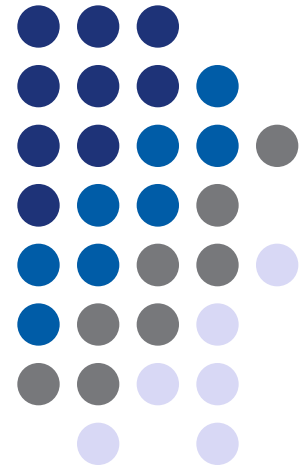


# Evidence Informing Practice

Selina Nazim, B.A.Sc, CPHI(C), Manager,  
York Region Community and Health Services Department



# York Region PSS Landscape



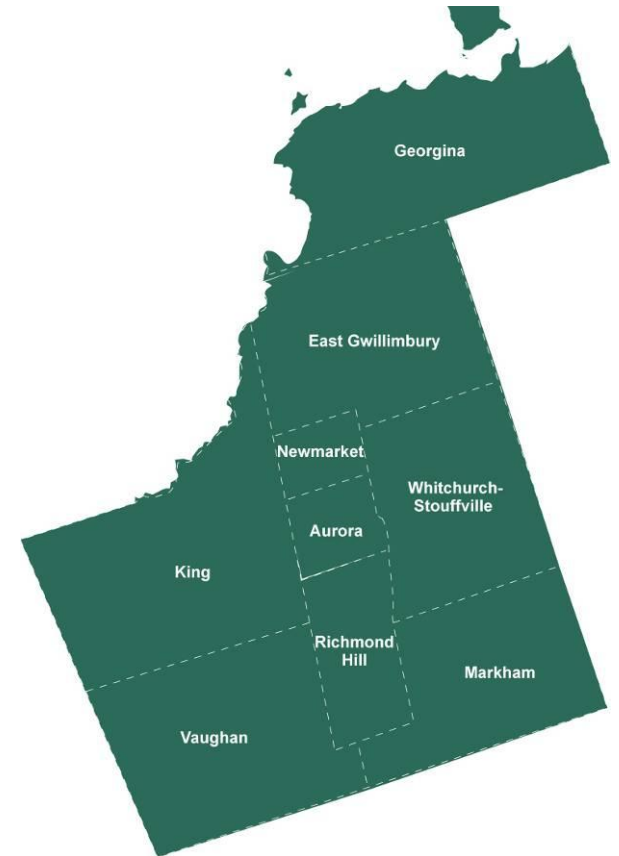
**1,100 Personal Service Settings**

**75% of PSS in YR offer non-invasive services**

- nail salons
- hair dressing/barbering
- Aesthetics (facials, waxing)

**25% of PSS in YR offer invasive services**

- ear/body piercing
- tattoo studios
- electrolysis
- Micro-pigmentation
- acupuncture



# The Goal



To increase infection prevention and control knowledge among  
Personal Service Setting Workers  
in York Region

# Objectives



- Provide IPAC educational workshop and resources for PSW's
- Promote awareness among PSW's that York Region Community and Health Services is a credible resource for IPAC information
- Assess needs and support for the development of a Regional by-law that would require IPAC certification of all YR PSW's

# Questions To Answer



1. What is the current IPAC knowledge level of PSSWs in York Region?
2. What IPAC educational training and support is provided to PSSW's?
3. Are standardized IPAC core competencies and certification needed for PSSW's?

# Research



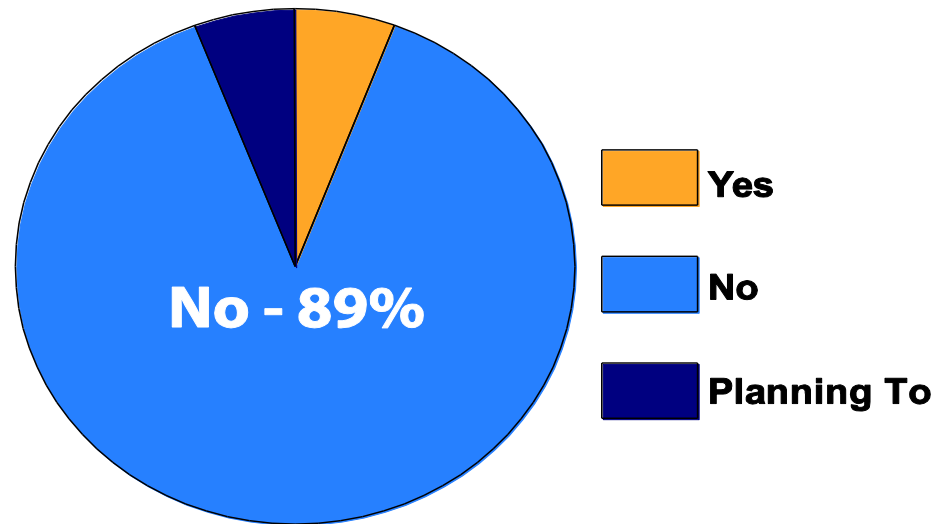
1. Environmental Scan of Health Units
2. Literature Review
3. Surveyed YR PSSW's
4. Key Informant Interviews

# Environmental Scan Results



## Question #1

Does your health unit (HU) offer formal IPAC workshops for PSSWs?

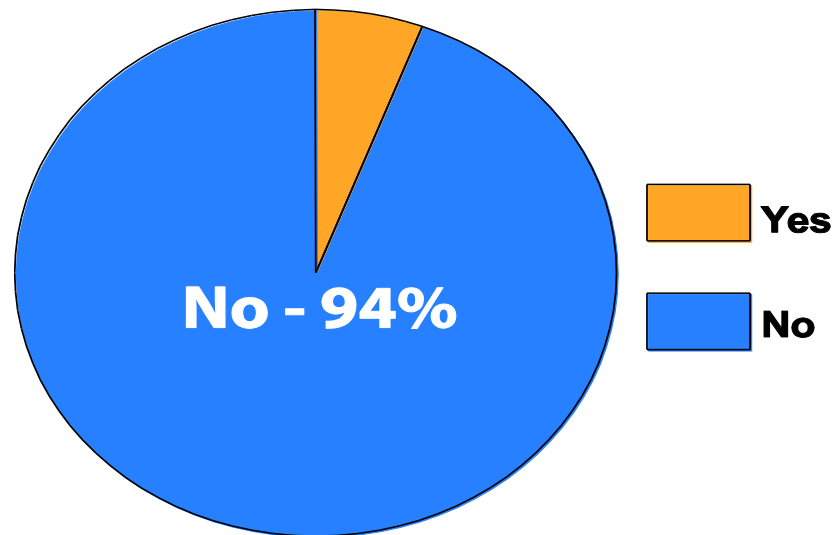


# Environmental Scan Results



## Question #2

Does your HU have a by-law requiring IPAC education for Personal Service Workers?





# Literature Review Results

- The literature review highlighted several results/recommendations:
  - PSSW's lack IPAC knowledge
  - Education strategies and training are needed to improve knowledge of PSSW's
  - There is a need for standardized IPAC guidelines/mandatory regulations, protocols or accreditation for PSS

# Survey of PSW's



## To determine:

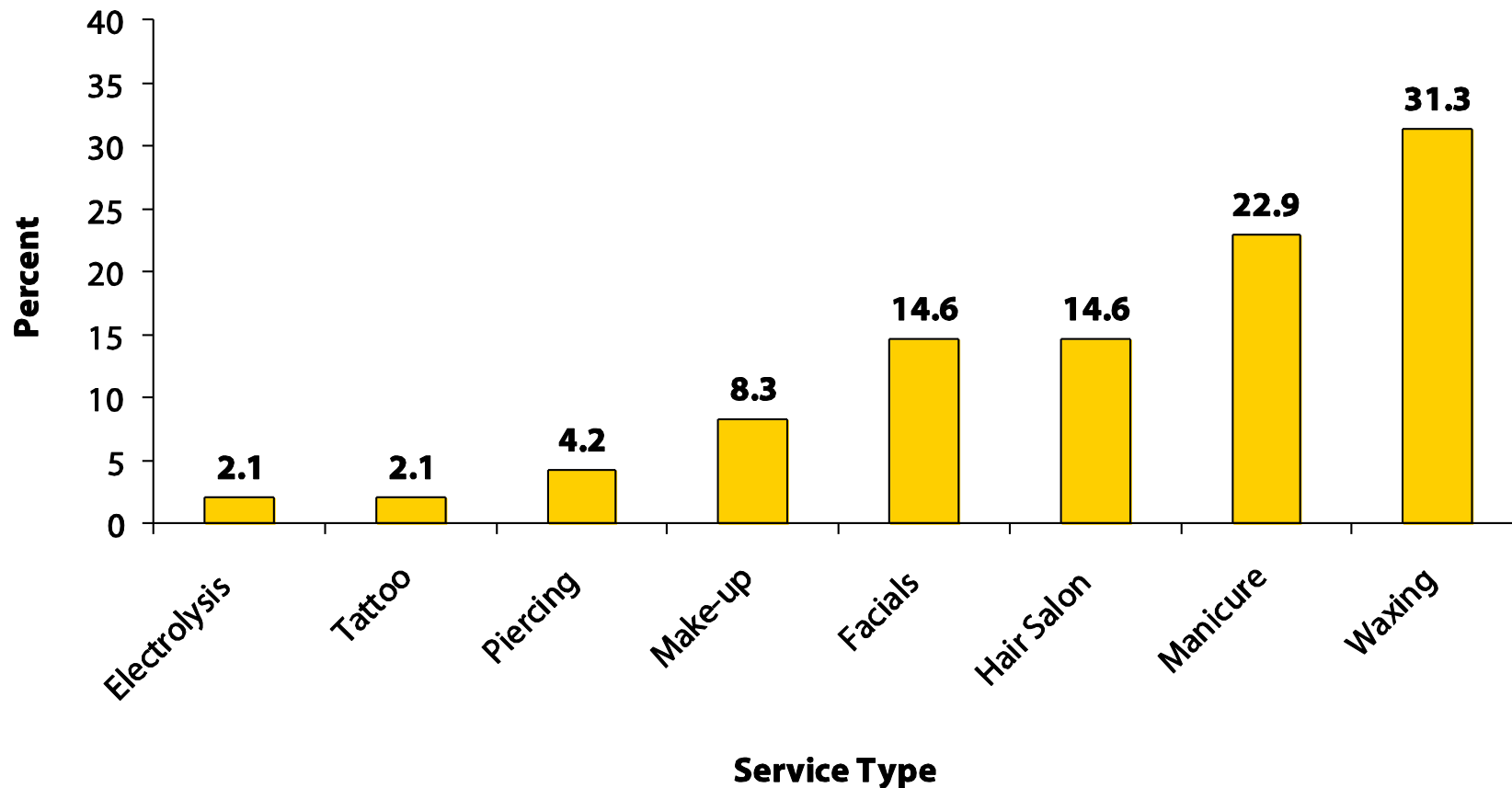
- Infection Prevention and Control knowledge level of York Region PSSW's
- Interest among PSSW's in attending an educational workshop offered by York Region Community and Health Services Department



# Survey Methods

- PSS were randomly selected and stratified
- A representative sample of 93 PSS were contacted
  - 48 interviews were completed

# Distribution of Survey Respondents by Service Type (N=48)



# Survey Questions



- Survey questions covered the following areas:
  - hand hygiene and glove use
  - infectious disease transmission risk and hepatitis B
  - Tools and implement cleaning, disinfection and sterilization
  - accidental injury during treatment
  - handling and disposal of sharps
  - Demographic and additional information



# Key Findings

- Indicated lack of knowledge among PSSWs related to these IPAC topics:
  - cleaning and disinfection of tools and implements
  - glove use and hand washing
  - infection transmission related to delivering or receiving services
- **83% of respondents showed interest in attending an IPAC workshop**



# Key Informant Interviews

**Purpose:** To gather IPAC information and opinions from PSS industry schools, suppliers and associations

## Questions Asked:

- What infection prevention and control topics are taught in schools?
- Would you support an IPAC workshop/certification offered by YRCHS?

# Key Informant Interview Results



- Confirmed that IPAC practices are not consistently taught in schools
- Supported the health unit's proposal to offer a workshop to PSSW's on IPAC practices and certification upon completion of the workshop



# Pilot Workshops

- Offered during spring 2010
- Topics covered:
  - How you can protect yourself from infectious diseases
  - Tools and implement cleaning, disinfection and sterilization
  - How to select an appropriate disinfectant
  - Sharps disposal

# Pilot Workshop Evaluation Tools



- Pre and post-test questionnaire at the workshop to assess knowledge transfer
- Focus groups were held after the session to obtain additional information

# Pilot Workshop Pre and Post Evaluation Results



- Statistically significant increase in participant knowledge after the workshop
- Participants indicated that they would like to receive recognition of attendance
- Future workshops could be improved by offering workshops targeted to specific services
- Participants identified the Health Unit as a credible source for IPAC information



# Focus Group Questions

- What other IPAC information would you like to receive?
- What kinds of IPAC resources would be most useful to you in your daily work?
- What would be the best way to provide to this information to you?
- Where do you go to get information?
- What do you think would be the best way to provide future workshops to you?



# Focus Group Results

- Would like more information on
  - Cleaning and disinfection
  - Sharp disposal
  - Service/trade specific information
- Resources:
  - Quick reference signs
  - Cleaning and Disinfection charts
  - Resources must service specific



# Focus Group Results

- Best to provide information:
  - In person/Workshop
  - Mail
  - Facebook
  - Checking websites and email difficult
- Where PSW's go to get information
  - Trade magazines
  - Health and trade shows



# Focus Group

- Providing future workshop:
  - In class workshop
  - Targeted workshops
  - Allow for networking with other PSW's
  - Provide hands on activities
  - Provide certificate of completion
  - Strong support for workshop should be mandatory



# Final Workshop

- Level 1 and level 2 workshop
- Half day
- Certificate of completion
- IPAC Guidebook
- CIPHI PSS fact sheets

# Guidebook

- Magazine look and feel
- Lots of graphics
- Will include service specific IPAC information



# Guidebook



## operating your business

### GENERAL GUIDELINES



IT'S NOT ONLY IMPORTANT TO RUN A SALON OR SPA THAT PROVIDES HIGH QUALITY SERVICES, BUT ALSO TO MAKE SURE THAT BOTH WORKERS AND CLIENTS ENJOY AND CLEAN AND SAFE ENVIRONMENT.

Here are some general guidelines to keep in mind when running your business. The information contained in this guidebook has been adopted from the Ministry of Health and Long Term Care – "Infection Prevention and Control Best Practices for Personal Service Settings".

#### 1. When opening a new business or taking over an existing business:

- Contact your local building/ by-law or licensing department. Remember, it is the owner's/ operator's responsibility to comply with the local municipal licensing and/or by-law

requirements to operate a business.

- You should review the "Infection Prevention and Control Best Practices for Personal Service Settings" and Personal Service Setting fact sheets to make sure that you are able to meet the infection prevention and control requirements.
- These documents are on [www.york.ca](http://www.york.ca) → Click Services → Public Health and Safety → Health Inspection → Infection Prevention & Control
- Before opening your business, you must contact York Region Health Connection (1-800-361-5653) and provide the name and address of your business and details of the types of services that will be offered. You will be required to provide copies of your floor plan layout.
- Make sure your business complies with the Ontario Ministry of Labour Occupational Health and Safety Act.

#### 2. Your workers must follow these guidelines:

- Workers' personal items (food, medication, aesthetic items) must be stored separately from client supplies.
- Workers can not smoke, eat or drink while providing services to clients.
- Workers must be trained and follow routine practices such as hand hygiene, glove use, face protection mask and goggles and gown.
- Hepatitis B vaccination is strongly recommended for all workers.

#### 3. General requirements for your business:

- Your business must be clean, well lit and kept in good repair.
- Work surfaces (counters, tables, trays, lamps, magnifiers) must be smooth and have a non-absorbent finish (water resistant).
- All floors, walls and ceiling must be non-absorbent and are clean and in good repair.
- All instruments, equipment and

linens must be stored in a clean and sanitary manner that prevents cross-contamination.

- Storage areas and shelving units must be smooth and have a non-absorbent finish.
- Clean instruments and equipment must be stored separately from dirty instruments and equipment.
- Creams and lotions must be dispensed in a way that avoids contamination. No double dipping!

#### 4. Cleaning and disinfecting:

- All work surfaces must be cleaned and disinfected using a low level disinfectant at least once a day or as required.
- Used instruments should be soaked in water with/without a detergent if they can not be immediately cleaned.
- Use disinfectants that have a Drug Identification Number (DIN).
- Read the label on all disinfectants and follow manufacturer's instructions.

#### 5. Routine practices

These are practices to prevent and control transmission of microorganisms and should be used on all clients during the service. They include hand hygiene, glove use, face protection, gown use and clean equipment. This is what protects you and your clients from infections.

#### 6. Records

- Businesses that offer procedures that break the skin such as ear piercing, body piercing, tattooing, micropigmentation, electrolysis and acupuncture, must keep client records on site. The records must include:
  - i. Date of procedure and full name (first and last) of the personal service worker
  - ii. Client name (first and last), complete mailing address and telephone number
  - iii. Details of the procedure carried out.
- Accidental exposures to blood or body fluids to the client or works must be documented and the record kept on site.
- All records must be kept on site for a minimum of one year and on file for a minimum of five years. Collect and store information according to local and provincial privacy legislation. It is important to keep all records on site to protect your business in the event that a Public Health Inspector conducts an investigation or responds to a complaint.



# Guidebook



INFECTION PROTECTION

## Protecting yourself from INFECTIONS

WASHING YOUR HANDS  
+ GLOVES  
+ FACE PROTECTION  
+ GOWNS  
= ROUTINE PRACTICES



**Finger nails are a source of bacteria, so make sure to get the soap underneath them**

Routine practices protect you and your clients from being exposed to blood/body fluids. Use these practices when providing services to your clients. All clients must be considered potentially infectious and following routine practices will reduce the risk of spreading germs to you or your client.

**ROUTINE PRACTICES – Keeping Your Hands Clean**

Keeping your hands healthy is the first line of defense against infection. Remember these four simple steps to keep your hands free from cracks and irritation:

1. Use warm water to wash your hands – fingernails are a source of bacteria, so make sure to get the soap underneath them.
2. Pat your hands dry. This helps prevent your hands from chapping and cracking.

*Remember, damp hands have 1,000 more germs than dry ones.*

3. Use hand lotions and protective barrier creams on a regular basis to help keep the skin moist and healthy.
4. Don't use moisturizers that are petroleum-based – these can cause gloves to breakdown.

**Regular Soap or Antibacterial Soap?**  
You only need regular soap and water. Rub your hands together for 15 seconds to remove germs. Studies indicate that there is no added benefit to using antibacterial soaps.

17

**routine practices**  
FACE PROTECTION and GOWNS

INFECTION PROTECTION

## FIVE STEPS TO PROTECT YOURSELF FROM INFECTION



IF TREATMENTS MIGHT GENERATE SPLASHES OR SPRAYS OF BLOOD, BODY FLUIDS, SECRETIONS OR EXCRETIONS, PROTECT YOURSELF AND MAKE SURE TO WEAR FACE PROTECTION AND A GOWN.

- 1 Follow ROUTINE PRACTICES
- 2 COVER CUTS on your hands and arms with a waterproof bandage or gloves if necessary.
- 3 THOROUGHLY WASH YOUR HANDS before and after each client.





23

# Guidebook



*Germs hide under watches, bracelets and rings, so always remove them when you wash your hands.*

What do you think are the five areas that you miss when you wash your hands? Fill in your answers below.

- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_

The five most common areas missed when we do hand washing are:

**FINGERS**

**AROUND FINGERNAILS**  
95 per cent of germs are found under the fingernails

**PALM**

**BETWEEN FINGERS**

**BACK OF HAND**

**HAND WASHING FACTS:**

**28%** of all York Region PSS workers surveyed do not wash their hands between services – remember to wash your hands.

**15 seconds** is how long it takes to wash your hands and prevent the spread of germs.

IPC GUIDEBOOK INFECTION PREVENTION IS ALWAYS IN STYLE

Hands may **LOOK** clean but **ARE** they?

**E. COLI** causes diarrhea

**HEPATITIS B** causes liver disease and can survive on surfaces for up to seven days

**FLU VIRUS** can survive on surfaces for up to 72 hours

**NOROVIRUS** can make you sick and cause vomiting and diarrhea

**WASHING YOUR HANDS** is the single and most effective way to prevent the spread of disease. Always wash your hands before, and if they become dirty while providing any service. Cover any cuts on your hands and wear gloves to prevent infection. Remember that when you sneeze, particles travel over three feet away at a speed of 150 km!

IPC GUIDEBOOK INFECTION PREVENTION IS ALWAYS IN STYLE

# Guidebook



## CLEANING & DISINFECTING

### ALL ABOUT DISINFECTING

Disinfectants are chemicals used on equipment, instruments and surfaces to kill different types of germs, but they do not kill spores.

Disinfectants are toxic to humans and other animal tissue. They are only meant for inanimate objects, for example: work stations, clippers, glass nail files, tweezers, etc.

Disinfection is not the same as sterilization. Remember, disinfection does not kill spores, where sterilization does kill spores and all living things.

For disinfecting to be done correctly, tools must be immersed in the disinfectant. This ensures that all surface areas of the tool (i.e. nooks and crannies) are in contact with the disinfectant for the required contact time.

*infection prevention*  
**always in style**

### ASK THE EXPERT:

**Q. DO I ALWAYS NEED TO DISINFECT MY TOOLS?**

**A. Yes.** Disinfectants are very powerful chemicals that kill bacteria, fungi and viruses. Disinfecting kills the disease-causing germs found on your tools/equipment/work surfaces. These germs can find their way to you and your clients, and cause infections.

**Q. I'VE HEARD VINEGAR IS A NATURAL DISINFECTANT; CAN I USE IT AT MY SHOP?**

**A. No!** Vinegar is great on salads, but not as a disinfectant. Vinegar does not kill the disease-causing germs found on your tools/equipment at your shop.

**Q. HOW DO I MAKE A DISINFECTING SOLUTION?**

**A.** Each disinfectant is different, which is why it is so important to read the label and follow the directions. Don't forget to properly disinfect your tools/equipment – they must be immersed in the disinfectant for the entire contact time.

**Q. WHAT IS CONTACT TIME?**

**A.** Contact time is the length of time required for the disinfectant to kill all the germs on your tools/equipment. Again, you need to read the product label to determine the length of time needed. The timing can vary from one minute to 30 minutes.

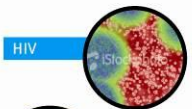
### REMEMBER:

IF YOU DO NOT FOLLOW THE RIGHT CONTACT TIME, YOUR TOOLS WILL NOT BE DISINFECTED.

- ▶ SOME MICRO-ORGANISMS ARE HARDER TO KILL THAN OTHERS, SO DIFFERENT LEVELS OF DISINFECTION ARE REQUIRED. THE TYPE OF GERM DETERMINES THE LEVEL OF DISINFECTION REQUIRED AND THE CONTACT TIME.
- ▶ DISINFECTANTS ARE CATEGORIZED AS HIGH, INTERMEDIATE OR LOW LEVEL DISINFECTION. THE LEVEL OF DISINFECTION REQUIRED DEPENDS ON WHAT THE TOOL OR INSTRUMENT IS BEING USED FOR.
- ▶ DISINFECTANTS ARE ONLY GOOD IF YOU FOLLOW THE MANUFACTURER'S INSTRUCTIONS IN PREPARATION AND CONTACT TIME. ALSO, WHEN IN DOUBT, ALWAYS CHOOSE THE HIGHER LEVEL OF DISINFECTANT.

### LEVELS OF DISINFECTION

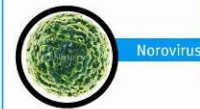
#### LOW LEVEL DISINFECTION



#### INTERMEDIATE LEVEL DISINFECTION



#### HIGHER LEVEL DISINFECTION



# Guidebook



## CLEANING & DISINFECTING

Our expert  
DISPELS  
THE MYTHS  
about  
disinfectants

**MYTH: DISINFECTING WIPES CAN BE USED TO CLEAN TOOL, EQUIPMENTS AND SURFACES.**

The disinfecting wipes sold in stores are for household use only and they cannot be used because they often dry before the adequate contact time is achieved. This means that the germs on the surface/area have not been killed. In addition, to properly disinfect tools and equipment they must be submerged in the disinfectant and by using a wipe you're not able to do this. Also, there is no indication on how much surface area can be disinfected with one wipe.

**MYTH: THE MORE BLEACH YOU SMELL, THE STRONGER THE SOLUTION AND THE MORE BACTERIA IT KILLS.**

Chlorine bleach has a very distinct odour which is unrelated to the strength of the product. The common bleach that we purchase in the store has a unique chemistry that is

derived from sodium chloride (common table salt) and does not form dioxins. Bleach does not contaminate groundwater because it does not survive sewage treatment (municipal treatment plants or septic systems).

**MYTH: VINEGAR AND BLEACH MIXED TOGETHER MAKE A STRONGER SOLUTION.**

**NO!** Never mix chemicals together and always follow the manufacturer's directions about using the chemical. Bleach combines with acids such as vinegar to release toxic chlorine gas which can give you a nasty chemical burn to your eyes and lungs. Always use the chemical for the use it was intended. Don't believe everything you read on the internet. If you have questions, contact the manufacturer directly.

infection prevention  
**always in style**

PREPARING  
HOUSEHOLD  
BLEACH  
as a  
Disinfectant

Level Required	How to Mix Bleach Solution
High-Level Disinfection	10 ml of bleach + 495 ml of water
1:50 dilution (1 part bleach to 49 parts water)	OR 2 tsp. of bleach + 2 cups of water
Intermediate-Level Disinfection	10 ml of bleach + 495 ml of water
1:50 dilution (1 part bleach to 49 parts water)	OR 2 tsp bleach with 5 cups of water
Low-Level Disinfection	5 ml of bleach + 2 1/2 litres of water
1:500 dilution (1 part bleach to 499 parts water)	OR 1 tsp bleach + 10 cups of water

**DISINFECTING TIPS**

- 1) CLEAN ALL SURFACES WITH SOAP AND WATER BEFORE YOU DISINFECT
- 2) RINSE ALL SURFACES WITH WATER BEFORE YOU DISINFECT
- 3) SOLUTION MUST BE MADE FRESH DAILY TO PRESERVE STRENGTH
- 4) HOUSEHOLD BLEACH SOLUTION IS 5.25 PER CENT SODIUM HYPOCHLORITE SOLUTION

# Guidebook

## INSTRUMENT DISINFECTION CHART

remember:

YOU MUST CLEAN WITH SOAP AND WATER BEFORE DISINFECTING

LEVEL OF DISINFECTION	WHEN TO USE	WHAT TO USE	APPROXIMATE CONTACT TIME	EXAMPLES OF ITEMS
Low-Level	Non-critical items that come in contact with skin. Items that do not ordinarily touch the clients. Can be used for disinfection of environmental surfaces and for routine housekeeping.	5-25% bleach 1:500 chlorine bleach solution 1 part bleach and 499 parts water = 100 ppm Quaternary ammonium Example: Lysol disinfectant, Barbicide 3% hydrogen peroxide Phenols	Less than 10 minutes  Follow manufacturer's instructions  10 minutes 10 minutes	<ul style="list-style-type: none"> <li>Combs and brushes</li> <li>Hair rollers</li> <li>Scissors</li> <li>Service trays</li> <li>Hairstyling stations</li> <li>Chairs</li> <li>Floors/walls</li> </ul>
Intermediate-Level	Semi-critical items that come in contact with non-intact skin or mucous membranes, but not intended to penetrate them.	5-25% bleach 1:50 chlorine bleach solution 1 part bleach and 49 parts water = 1000 ppm 70-90% isopropyl alcohol 70-90% ethyl alcohol	10 minutes 10 minutes	<ul style="list-style-type: none"> <li>Nippers, clippers, nail cutters, cuticle pushers</li> <li>Crochet hooks</li> <li>Metal/glass nail files</li> <li>Metal/glass paddle foot file</li> <li>Waxing</li> <li>Spatula</li> <li>Waxing</li> <li>Facial brushes</li> </ul>
High-Level	Critical items that penetrate the skin; instruments used for invasive procedures. Instruments that hold sterile items.	5-25% bleach 1:10 chlorine bleach solution 1 part bleach and 9 parts water = 5000 ppm 6% hydrogen peroxide Example: Virox 7% stabilized hydrogen peroxide	10 minutes  Follow manufacturer's instructions Follow manufacturer's instructions	<ul style="list-style-type: none"> <li>Razor blade handle/crede</li> <li>Footbaths</li> <li>Nippers, clippers, etc with blood contact</li> <li>Double looped comedones</li> </ul>

York Region Community and Health Services does not promote or contest the use of any brand named products listed. This is not an exhaustive list of all products sold; it only represents examples of some of the products used in personal service settings. This chart is designed to help you understand and find an acceptable disinfectant.



## CLEANING AND DISINFECTING FLOW CHART

YOU DO NOT HAVE TO SEE BLOOD OR BODY FLUIDS ON INSTRUMENTS FOR AN INFECTION TO OCCUR.



For more information on infection prevention and control or to speak with a Public Health Inspector call York Region Health Connection 1-800-361-5653, TTY 1-866-592-9933

CLEANING & DISINFECTING




# Guidebook



## Sharps containers

### GENERAL GUIDELINES



**WHAT ARE SHARPS? A SHARP IS ANY ITEM OR OBJECT THAT PENETRATES, PERFORATES OR PUNCTURES THE SKIN. EXAMPLES: DISPOSABLE RAZORS, NEEDLES, LANCETS, SCALPELS.**

**ABOUT SHARPS**

- Do not re-use or manipulate sharps
- Do not save needles or other sharps for future use on any person (even on the same client).
- Always handle used needles with care to avoid injuries during disposal.
- Never recap used needles

**SHARPS CONTAINERS:** All sharps must be disposed of in an approved sharps container, regardless of the quantity involved. If you dispose of the sharps in the garbage you will be putting someone else's life at risk for a potential exposure.

You may need several sharps containers located close to where services are provided. You do not want to walk across the room to dispose of a sharp because there is a greater risk of injury. Wall mounted sharps containers are preferred as they are more secure.

Containers must be:


- Puncture resistant
- Leak proof
- Colour coded
- Disposed of properly – do not throw out sharps or the container in regular garbage
- Discarded according to biomedical waste regulations
- Discarded when ¾ full
- Labelled with the universal Bio hazard symbol

**infection prevention always in style**

16 INFC GUIDEBOOK INFECTION PREVENTION IS ALWAYS IN STYLE

## test your knowledge about INFECTIONS

### QUIZ



#### BLOODBORNE INFECTIONS

**Hepatitis B is 100 times more contagious than the virus that causes AIDS.**

- Which virus, HIV, Hepatitis B or Hepatitis C is preventable with a vaccine?
  - Hepatitis C
  - HIV
  - Hepatitis B

If you answered c. **Hepatitis B** then you're correct. The Hepatitis B vaccine has been used in Canada for more than 30 years and is delivered in three doses.
- True or False: People with HIV, Hepatitis B and Hepatitis C show signs and symptoms of the disease right away.
 

**False:** People with HIV, Hepatitis B and Hepatitis C often look healthy for years before becoming ill. During this time, they carry the disease in their blood which is why it is important to clean and disinfect surfaces and equipment.
- How can your clients be exposed to a bloodborne infection?
  - Contaminated or work surface
  - Splash to mucous membranes with infected blood or body fluid
  - A cut or scrape from a contaminated instrument
  - All of the above

If you answered d you are correct. It is important to follow proper infection control practices so that you don't transmit bloodborne diseases to your clients.
- What is an example of a bloodborne disease?
  - Strep throat
  - Hepatitis A
  - Hepatitis B
  - All of the above

If you answered c – **Hepatitis B** you are correct. Hepatitis B is 100 times more contagious than the virus that causes AIDS. **Make the decision to protect yourself, get vaccinated against Hepatitis B.**

**infection prevention always in style**

15 INFC GUIDEBOOK INFECTION PREVENTION IS ALWAYS IN STYLE



# Outcomes

- Increase in IPAC knowledge
- Increase in compliance with MOHLTC *Infection Prevention and Control in Personal Service Settings Best Practice Document*
- Decrease in blood borne infections and other diseases of importance
- Overall change in behaviours among PSW's with respect to infection prevention and control