serve orders when the conditions of premises, such as the failure to comply with adequate infection prevention and control procedures, pose a health hazard to clients. In 2011, as of May 24th, TPH had issued 61 section 13 orders for PSS due to inadequate infection control practices. These infractions can only be noted and rectified in the PSS that TPH is aware of.

Uninspected Premises and Licensing

The actual number of PSS requiring annual inspection in Toronto is currently unknown as hairdressing and barbershops are the only PSS that require a business licence to operate in the City of Toronto under Municipal Code Chapter 545.[19] Given that all other types of PSS (tattooing, body piercing, electrolysis and other aesthetic procedures) can operate without a licence, a combination of approaches has been developed by TPH staff to identify these premises. These include internet searches, responding to public complaints about a previously unknown establishment, and incidental sightings. This task is further complicated by the high rate of turnover in the PSS industry. In 2010, 407 new premises were identified while 319 went out of operation, representing approximately 11-14% turnover for that year. In addition, PSS are increasingly performed in non-traditional settings, such as in homes and at special events. As a result of the varied and transient nature of many PSS, TPH has identified premises that were operating for months or even years without ever having had a public health inspection. This presents a potentially preventable public health and safety issue if standards are not being met in the interval between when an establishment opens and when TPH has an opportunity to inspect and educate.

An example occurred in late 2003 when TPH received a complaint about a tattoo shop that operated at a market. The establishment had never been inspected as it was unknown to TPH. On inspection, it was found that the equipment could not be verified as being sterile between uses and therefore it presented a potential risk to everyone who had been tattooed in the shop. As a result, several hundred clients needed to be notified about their potential risk of acquiring a bloodborne infection due to the services they received at this PSS. These clients had no way of knowing that the premises had never been inspected and TPH had no way of inspecting the premises until a complaint was received, three years into their operation.

The lack of an inspection prior to operation also creates challenges for the PSS. There have been several occasions where infrastructure work was needed to ensure compliance with infection control recommendations. For example, operators may be informed that they need a sink for handwashing, but the plumbing was not done in the construction phase. This leads to an increased financial burden for operators. These situations are avoidable if operators are aware of the requirements in advance of opening. As well, good infection control practices are essential to protect PSS staff from contracting infections from their clients. Inspections prior to opening and while open, as a condition of licensure, would help reduce risks to both the public and to operators.

Public Reporting / Disclosure of Inspection Results

A public awareness strategy is an additional tool to help reduce the risk of infectious disease transmission that may be associated with PSS. A proven approach to raising awareness is the award-winning DineSafe program for food safety in Toronto. Requiring public posting of inspection results would provide greater transparency for clients and an incentive to operators for adherence to good infection control practices. Compliance of food operators during routine inspections increased from 50% to 78% after the DineSafe disclosure program was first introduced and is currently over 90%. Through a similar PSS disclosure program, the number of PSS infection control breaches is likely to be reduced leading to a decrease in the number of re-inspections needed and overall improved infection prevention and control practices. Furthermore, clients would know in advance whether an establishment had been inspected or not, and the occurrence of uninspected premises would be reduced. Public disclosure would allow consumers to make an informed choice about PSS services based on past inspection results.

Operator Training

Although there are college diploma training programs and standards available for aestheticians in Ontario (funded by the Ministry of Training, Colleges and Universities), there is currently no provincial requirement for formal training for PSS operators.[20] Studies in Australia showed a lack of knowledge among tattoo artists and body piercers in the areas of equipment sterilization, hand hygiene, and universal precautions.[21,22] A study involving tattoo artists in Minnesota reported that the majority of participants supported mandatory training in infection control.[23] In other jurisdictions, acquiring a PSS licence is dependent on meeting minimum training requirements; however, Ontario has not set any minimum standards for training. Because of this gap, and because PSS services are so diverse, Provincial support for setting training requirements is needed. Some personal services are provided by professionals regulated by a professional body/college in Ontario. These PSS are not inspected by public health but are expected to comply with their College's requirements and complaints can be investigated by the regulatory bodies. Acupuncturists are currently inspected by public health but in an upcoming regulatory transition the Traditional Chinese Medicine Act (2006) will require the performance of acupuncture to be restricted to: members of a new College of Traditional Chinese Medicine Practitioners and Acupuncturists of Ontario (CTCMPAO), members of certain other regulated health professions and for addiction treatment performed in a health facility. Currently, a transitional council is developing regulations for the CTCMPAO to be approved by the Ministry of Health and Long-Term Care. Until such time that the regulations are established for the new college and acupuncturists are registered, acupuncture will continue to be inspected in Ontario by public health units.

Improving PSS Regulation in Toronto

Several inputs were used in developing this report considering the impact of proposed changes to the licensing bylaw. They include a scan of the regulatory practices in other jurisdictions, a survey of Toronto residents, and consultation with city partners such as the Executive Directors of Municipal Licensing and Standards, and Economic Development and Culture. In addition, industry consultation is planned.

PSS regulation in other jurisdictions

In late 2010/early 2011, staff conducted an environmental scan of PSS bylaws in other jurisdictions. Of the 36 health units in Ontario, 20 health units have some sort of licensing bylaw for PSS in their jurisdiction (varies by municipality). Of these 20, eight health units have municipalities that have licensed all PSS services (i.e., Tattooing, piercing, hair and barber services, nail services, etc). The remaining 12 health units that have PSS bylaws have only some PSS services that require a licence. Toronto would fit in this category as a licence is currently required only for hair/barber services. The most common service type to require a licence was tattooing and body piercing with 17 health units having at least one jurisdiction in their catchment area with this requirement.

Outside of Ontario, both Vancouver and Calgary require PSS to have a licence to operate. The City of Winnipeg has a comprehensive "Body Modification" bylaw specific for tattooing and body piercing services. Each PSS offering these services requires an operating permit, which is dependent on a public health inspection prior to operating.[24]

The most comprehensive U.S. public health programs related to infection prevention and control in PSS that were identified involve the states of California, Virginia and Oregon. With respect to nail services, the California Department of Consumers Affairs Board of Barbering & Cosmetology has very strict rules when enforcing infection control standards. Public Health inspectors have the ability to close premises and suspend their licence immediately if a significant infraction is identified. Premises can also be put on one-year probation, and during that period the establishment is inspected quarterly. Staff must also complete an approved remedial training course in infection control standards.[25] In Virginia, licence, training and certification is required for both the shop and practitioners of barbering, cosmetology, body piercing, aesthetics, tattooing and waxing. The Oregon Health Licensing Agency has legislation for the practice of body art and electrolysis. All PSS offering these services require an operator's licence, and several criteria must be fulfilled by each worker prior to obtaining a licence which include: successful completion of a High School diploma, a minimum of 360 hours training under a licensed professional, and passing a state administered written and practical examination pertaining to their area of practice. They must also complete 15 hours of continuing education every three years. Licences must be renewed on an ongoing basis and require a public health inspection.[26]

New York State is also currently developing enhanced regulations for PSS. The law will require tattoo and body piercing operators to obtain a permit in order to operate a tattoo or body piercing business and for all tattoo and piercing artists to obtain an individual permit.[27]

Public Survey Results

In the fall of 2010, a survey was conducted to gain an understanding of the public's use of personal services, knowledge of the current PSS regulation in Toronto, as well as to measure support for licensing and routine disclosure of inspection reports. 500 interviews were completed: 400 in English and 100 in another language (including Cantonese, Mandarin, Tamil, Korean, and Vietnamese).

The survey results indicate that there is public support for a licensing bylaw. The majority of respondents felt that all PSS service types should require a business licence. Acupuncture, body piercing and tattooing had the most support for requiring a business licence (91%, 89% and 89% respectively). There was also strong support for licensing less invasive PSS services such as manicures/pedicures and facials (73% and 68% respectively). 58% of respondents were under the impression that all PSS already required a business licence to operate.

The results also showed support for a public reporting system through coloured signage that would be similar to the DineSafe food safety program in Toronto. 80% of respondents said they would support such a system for PSS (with 63% strongly supporting public reporting).

Consultation with City Partners

Municipal Licensing and Standards (MLS) has reviewed the recommendations in this report and are supportive of changes to the current licensing bylaw. TPH will continue to work with MLS to determine the details and implications of bylaw implementation. TPH will also work with Economic Development and Culture to ensure PSS operators are aware of City of Toronto business support services for newly licensed premises.

Consultation with the PSS Industry

Consultation with various stakeholder groups is essential prior to implementing any changes to the bylaw. The consultation will be conducted using a combination of methods to gather stakeholder input such as key informant interviews, focus groups (arranged according to service type) and / or web-based input. Key stakeholders will include:

- PSS operators in Toronto
- Local and national agencies or associations representing various PSS service types, and
- PSS training schools

Conclusion

Given the increasing use of PSS by the public and the potential health risks associated with these services, it is essential that PSS operators are informed of and follow recommended infection prevention and control practices. In order to optimize the current mandated inspection program, and better protect the health and safety of the public and operators, this report recommends measures to strengthen its current PSS program. These include the mandatory licensing of all PSS where there is a risk of infectious disease transmission and the creation of an inspection disclosure program. Industry consultation will be carried out prior to developing detailed bylaw changes. A report later in 2011 will include consultation results as well as outline the impacts for TPH, other city divisions and other relevant stakeholders. Mandatory training for operators is an issue that should be examined at the Provincial level. It is recommended that the Ministry of Health and Long-Term Care set minimum infection control training requirements for PSS operators.

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SIGNATURES

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