



Government of the Republic of Trinidad and Tobago

Ministry of Health



# OCCUPATIONAL HEALTH & DENTISTRY

## Guidelines for Infection Prevention and Control

JUNE 2020

3rd Edition





# TABLE OF CONTENTS

|       |                                                                                        |     |
|-------|----------------------------------------------------------------------------------------|-----|
|       | <b>Acknowledgements</b>                                                                | i   |
|       | <b>Preface</b>                                                                         | ii  |
|       | <b>Foreword</b>                                                                        | iii |
| 1     | Occupational health and safety                                                         | 1   |
| 1.1   | Purpose of risk management                                                             | 1   |
| 1.2   | Key statements                                                                         | 1   |
| 1.3   | Policy statements                                                                      | 2   |
| 2     | Compliance with infection prevention and control guidelines                            | 3   |
| 2.1   | Training                                                                               | 3   |
| 2.2   | Hierarchy of controls                                                                  | 4   |
| 2.2.1 | Administrative controls                                                                | 4   |
| 2.2.2 | Environmental/engineering controls                                                     | 4   |
| 2.2.3 | Personal Protective Equipment                                                          | 4   |
| 3     | Evaluation of Ill Healthcare Personnel                                                 | 5   |
| 4     | Pre-exposure screening and immunizations                                               | 7   |
| 4.1   | Immunization                                                                           | 7   |
| 5     | Post Exposure Prophylaxis (PEP)                                                        | 8   |
| 5.1   | Sharp injuries                                                                         | 9   |
| 5.1.1 | Post -exposure prophylaxis (PEP) FOR HIV infection: general recommendations on regimen | 11  |
| 5.2   | What Should I do If I have an occupational injury such as a Sharp injury               | 12  |
| 6     | Care for health workers exposed to the new coronavirus (COVID-19) in health facilities | 13  |
| 6.1   | Key considerations                                                                     | 13  |
| 6.2   | Glossary                                                                               | 13  |
| 6.3   | Care for health workers exposed to covid-19 in health facilities                       | 14  |
| 6.4   | Management of health workers exposed to covid-19                                       | 14  |
| 6.4.1 | Immunization against seasonal influenza                                                | 16  |
| 7     | Dentistry / Dental units                                                               | 17  |
| 7.1   | Objectives                                                                             | 17  |
| 7.2   | Key statements                                                                         | 17  |
| 7.3   | Policy statements                                                                      | 18  |
| 7.4   | Key recommendations in dental settings                                                 | 18  |
| 7.5   | Respiratory hygiene/cough etiquette                                                    | 18  |
| 7.6   | Dental health care personnel safety                                                    | 19  |
| 7.7   | Personal protective equipment                                                          | 19  |
| 7.8   | Safe injection practice                                                                | 20  |
| 7.9   | Environmental infection prevention and control                                         | 20  |
| 7.9.1 | Control of environmental contamination                                                 | 21  |
| 7.10  | Sharps safety                                                                          | 21  |
| 7.11  | Specific procedures in dental units                                                    | 22  |

|        |                                                                          |    |
|--------|--------------------------------------------------------------------------|----|
| 7.12   | Decontamination, cleaning and sterilization of instruments and equipment | 22 |
| 7.13   | Sterilization and disinfection of patient-care devices                   | 24 |
| 7.14   | Post-procedure cleaning and sterilization of instruments                 | 24 |
| 7.15   | Dental Laboratory                                                        | 24 |
| 7.15.1 | Working areas in a dental laboratory                                     | 26 |
| 7.16   | Education and training in infection prevention and control practices     | 26 |

## ANNEXES

|                                                                                         |    |
|-----------------------------------------------------------------------------------------|----|
| Annex                                                                                   | 27 |
| National Post-exposure prophylaxis                                                      | 27 |
| Form for self-monitoring or active monitoring of healthcare workers exposed to COVID-19 | 28 |
| References                                                                              | 29 |

## LIST OF TABLES

|                                                                                                                                                                              |    |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|
| Table 1 - Recommended work restrictions for health care personnel colonized/<br>exposed or infected with selected infectious agents                                          | 5  |
| Table 2 - Immunizations recommended for nonimmune health care personnel                                                                                                      | 7  |
| Table 3 - Management of an infectious disease exposure                                                                                                                       | 8  |
| Table 4 - Post exposure prophylaxis counselling of exposed HCW                                                                                                               | 8  |
| Table 5 - Methods of reducing percutaneous, mucous membrane, or non-intact skin exposure<br>to blood or potentially infectious body fluids                                   | 9  |
| Table 6 - Postexposure management to prevent Hepatitis B infection of health care personnel<br>after occupational percutaneous and mucosal exposure to blood and body fluids | 10 |
| Table 7 - Post Exposure prophylaxis for HIV                                                                                                                                  | 11 |
| Table 8 - Actions to take when a health worker has been exposed to COVID-19 in health facilities                                                                             | 14 |
| Table 9 - Classification of dental instruments                                                                                                                               | 22 |
| Table 10 - Summary of recommendations for Reprocessing instruments of dental health care                                                                                     | 23 |
| Table 11 - Dental procedures and preventive measures                                                                                                                         | 25 |
| Table 12 - Risk assessment at the workplace for HIV exposure                                                                                                                 | 27 |
| Figure 1 - Management flow for health workers exposed to COVID-19                                                                                                            | 15 |

# Acknowledgements

The Ministry of Health Trinidad and Tobago wishes to acknowledge:

While it is impossible to name everyone who participated in the meetings and workgroups during the review and update of the Manual, we wish to acknowledge the contributions of:

The Oversight Committee members representing the Pan American Health Organization/World Health Organization [PAHO/WHO], Ministry of Health.

The multidisciplinary team of health professionals for their valuable comments/suggestions.

PAHO/WHO for sponsoring the consultancy.

We would especially like to thank the Focal point – Dr. Rajeev P. Nagassar, Specialist Medical Officer Microbiology and Head of Department Microbiology and Member of the National Coordinating Committee to Combat Antimicrobial Resistance, for leading this initiative.

Members of the Multi-disciplinary team:

- Adana Stapleton – *NCRHA*
- Althea Sharpe Johnson – *TRHA*
- Arlene Wallace – *NWRHA*
- Bridgit Bellman-Cooper – *NCRHA*
- Carolyn Heeraman – *NWRHA*
- Cheryl Martyr – *NWRHA*
- Cindi Matthew-Payne – *ERHA*
- Darrel Jones – *NWRHA*
- Donette Hazel-Jack – *TRHA*
- Dr Arlana Kate Bissoon – *UWI*
- Dr Don Antonio Martin – *NCRHA*
- Dr Marlon Rampaul – *NCRHA*
- Dr Stanley Giddings - *UWI*
- Elizabeth Burke – *SWRHA*
- Farah Mohammed – *ERHA*
- Keisha Gomez – *NCRHA*
- Keston Daniel – *ERHA*
- Lima Harper – *ERHA*
- Madhura Manjunath – *NWRHA*
- Melissa Primus-Kerr – *NWRHA*
- Michelle Murray – *SWRHA*
- Michelle Ramnarine – *ERHA*
- Natalie Gibbs-Greenidge – *SWRHA*
- Natasha Samaroo – *NCRHA*
- Neisha Simon – *TRHA*
- Nicole Gokool – *NCRHA*
- Nicole Sydney – *NWRHA*
- Nirmala Boodram-Bridgelal – *NWRHA*
- Professor Patrick Akpaka – *UWI*
- Rajeev P. Nagassar – *ERHA*
- Reyma Worell-Steeple – *NCRHA*
- Roshnie Kisoosingh – *NWRHA*
- Shalini Pooransingh – *UWI*
- Simone Reid-DesVignes – *TRHA*
- Stacy Thomas – *SWRHA*

This manual was produced by the Principal Medical Officer - Institutions (Under the Office of the Chief Medical Officer), Ministry of Health of Trinidad and Tobago, in collaboration with The PAHO/WHO of Trinidad and Tobago.

Copyright © 2021, Ministry of Health, Government of the Republic of Trinidad and Tobago. All rights reserved. No part of this publication may be reproduced, distributed or transmitted in any form or by any means without the prior written permission of the Government of the Republic of Trinidad and Tobago.

# Preface

The Government of the Republic of Trinidad and Tobago through the Ministry of Health has implemented a comprehensive Health Sector Reform Programme. This Programme is aimed at improving the quality of health care by introducing new organizational structures and systems, re-engineering ineffective systems and shifting expenditure to health promotion and disease prevention initiatives.

In keeping with one of the main goals, which is to improve and maintain the quality of health care delivered to the population, the ministry has introduced a sector-wide comprehensive Continuous Quality Improvement [CQI] Programme. Key elements of the CQI Programme include Accreditation and Licensing; Monitoring and Audit; Training and Capacity Building; Risk Management; Quality Management Information Systems [QMIS]; Systems Re-engineering and Evaluation.

In the context of the accreditation and risk management systems of the Quality Programme, the Ministry of Health has introduced a structured programme for the prevention and control of infection since it maximizes patient outcomes and is part of the Ministry's strategy for providing safe, effective and efficient quality health services.

In Trinidad and Tobago, like many other countries in the world, increasing numbers of different organisms are developing resistance to greater numbers of available antibiotics. Increased global travel is bringing more persons into contact with diseases, which are incubating; additionally, there are greater numbers of persons in a state of immune suppression who are more susceptible to invasion by pathogens [organisms causing diseases] or those usually considered non- pathogenic.

It is also well recognized that poor infection prevention and control practices result in patient dissatisfaction, increases patient stay and overall costs including litigation. It is therefore imperative that a holistic approach be instituted to the prevention and control of infection in Trinidad and Tobago. To achieve this goal public and private sector partnership has become absolutely essential. It is also mandatory that all health care facilities implement the infection prevention and control policies and guidelines in order to reduce the risks and improve quality.

The scope of the 3rd Edition of the Infection Prevention and Control Policies and Guidelines for Healthcare Services has been updated in four guidelines:

- **Guideline 1 – Prevention and Control of Healthcare-associated infections**
- **Guideline 2 – Occupational safety and health**
- **Guideline 3 – Sterilization and Disinfection**
- **Guideline 4 – Environmental cleaning**
- **Guideline 5 – Healthcare-associated infections surveillance – To be released at a later date**

As Minister of Health, I give the assurance that patient safety is of utmost importance and that the necessary infrastructure and resources will be made available and I feel confident that you the health care professionals, managers, and support staff will ensure that the goals of the programme are achieved and maintained. We thank the Pan American Health Organization (PAHO) for partnering with us to achieve this revision of our manual.

---

**Chief Medical Officer**

---

**Minister of Health**

# Foreword

The Government of the Republic of Trinidad and Tobago through the Ministry of Health has as one of its goals, improvement in the quality of health care. In order to achieve this goal, the Ministry of Health has introduced a Risk Management System including the strengthening of programmes for the prevention and control of infection.

The Manual of Infection Prevention and Control Policies and Guidelines (first edition) outlined the policies and guidelines which must be implemented by all health care personnel in primary, secondary and tertiary health care environments in both public and private health care facilities.

Key areas of infection prevention and control such as epidemiology, isolation, standard precautions, disinfection and sterilization, waste management and risk management are addressed.

The manual was reviewed and updated in the second edition and is now reviewed updated and sectioned in this 3<sup>rd</sup> edition. The new manual is composed of four (4) sections or guidelines, to make it more user friendly.

We must thank the Members of the local committee named above and even those we have unintentionally omitted. The Pan American health Organization (PAHO) must be especially mentioned for their continued partnership in providing quality Health care.

This manual should be an integral component of the orientation process for all new employees and is recommended for use by the Human Resources Unit in the recruitment of staff for the Infection Prevention and Control Committee at the respective healthcare facility.

It is therefore mandatory that all health care personnel receive sensitization in the use of this Manual and diligently implement the policies and guidelines in order to minimize and control the occurrence of infection thereby improving the overall quality of health care delivery to the population.

---

**Chief Medical Officer**



# 1. OCCUPATIONAL HEALTH AND SAFETY

## 1.1 PURPOSE OF RISK MANAGEMENT

- Regulate facilities where work is carried out and to promote safe work practices to minimize the incidence of illness and injury experienced by employees.
- Certainty of compliance with Standard Precautions to reduce occupational exposure to HBV, HCV, and HIV and other bloodborne pathogens that employees may encounter in their workplace

## 1.2 KEY STATEMENTS

Healthcare workers are frequently exposed to infectious agents via sharp injuries (e.g., Hepatitis C virus [HCV], Hepatitis B virus [HBV], and human immunodeficiency virus [HIV]), direct patient care (e.g., respiratory viruses, gastrointestinal pathogens, and pertussis), and contaminated environments (e.g., *Clostridium difficile*).

To minimize the risk of acquiring an infectious disease, six key recommended practices should always be in place:

- proper training in infection control practices and sharp injuries prevention for HCW at initiation of health care practice and annually.
- immunization for preventable diseases with vaccines.
- evaluation of HCW who were exposed to communicable diseases for receipt of post exposure prophylaxis.
- adherence to standard precautions when providing patient care, especially appropriate hand hygiene before and after patient care.
- prompt institution of appropriate isolation precautions for patients with known or suspected communicable disease.
- proper use of personal protective equipment, such as face masks, respirators (N95 or FFP2), eye protection, and gowns when caring for patients with potentially communicable diseases.

For bloodborne pathogens such as Human Immunodeficiency Virus (HIV), Hepatitis B Virus (HBV), and Hepatitis C Virus (HCV), transmission in the workplace occurs through accidental exposure to blood (AEB), when in contact with blood or body fluids as a result of injury with a needle or any other sharp instrument, or via mucous membrane (eye, mouth), or contact with damaged skin (eczema, wounds).

## 1.3 POLICY STATEMENTS

- Departments/wards/units shall institute as many engineering and work practice controls as possible to eliminate or minimize employee exposure to blood, and body fluids.
- All health care workers should be trained about specific operating procedures pertinent to their work area, to prevent exposure to potentially contaminated blood or body fluids
- All supervisors should be responsible for informing health care workers of any special precautions pertinent to their area of work.
- All health care workers should follow engineering controls and comply with Standard Precautions and Work Practice Controls.
- All health care facilities should have in place Post-Exposure Prophylaxis (PEP) procedures. These procedures shall be consistent with procedures for other workplace accidents/incidents and shall utilize existing mechanism for treatment, compensation, rehabilitation, retraining and long-term follow-up of employees injured at work.

- All health care workers shall comply with these guidelines.
- All health care workers shall immediately report any incident related to contact with blood or other potentially infectious material sustained while in occupational duties, according to Post-Exposure Prophylaxis procedures. Supervisors are responsible for posting this procedure.
- Health care workers who experienced injuries and exposures to blood or other potentially infectious material shall be given first aid immediately after occurrence.
- HBV vaccine shall be offered at health care facility's expense, to all health care workers whose occupational tasks place them at risk of exposure to blood or other potentially infectious material.
- Susceptible HCW, including pregnant women, shall not care for patients with chickenpox, herpes zoster, or rubella.

## 2. COMPLIANCE WITH INFECTION PREVENTION & CONTROL GUIDELINES

Strategies aimed to eliminate or minimize exposure to blood borne pathogens must include:

- Training in infection prevention and control policies and guidelines including Standard Precautions.
- Appraisal of compliance with Standard Precautions
- Complying with the hierarchy of controls:
  - Administrative controls
  - Environmental/engineering controls
  - Personal Protective Equipment
  - Implementing appropriate housekeeping procedures
  - Issuing of personal protective equipment (PPE)
  - Establishment of an effective occupational health programme that includes immunization, post-exposure prophylaxis and medical surveillance.

### 2.1 TRAINING

- Essential for all health care workers receive. They should receive an initial and ongoing training in infection prevention and control to enable them to perform their duties safely.
- Health and safety training should ensure that workers know and understand the potential risks associated with health care facility waste, the value of immunization against the Hepatitis B virus, and the importance of using the personal protective equipment available to them.
- A goal of training is to enable health care workers anticipate and manage situations in which they may be exposed to infectious micro-organisms such as HIV, HCV or HBV.
- All healthcare workers should have access to appropriate professional counselling and follow-up services, after any possible and definite exposures to blood, and body fluids.
- Training employees in implementing the policy is critical to a successful health care facility waste management programme. A health care facility waste management policy is only effective if it is used daily, consistently and accurately.
- Orientation and in-service training programmes for new employees, as well as on-going in-service training for existing employees should be developed and implemented. Training should focus on all principles of health care facility waste management as discussed throughout this section. It also should highlight employee's roles and responsibilities with respect to the waste management programme.
- A health care facility waste management policy should include continuous monitoring of workers' health and safety to ensure that proper handling, treatment, storage, transport and disposal are being adhered to, and that appropriate preventive measures are being carried out.

## 2.2 HIERARCHY OF CONTROLS

### 2.2.1 ADMINISTRATIVE CONTROLS

- First priority in IPC strategies. They provide the infrastructure related to policies, regulations and procedures to prevent, detect, and control infections during health care. To be effective, IPC measures must be implemented at the first point of patient encounter and should be continued until patient is discharged from the facility.
- These controls take care of the implementation and facilitation of IPC precautions by health care workers and others involved in patient care. They include policies on the use of available supplies and PPE and policies and procedures for all facets of occupational health.

### 2.2.2 ENVIRONMENTAL/ENGINEERING CONTROLS

- Consider basic healthcare facility infrastructure to ease compliance of administrative controls. These controls address ensuring adequate environmental ventilation in all areas within a health-care facility, as well as adequate environmental cleaning. Both controls can help reduce the spread of some pathogens during healthcare.

### 2.2.3 PERSONAL PROTECTIVE EQUIPMENT

- Rational and consistent use of available PPE and appropriate hand hygiene reduce the spread of infection. Although use of PPE is the most visible control used to prevent the spread of infection, in the absence of effective administrative and engineering controls, use of PPE by itself has limited benefit.

The following practice controls in workplace are part of the Standard Precautions for blood-borne pathogens compliance guidelines:

- Eating, drinking, smoking, applying cosmetics, and handling contact lenses are prohibited in the work areas and/or work surfaces that carry an inherent potential for contamination.
- Food and drink must be stored in refrigerators, freezers, or cabinets specifically defined for that purpose, not to share spaces with clinical or laboratory supplies prone to be contaminated or be a source of contamination. Such storage requires clear labelling to avoid confusion.
- Hands and other skin surfaces contaminated with blood or other potentially infectious materials shall be washed immediately and thoroughly with soap and running water.
- Contaminated mucous membranes shall be washed thoroughly with water.
- Any HCW with open wounds or weeping skin rashes shall refrain from all direct patient care, potentially hazardous laboratory procedures and from handling patient-care equipment until the condition resolves. Cuts or abrasions shall be protected with a waterproof dressing and gloves prior to performing any procedure involving contact with blood and other potentially infectious material.
- Pregnant women shall be especially familiar with and strictly adhere to Standard Precautions. Infection in mother places the foetus at risk of acquiring the infection.

### 3. EVALUATION OF ILL HEALTHCARE PERSONNEL

HCW exposed to a communicable disease for which they are susceptible should be considered for work restrictions or furlough (Table 1). Infectious HCW have been the source for patient infection and the index case for outbreaks. HCW-to-patient transmission has been well documented for HIV, HBV, and HCV but has most commonly been reported with HBV. For this reason, infected HCP who perform invasive procedures should be evaluated by a special panel for the need for education, additional engineering controls, and/or work restrictions according to guidelines.

**Table 1 – Recommended work restrictions for health care personnel colonized / exposed or infected with selected infectious agents**

| Infection or Infectious Agent               | Exposed or Colonized                                                                                                                                 | Infected (Duration of Restrictions)                                                                                                                                                                                                                                                   |
|---------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Conjunctivitis (adenovirus)                 | Exposed; no restriction unless illness develops                                                                                                      | Restrict from patient contact and contact with the patient's environment (until discharge ceases)                                                                                                                                                                                     |
| Cytomegalovirus                             | No restriction                                                                                                                                       | No restriction                                                                                                                                                                                                                                                                        |
| Diarrheal diseases                          | No restriction unless illness develops                                                                                                               | Acute disease: exclude from duty (until >48–72 h after symptoms resolve)<br>Convalescent stage (Salmonella spp): restrict from care of high-risk patients and food handling (until symptoms resolve; consult local and state authorities for HCP/food handlers with Salmonella typhi) |
| Diphtheria                                  | Exposed: no restriction unless illness develops                                                                                                      | Exclude from duty (until antimicrobial therapy completed and 2 cultures obtained 24 h or more apart are negative)                                                                                                                                                                     |
| Hepatitis A                                 | Exposed: no restriction unless illness develops                                                                                                      | Restrict from patient contact, contact with patient's environment, and food handling (until 7 d after onset of jaundice)                                                                                                                                                              |
| Hepatitis B (chronic)                       | —                                                                                                                                                    | Restrictions based on review of only HCW who perform exposure-prone procedures by expert panel                                                                                                                                                                                        |
| Hepatitis C                                 | —                                                                                                                                                    |                                                                                                                                                                                                                                                                                       |
| Herpes simplex (genital)                    | —                                                                                                                                                    | No restriction                                                                                                                                                                                                                                                                        |
| Herpes simplex (hands; herpetic whitlow)    | —                                                                                                                                                    | Restrict from patient contact and contact with the patient's environment (until lesions heal)                                                                                                                                                                                         |
| Herpes simplex (orofacial)                  | —                                                                                                                                                    | Evaluate for need to restrict from care of high-risk patients                                                                                                                                                                                                                         |
| HIV                                         | —                                                                                                                                                    | Restrictions based on review of HCP who perform exposure-prone procedures by expert panel                                                                                                                                                                                             |
| Measles                                     | Exposed (susceptible HCW): exclude from duty (From the 5th day after 1st exposure through 21st day after last exposure and/or after rash appears)    | Exclude from duty (until 7 d after the rash appears)                                                                                                                                                                                                                                  |
| Meningococcal Infections                    | Exposed: no restriction unless illness develops<br>Colonized (unrelated to invasive case): no restriction                                            | Exclude from duty (until 24 h after start of effective therapy)                                                                                                                                                                                                                       |
| Methicillin-resistant Staphylococcus aureus | Colonized: no restrictions unless or ill or epidemiologically/molecular test linked to patient infections                                            | Allow to work provided lesions can be contained under bandage and clothes; if lesions on exposed area (e.g., hands/wrists, face/neck), exclude from duty (until lesions healed)                                                                                                       |
| Mumps                                       | Exposed (susceptible HCW): exclude from duty (from the 12th day after 1st exposure through 26th day after last exposure or after onset of parotitis) | Exclude from duty (until 9 d after onset of parotitis)                                                                                                                                                                                                                                |

| Infection or Infectious Agent              | Exposed or Colonized                                                                                                                                 | Infected (Duration of Restrictions)                                                                                                                                                                                                                                                                                           |
|--------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Pertussis                                  | Exposure (asymptomatic): no restriction unless develops illness (PEP recommended)<br>Exposed (symptomatic): per active disease                       | Exclude from duty (from beginning of catarrhal stage through 3rd week after onset of paroxysms or until 5 d after start of effective antimicrobial therapy)                                                                                                                                                                   |
| Rubella                                    | Exposed (susceptible HCP): exclude from duty (from 7th day after 1st exposure through 21st day after last exposure)                                  | Exclude from duty (until 5 d after rash appears)                                                                                                                                                                                                                                                                              |
| Group A streptococcus                      | Colonized: no restrictions unless or ill or epidemiologically/molecular test linked to patient infections                                            | Restrict from patient care, contact with patient's environment, or food handling (until 24 h after adequate treatment started)                                                                                                                                                                                                |
| Tuberculosis                               | Latent tuberculous infection: no restrictions                                                                                                        | Active pulmonary tuberculosis: exclude from duty (until proved noninfectious)                                                                                                                                                                                                                                                 |
| Varicella                                  | Exposed (susceptible): exclude from duty (from 10th day after 1st exposure through 21st day [27th day if varicella IG provided] after last exposure) | Exclude from duty (until all lesions dried and crusted)                                                                                                                                                                                                                                                                       |
| Zoster                                     | Exposed (susceptible): same as varicella                                                                                                             | Localized, in healthy HCP: Allow to work provided lesions can be contained under bandage and clothes; if lesions on exposed area (eg, hand/wrists, face/neck), exclude from duty (until lesions dried and crusted). Generalized or localized in immunosuppressed HCW: exclude from duty (until all lesions dried and crusted) |
| Viral respiratory tract infections (acute) | No restrictions unless illness develops                                                                                                              | Febrile: exclude from duty (until afebrile for >24 h)<br>Afebrile: exclude from care of immunocompromised patients (ie, patients cared for in a protected environment) (until afebrile for >24 h or 7 d since onset of symptoms, whichever is longer) – HCP should wear a mask providing care until symptom-free              |

- **RECORD KEEPING**

The employee completes the Accidents/Incidents and Spills Form (see Accidents/Incidents & Spills Form and (Appendix 5).

- **CONFIDENTIALITY**

As with all medical information, the information is confidential. Information is disclosed only with the health care worker's signed consent.

- **IMPORTANT LABORATORY MARKERS TO BE MONITORED**

- Haemoglobin
- Kidney and Liver Functions
- White Blood Cell Count: Total and Differentials.
- TB monitoring

Source: \* Ministry of Health, Trinidad & Tobago

## 4. PRE-EXPOSURE SCREENING AND IMMUNIZATIONS

All HCW should be screened and receive education considering measures to reduce the risk of acquiring infectious diseases. All information obtained should be kept in records (electronic database).

### 4.1 IMMUNIZATION

- It is recommended that all HCW be immune to mumps, measles, rubella, varicella, pertussis, and influenza, and protected against HBV. Depending on the vaccine preventable disease, immunity may be assured by several different measures (Table 2).
- HCW who are not immune should receive appropriate immunization(s) (Table 2). Even if HCW are considered immune to a vaccine-preventable disease transmitted by droplets (pertussis, invasive meningococcal infection, mumps, or rubella) or airborne route (varicella), they should wear a mask (don prior to entering the room) while providing care to a patient with one of these diseases because immunization is not 100% effective in preventing infection.

**Table 2 – Immunizations recommended for nonimmune health care personnel**

| Vaccine                               | Health Care Personnel                                                      | Comments                                                                                                                                                                                                                                                                                                               |
|---------------------------------------|----------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Mumps                                 | All (2 doses)                                                              | Provide as MMR                                                                                                                                                                                                                                                                                                         |
| Measles                               | All (2 doses)                                                              | Provide as MMR                                                                                                                                                                                                                                                                                                         |
| Rubella                               | All (1 dose)                                                               | Provide as MMR                                                                                                                                                                                                                                                                                                         |
| Varicella                             | All (2 doses)                                                              | —                                                                                                                                                                                                                                                                                                                      |
| Hepatitis B                           | HCW with potential exposure to blood or contaminated body fluids (3 doses) | —                                                                                                                                                                                                                                                                                                                      |
| Meningococcal (serogroups A, C, Y, W) | Clinical microbiologists (1 dose; booster every 5 y)                       | Use conjugate vaccine for HCP 18–54 y of age and polysaccharide vaccine for HCW over 55 y of age                                                                                                                                                                                                                       |
| Meningococcal (serogroup B)           | Clinical microbiologists (2 doses)                                         | —                                                                                                                                                                                                                                                                                                                      |
| Tdap                                  | All (1 dose; no boosters recommended)                                      | Especially important for HCP who have contact with children                                                                                                                                                                                                                                                            |
| Influenza                             | All (1 dose each year)                                                     | HCW who care for severely immunocompromised persons who require care in a protected environment should receive IIV or RIV; HCW who receive LAIV should avoid providing care for severely immunocompromised persons (ie, persons receiving care in “protected” hospital unit, such as BMTU) for 7 d after immunization. |

Abbreviations: BMTU: bone marrow transplant unit; IIV: inactivated influenza vaccine; RIV: recombinant influenza vaccine; Tdap: Tetanus toxoid, diphtheria and acellular pertussis. Accessed from: DJ Weber, WA Rutala. Occupational Health Update. Infect Dis Clin N Am 30(2016) 729-757.

## 5. POST EXPOSURE PROPHYLAXIS (PEP)

At any time HCWs are exposed to blood or body fluids in their workplace, percutaneously, through ocular conjunctiva, mucous - membranes or non-intact skin, the need for postexposure prophylaxis should be evaluated immediately. Decisions to administer postexposure prophylaxis should be based on the HBsAg status of the source patient, laboratory-based tests to determine the possibility of transmission of HIV, or HCV, and the vaccination history and vaccine-response status of the exposed HCP.

To guide a proper approach of an HCW potentially exposed to an infectious agent, a well-defined hospital protocol should be in place including all considerations included in Table 3. The need of proper counselling is paramount to every HCW exposed, to an infectious agent and adequate information is to be provided in case prophylaxis is offered (Table 4).

Table 3 – Management of an infectious disease exposure

### Management of an infectious disease exposure

1. Obtain name, medical record number, and location of source case
2. Determine if source has an infection or is infectious
3. Determine if transmission of infection is possible
4. Determine if HCW is susceptible
5. Determine if post exposure prophylaxis is available and needed
6. Consider other options of prophylaxis is available if HCW has a contraindication to regular prophylaxis
7. Administer prophylaxis with informed consent
8. Arrange follow up of HCW after prophylaxis is applied
9. Keep records of all of the above

Table 4 – Post exposure prophylaxis counselling of exposed HCW

### Post exposure prophylaxis counselling of exposed HCW

#### INFORMATION FOR HCW EXPOSED TO AN INFECTIOUS AGENT

- Risk of acquiring the infectious disease
- Risk of transmitting to patients, other HCW, or contacts any infection that is acquired
- Methods of preventing transmission of infection to other patients
- Work restrictions if needed
- Recommended follow up

#### INFORMATION FOR HCW WHO ARE OFFERED PROPHYLAXIS

- Need of prophylaxis
- Alternative methods of prophylaxis if regular method is contraindicated
- Degree of protection provided by the treatment
- Potential side effects of therapy
- Safety laboratory tests (if recommended)
- Known risks of infection if prophylaxis is refused by HCW



## 5.1 SHARP INJURIES

The incidence of injuries by needlestick and sharps has been greatly diminished by advance in education, needle disposal, engineering changes and personnel protection, regular training and monitoring should be always in place for HCW to improve skills and stick to proper handling of devices. Methods of reducing exposure to contaminated blood or body fluids are listed in Table 5.

**Table 5 – Methods of reducing percutaneous, mucous membrane, or non-intact skin exposure to blood or potentially infectious body fluids**

### **Methods of reducing percutaneous, mucous membrane, or non-intact skin exposure to blood or potentially infectious body fluids**

Strict adherence to Standard Precautions (specially hand hygiene and use of PPE)

Availability of safety engineered devices (needles, syringes, scalpels, etc.)

Use of double gloves in surgical procedures with increased risk of glove puncture

Use of blunted surgical needles, when possible

Work practice controls to reduce risk of injuries (v.g. eliminate recapping needles, use of a tray to pass sharp instruments, prompt and safe discard of used sharp instruments)

Puncture resistant sharp disposal units

Discharge HCW with exudative lesions or weeping dermatitis on exposed body areas from providing direct patient care.

Enhanced education and training on proper use of safety engineered devices.

### • POST-EXPOSURE PROPHYLAXIS FOR HBV INFECTION: GENERAL RECOMMENDATIONS ON REGIMEN

HBV immunization prior to beginning direct patient care of all HCW with potential blood or body fluid exposure is mandatory to prevent health care–associated HBV infection. All HCW should know their immune response to vaccination. All HCW immunized in training or at initiation of patient contact, should have an anti-HBs quantitative titer drawn 1 to 2 months after the last dose of vaccine.

HCW with greater than or equal to 10 mIU/mL anti-HBs are considered immune for life. HCW who do not respond adequately should be reimmunized with 3 additional doses of vaccine and tested for immunity 1 to 2 months after the last (6th dose). HCW who have not responded adequately should be tested for HBsAg. Non-responders to 6 doses of vaccine should be counseled to return to report any exposures to blood or body fluids because they can receive prophylaxis with HBIG (Table 6).

**Table 6 – Postexposure management to prevent Hepatitis B infection of health care personnel after occupational percutaneous and mucosal exposure to blood and body fluids**

| Postexposure management to prevent Hepatitis B infection of health care personnel after occupational percutaneous and mucosal exposure to blood and body fluids |                        |                         |                           |                       |                                |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|-------------------------|---------------------------|-----------------------|--------------------------------|
| HCW Status                                                                                                                                                      | Postexposure Testing   |                         | Post exposure prophylaxis |                       | Postvaccination                |
|                                                                                                                                                                 | Source Patient (HBsAg) | HCW Testing (Anti-HBs)  | HBIG <sup>a</sup>         | Vaccination           | Serologic Testing <sup>b</sup> |
| Documented responder <sup>c</sup> after complete series (3 or more doses)                                                                                       | No action needed       |                         | No action needed          |                       | No action needed               |
| Documented Non-responder <sup>d</sup> after 6 doses                                                                                                             | Positive/unknown       | — <sup>e</sup>          | HBIGx2 separated by 1 mo  | —                     | No                             |
|                                                                                                                                                                 | Negative               | No action needed        | No action needed          |                       | No action needed               |
| Response unknown after 3 doses                                                                                                                                  | Positive/unknown       | <10 mIU/mL <sup>e</sup> | HBIGx1                    | Initial revaccination | Yes                            |
|                                                                                                                                                                 | Negative               | <10 mIU/mL              | None                      | —                     | —                              |
|                                                                                                                                                                 | Any                    | Greater than 10 mIU/mL  |                           | No action needed      | No action needed               |
| Unvaccinated/incompletely vaccinated or vaccine refusers                                                                                                        | Positive/unknown       | — <sup>e</sup>          | HBIGx1                    | Complete vaccination  | Yes                            |
|                                                                                                                                                                 | Negative               | —                       | None                      | Complete vaccination  | Yes                            |

<sup>a</sup> HBIG should be administered intramuscularly as soon as possible after exposure when indicated. The effectiveness of HBIG when administered greater than 7 days after percutaneous, mucosal, or nonintact skin exposures is unknown. HBIG dosage is 0.06 mL/kg.

<sup>b</sup> Should be performed 1 to 2 months after the last dose of the HepB vaccine series (and 4–6 months after administration of HBIG to avoid detection of passively administered anti-HBs) using a quantitative method that allows detection of the protective concentration of anti-HBs (10 mIU/mL).

<sup>c</sup> A responder is defined as a person with anti-HBs 10 mIU/mL after 3 doses of Hep B vaccine.

<sup>d</sup> A non-responder is defined as a person with anti-HBs less than 10 mIU/mL after 6 doses of Hep B vaccine.

<sup>e</sup> HCP who have anti-HBs less than 10 mIU/mL, or who are unvaccinated or incompletely vaccinated, and sustain an exposure to a source patient who is HBsAg positive or has unknown HBsAg status, should undergo baseline testing for HBV infection as soon as possible after exposure, and follow-up testing approximately 6 months later. Initial baseline tests consist of total anti-HBc; testing at approximately 6 months consists of HBsAg and total anti-HBc.

From Schillie S, Murphy TV, Sawyer M, et al; Centers for Disease Control and Prevention. CDC guidance for evaluating health-care personnel for hepatitis B virus protection and for administering postexposure management. MMWR Recomm Rep 2013;62(RR-10):1–19

## 5.1.1 POST -EXPOSURE PROPHYLAXIS (PEP) FOR HIV INFECTION: GENERAL RECOMMENDATIONS ON REGIMEN

Table 7 gives an overview of current recommendations governing the use of post exposure prophylaxis to prevent HIV infection in individuals who may have been exposed to HIV, according to the type of exposure and the HIV status of the person who is the source of exposure.

**Table 7 – Post Exposure prophylaxis for HIV**

| Exposure type                            | Patient condition                                                                                                                                       |                                                   |
|------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------|
|                                          | HIV positive                                                                                                                                            | Unknown HIV status                                |
| <b>Percutaneous:<br/>more severe (1)</b> | Emtricitabine (FTC) + Tenofovir (TDF) 200mg-0300mg. One (1) tablet Once Daily (od) or Lopinavir + Ritonavir 400mg/100mg. One (1) table twice (2) daily. | <b>Consider population or subgroup prevalence</b> |
| <b>Percutaneous:<br/>less severe (3)</b> | Emtricitabine (FTC) + Tenofovir (TDF) 200mg-0300mg. One (1) tablet Once Daily (od) or Lopinavir + Ritonavir 400mg/100mg. One (1) table twice (2) daily. | <b>Do not offer PEP</b>                           |
| <b>Sexual</b>                            | Emtricitabine (FTC) + Tenofovir (TDF) 200mg-0300mg. One (1) tablet Once Daily (od) or Lopinavir + Ritonavir 400mg/100mg. One (1) table twice (2) daily. | <b>Consider population or subgroup prevalence</b> |
| <b>Splash (4): more<br/>Severe (5)</b>   | Emtricitabine (FTC) + Tenofovir (TDF) 200mg-0300mg. One (1) tablet Once Daily (od) or Lopinavir + Ritonavir 400mg/100mg. One (1) table twice (2) daily. | <b>Consider population or subgroup prevalence</b> |
| <b>Splash: less severe (6)</b>           | <b>Post-exposure prophylaxis is not recommended, but a two-drug regimen may be offered on request</b>                                                   | <b>Do not offer PEP</b>                           |

Negative HIV status: do not offer post-exposure prophylaxis if there is no risk that the source person is in the window period. The window period is a period of several weeks in which newly infected people do not produce enough HIV antibodies to give a positive result in most standard tests for HIV infection. An HIV test conducted during this first stage of HIV infection is likely to give a negative result. However, at this time the virus is developing in the body and can be transmitted to others. For HIV, the window period is about 22 days.

- 1) Examples include injury with a large hollow-bore needle, a deep puncture and contact with visible blood on a device or a needle used in artery or vein.
- 2) If an HIV-positive source has known or suspected resistance to antiretroviral therapy or if the background prevalence of antiretroviral therapy resistance in the community is more than 15%, three drugs (two nucleoside reverse-transcriptase inhibitors plus a protease inhibitor) should be offered.
- 3) Examples include injury with a small-bore or solid needle and a superficial injury.
- 4) Includes exposure to non-genital mucous membranes or to non-intact skin.
- 5) Examples include exposure to a large volume of blood or semen.
- 6) Examples include exposure to a smaller volume of blood or semen or to less infectious fluid (such as cerebrospinal fluid).

Source: Joint WHO/ILO guidelines on post-exposure prophylaxis (PEP) to prevent HIV infection, 2007 adapted from: Panlilio AL et al. Updated U.S. Public Health Service guidelines for the management of occupational exposures to HIV and recommendations for post-exposure prophylaxis. Morbidity and Mortality Weekly Report (MMWR), 2005, 54(No. RR-09):1–17.

## 5.2 WHAT SHOULD I DO IF I HAVE AN OCCUPATIONAL INJURY SUCH AS A SHARP INJURY

- 1) First report the incident to your supervisor
- 2) Go directly to Accident and Emergency in Hospital or to a designated facility in Primary care
- 3) Report the incident to the Occupational Health and Safety Department
- 4) Report the incident to Infection Prevention and control
- 5) Ensure that you are evaluated and followed up by a physician
- 6) Fill out an occupational exposure to blood borne pathogens report form
- 7) If the injury is not one involving blood borne pathogens, fill out an accidents/Incidents and spills report form
- 8) Ensure you are counselled on your blood tests, if blood is taken

## 6. CARE FOR HEALTH WORKERS EXPOSED TO THE NEW CORONAVIRUS (COVID-19) IN HEALTH FACILITIES

### 6.1 KEY CONSIDERATIONS

- In December 2019, a new coronavirus (SARS-CoV-2) was identified as the causative agent of a severe acute respiratory disease (COVID-19) in Wuhan, China. The virus spread to different countries and the World Health Organization (WHO) declared a pandemic on 11 March 2020.
- According to current evidence, the COVID-19 virus is transmitted among people through close contact and droplets, and airborne transmission can occur during aerosol-generating procedures (AGPs).
- **Aerosol-generating procedures (AGPs)** play a key role in spread of the disease, as do contaminated hands (of health workers), surfaces, and fomites. This chain can be interrupted with proper use of respirators by all health professionals during AGPs and with hand hygiene following WHO's "5 Moments."
- Transmission of COVID-19 to health professionals is associated with handling and caring for patients with COVID-19 and can occur and be amplified by noncompliance with standard precautions, based on transmission mechanisms, especially in healthcare settings.
- As of the date of this publication, the following precautions are recommended for care of patients with suspected or confirmed COVID-19:
  - Precautions for any suspected or confirmed COVID-19 case: **standard + contact + droplet transmission precautions.**
  - Precautions for any suspected or confirmed COVID-19 case and AGPs: **standard + contact + airborne transmission (aerosols or droplet nuclei) precautions.**

### 6.2 GLOSSARY

- **Active monitoring:** monitoring, by health workers themselves, of respiratory signs and symptoms, as well as fever, with active reporting to the health authorities or to the hospital's occupational health authorities regarding their health status or following local regulations (Annex).
  - **Acute respiratory illness:** clinical syndrome characterized by fever and at least one sign or symptom such as cough (with or without sputum production) or difficulty breathing. With COVID-19, patients can present nonspecific symptoms, such as fatigue, loss of appetite, malaise, muscle pain, sore throat, shortness of breath, stuffy nose, or headache. On rare occasions, patients can also present diarrhea, nausea, and vomiting. Cases of loss of sense of smell were described.
  - **High-risk exposure:** close contact with a case of COVID-19 in the community or in the home; providing direct care to a COVID-19 patient (physical examination, nursing care, carrying out AGPs, airway sampling) or contact with bodily fluids from COVID-19 cases or with a contaminated environment without proper use of personal protective equipment (PPE), or not performing hand hygiene when providing patient care.
  - **Low-risk exposure in health services:** providing direct care to someone with suspected or confirmed COVID-19, following recommendations for use of PPE in different clinical activities.
  - **Self-monitoring:** monitoring, by health workers themselves, of respiratory signs and symptoms, as well as fever, when exposed to risk of COVID-19 infection in the health facility. Health professionals should notify the health service where they work or follow local regulations (Annex).
- Aerosol-generating procedures (AGPs) include the following: positive pressure ventilation (BiPAP and CPAP), endotracheal intubation, airway suction, high-frequency oscillatory ventilation, tracheostomy, thoracic physiotherapy, nebulizer treatment, sputum induction, bronchoscopy, and autopsy.
- † To obtain the most up-to-date information for COVID-19 infection prevention and control, refer to: <https://www.who.int/emergencies/diseases/novel-coronavirus-2019/technical-guidance>.

## 6.3 CARE FOR HEALTH WORKERS EXPOSED TO COVID-19 IN HEALTH FACILITIES

- Health professionals should be evaluated by a medical professional before being given sick leave. This should also be reported, according to the procedures of the facility’s occupational health service. Table 8 presents the actions to take when a health worker has been exposed to COVID-19 in health facilities.
- Health workers must take standard precautions when returning to the health service:
  - Always perform hand hygiene when caring for patients.
  - Rational and proper use of PPE.
  - Safe handling of sharps.
  - Use of sterile medical equipment.
  - Keeping the hospital environment clean.
  - Proper management of hospital waste.
- Ensure rational and proper use of PPE: proper donning and doffing of PPE because of risk of contamination. If disposable equipment is used (e.g., single-use masks, gloves, or face shields), discard it in the proper place and wash your hands correctly; never reuse disposable materials.

## 6.4 MANAGEMENT OF HEALTH WORKERS EXPOSED TO COVID-19

Table 8 – Actions to take when a health worker has been exposed to COVID-19 in health facilities

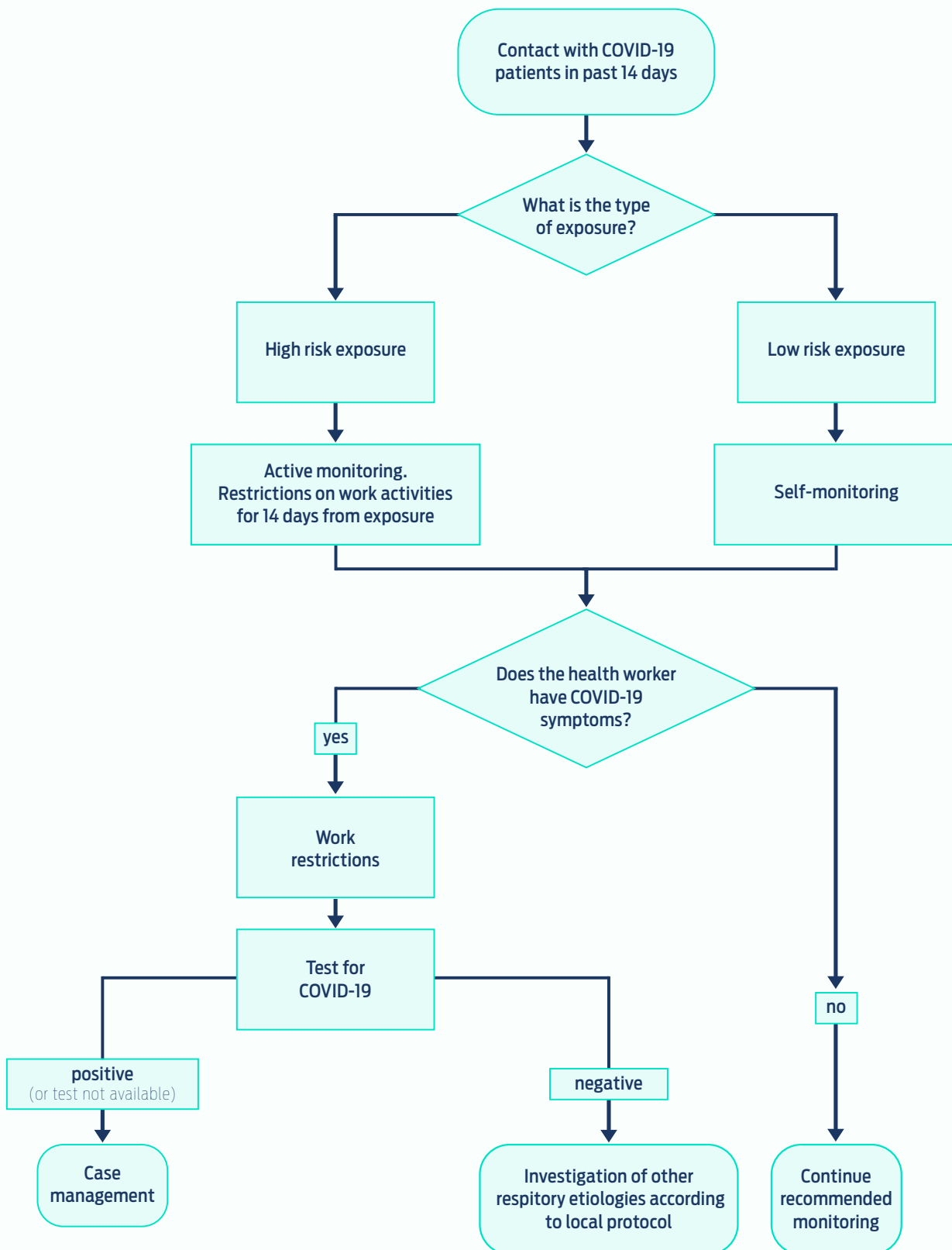
| Exposure risk                                                                      | Health status | Actions                                                                                                                                                            |                                                                                                                                                 |
|------------------------------------------------------------------------------------|---------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                    |               | Sick leave from work                                                                                                                                               | Surveillance / Monitoring of signs and symptoms                                                                                                 |
| Health worker with low-risk exposure in health facilities                          | Asymptomatic  | Not indicated.                                                                                                                                                     | Monitor appearance of respiratory symptoms and/or fever; self-monitoring. Seek medical care if signs and symptoms appear. Report to supervisor. |
| Health worker with high-risk exposure to a COVID-19 patient in the health service. | Asymptomatic  | Indicated. Stop working for 14 days from last exposure.                                                                                                            | Monitor appearance of respiratory symptoms or fever. Active monitoring. Screen if signs and symptoms appear. Home quarantine. (b)               |
| Health worker is a contact of someone with confirmed COVID-19 at home              | Asymptomatic  | Indicated. Stop working for 14 days from last exposure.                                                                                                            | Monitor appearance of respiratory symptoms or fever. Active monitoring. Screen if signs and symptoms appear. Home quarantine.                   |
| Health worker with low- or high-risk exposure in health facilities or at home      | Symptomatic   | Indicated. Stop working until remission of symptoms and two negative PCRs 24 hours apart. If PCR testing is not available, 7 days after remission of symptoms. (b) | Clinical case management (c) according to local protocols. (a)                                                                                  |

**Comments** (a) Except for pregnant women, people over 60 years of age, and people with diseases that cause current immunosuppression or people with decompensated chronic diseases, who should be evaluated by the attending physician and by the workplace physician. (b) Restrict contact between health workers and immunocompromised patients until 14 days following remission of symptoms. For more information on quarantine, consult: *World Health Organization. (2020). Considerations for quarantine of individuals in the context of containment for coronavirus disease (COVID-19): interim guidance, 19 March 2020. World Health Organization. <https://apps.who.int/iris/handle/10665/331497>. License: CC BY-NC-SA 3.0 IGO.* (c) For more information on clinical management of COVID-19, consult <https://www.who.int/emergencies/diseases/novel-coronavirus-2019/technical-guidance/patient-management>.

‡ For the sequence for donning and doffing of PPE, consult the infographics at: <https://www.paho.org/en/topics/coronavirus-infections/coronavirus-disease-covid-19/covid-19-communication-materials>.

Figure 1 presents the management flow for health workers exposed to COVID-19. This should be used together with Table 1 and the Annex.

Figure 1 – Management flow for health workers exposed to COVID-19



## 6.4.1 IMMUNIZATION AGAINST SEASONAL INFLUENZA

---

- Health workers are a priority group for vaccination against seasonal influenza. This contributes to individual protection, maintaining health services operations, and reducing transmission of influenza virus to the most vulnerable patients, including COVID-19 patients.
- The occupational health department should organize vaccination of health workers against influenza and other diseases according to the country's recommended vaccination schedule.



## 7. DENTISTRY / DENTAL UNITS

### 7.1 OBJECTIVES

- Regulate Dental units to promote safe work practices to minimize the incidence of illness and injury experienced by employees.
- Obtain a high degree of certainty in compliance with Standard Precautions to reduce occupational exposure to HBV, HCV, and HIV and other bloodborne pathogens that employees may encounter in their workplace

### 7.2 KEY STATEMENTS

- Dental care workers are exposed to several occupational hazards, that range from toxicity to chemicals routinely used in dentistry, threat of cross infection in the dental clinic, to muscle-skeletal diseases due to sub-optimal working posture. Awareness of these occupational hazards and implementation of preventive strategies are necessary to provide a safe practice environment.
- Dental patients and health care workers may be exposed to a variety of micro-organisms via blood, oral or respiratory secretions. These micro-organisms may include cytomegalovirus, Hepatitis B Virus (HBV), Hepatitis C Virus (HCV), Herpes Simplex Virus Types 1 and 2, Human Immunodeficiency Virus (HIV), Mycobacterium Tuberculosis, Staphylococci, Streptococci, and other virus and bacteria, especially those that infect the upper respiratory tract.
- Current epidemiological data clearly indicate that the risk of oral healthcare professionals acquiring infectious diseases when providing dental care can be minimized if recommended infection prevention and control practices are included regularly as part of their working routine.
- Adherence to Standard Precautions is a core element to reduce the risk of infection transmission in healthcare settings. These precautions must be in place always, regardless of a known or unknown condition of infection carriage by the patient.
- Infections may be transmitted in the dental clinic and dental laboratory through several routes, namely:
  - Direct contact with blood, oral fluids or other secretions
  - Indirect contact with contaminated instruments, clinic equipment, or environmental surfaces
  - Airborne contaminants from droplet spatter or aerosols of oral and respiratory fluids
- Principal means of limiting contamination by droplets, spatters, and aerosols include:
  - Strict adherence to Standard Precautions
  - Proper patient positioning
  - Appropriate use of rubber dams
  - Avoiding contact with objects such as charts, telephones, etc. during patient treatment.
  - Using high-velocity air evacuation

## 7.3 POLICY STATEMENTS

- **Standard Precautions** Shall be accomplished in the dental unit and laboratory (see Section Standard Precautions).
- **Hand hygiene** for routine dental examinations and nonsurgical procedures, use water and plain soap (hand washing) or antimicrobial soap (hand antiseptics) specific for health care settings or use an alcohol-based hand rub. If alcohol-based hand rubs are performed for hand hygiene in health care settings, soap and water should be used when hands are visibly soiled (e.g., dirt, blood, body fluids).
- For surgical procedures<sup>1</sup>, perform a surgical hand scrub before putting on sterile surgeon's gloves. For all types of hand hygiene products, follow the product manufacturer's label for instructions.

## 7.4 KEY RECOMMENDATIONS IN DENTAL SETTINGS

- Perform hand hygiene
  1. before touching a patient
  2. before clean / aseptic procedure
  3. after body fluid exposure risk
  4. after touching a patient
  5. after touching patient surroundings

Adapted from WHO Guidelines on Hand Hygiene in Health Care: A Summary. <https://www.who.int/gpsc/5may/dental-care.pdf?ua=1>

## 7.5 RESPIRATORY HYGIENE/COUGH ETIQUETTE

- Implement measures to contain respiratory secretions in patients and accompanying individuals who have signs and symptoms of a respiratory infection, beginning at point of entry to the facility and continuing throughout the visit.
- Post signs at entrances with instructions to patients with symptoms of respiratory infection to -
  - Cover their mouths/noses when coughing or sneezing.
  - Use and dispose of tissues.
  - Perform hand hygiene after hands have been in contact with respiratory secretions.
  - Provide tissues and no-touch receptacles for disposal of tissues.
  - Provide resources for performing hand hygiene in or near waiting areas.
  - Offer masks to coughing patients and other symptomatic persons when they enter the dental setting.
  - Provide space and encourage persons with symptoms of respiratory infections to sit as far away from others as possible. If available, facilities may wish to place these patients in a separate area while waiting for care.
- Educate DHCP on the importance of infection prevention measures to contain respiratory secretions to prevent the spread of respiratory pathogens when examining and caring for patients with signs and symptoms of a respiratory infection.

## 7.6 DENTAL HEALTH CARE PERSONNEL SAFETY

- A written policy should be in practice regarding immunizing DHCP, including a list of all required and recommended immunizations for dental HCP (e.g., hepatitis B, MMR-measles, mumps, and rubella- varicella (chickenpox), Tdap (tetanus, diphtheria, pertussis).
- All dental HCP should be screened for tuberculosis (TB) upon hire regardless of the risk classification of the setting.
- Referral arrangements should be in place to qualified health care professionals (e.g., occupational health program of a hospital, educational institutions, health care facilities that offer personnel health services) to ensure prompt and appropriate provision of preventive services, occupationally related medical services, and postexposure management with medical follow-up.
- Well-defined policies concerning contact of personnel with patients when personnel have potentially transmissible conditions, must be developed and known by all HCP.

## 7.7 PERSONAL PROTECTIVE EQUIPMENT

- Provide enough and appropriate PPE and ensure it is accessible to dental healthcare personnel.
- Educate all DHCP on proper selection and use of PPE.
- Wear gloves whenever there is potential for contact with blood, body fluids, mucous membranes, non-intact skin or contaminated equipment.
- Do not wear the same pair of gloves for the care of more than one patient.
- Do not wash gloves. Gloves cannot be reused.
- Perform hand hygiene immediately after removing gloves.
- Wear protective clothing that covers skin and personal clothing during procedures or activities where contact with blood, saliva, or other potentially infectious materials is anticipated.
- Wear mouth, nose, and eye protection during procedures that are likely to generate splashes or spattering of blood or other body fluids.
- Remove PPE before leaving the work area.
- Gloves: Non-sterile gloves are appropriate for examination and non-surgical procedures. Gloves are for single use, discarding them after use.
- Fluid impervious or surgical masks: Whenever working near a patient who is coughing, or if procedure generates aerosols.
- Protective eye wear/face shield: When preparing a tooth with high-speed hand-pieces. When polishing a crown. Face shields should be changed when necessary. If dentist or staff has acne or dermatitis.
- Protective clothing (gowns, aprons, laboratory coats, clinic jackets): Anticipated soiling of clothing with blood or other body fluids. Protective clothing shall be worn when entering office and removed when leaving office.
- Reusable protective clothing shall be washed separately when visibly soiled or penetrated by fluids, and at least daily, using a normal laundry cycle.
- Disposal of personal protective equipment – Protective garments and devices (including gloves, masks, eye and face protections) shall be removed before personnel exit areas of the dental office used for laboratory or patient care activities.

## 7.8 SAFE INJECTION PRACTICE

- Safe injection practices are a set of measures dentists should follow to perform injections in the safest possible manner to protect patients. Handling parenteral medications when administering local anesthesia, in which needles and cartridges containing local anesthetics are used for one patient requires that dental cartridge syringe must be cleaned, and heat sterilized between patients.
- Unsafe practices that have led to patient harm include:
  - use of single syringe—with or without the same needle—to administer medication to multiple patients,
  - reinsertion of a used syringe—with or without the same needle—into a medication vial or solution container (e.g., saline bag) to obtain additional medication for a single patient and then using that vial or solution container for subsequent patients.
  - preparation of medications near contaminated supplies or equipment.
- Prepare injections using aseptic technique in a clean area.
- Disinfect the rubber septum on a medication vial with alcohol before piercing.
- Do not use needles or syringes\* for more than one patient (this includes manufactured prefilled syringes and other devices such as insulin pens).
- Medication containers (single and multidose vials, ampules, and bags) are entered with a new needle and new syringe, even when obtaining additional doses for the same patient.
- Use single-dose vials for parenteral medications when possible.
- Do not use single-dose (single-use) medication vials, ampules, and bags or bottles of intravenous solution for more than one patient.
- Do not combine the leftover contents of single-use vials for later use.
- The following apply if multidose vials are used:
  - Dedicate multidose vials to a single patient whenever possible.
  - If multidose vials will be used for more than one patient, they should be restricted to a centralized medication area and should not enter the immediate patient treatment area (e.g., dental operatory) to prevent inadvertent contamination.
  - If a multidose vial enters the immediate patient treatment area, it should be dedicated for single-patient use and discarded immediately after use.
  - Date multidose vials when first opened and discard within 28 days unless the manufacturer specifies a shorter or longer date for that opened vial.
  - Do not use fluid infusion or administration sets (e.g., IV bags, tubings, connections) for more than one patient.

## 7.9 ENVIRONMENTAL INFECTION PREVENTION AND CONTROL

- Establish policies and procedures for routine cleaning and disinfection of environmental surfaces in dental health care settings.
- Use surface barriers to protect clinical contact surfaces, particularly those that are difficult to clean (e.g., switches on dental chairs, computer equipment) and change surface barriers between patients.
- Clean and disinfect clinical contact surfaces that are not barrier-protected with an EPA-registered hospital disinfectant after each patient. Use an intermediate-level disinfectant (i.e., tuberculocidal claim) if visibly contaminated with blood.

- Select EPA-registered disinfectants or detergents/disinfectants with label claims for use in health care settings.
- Follow manufacturer instructions for use of cleaners and EPA-registered disinfectants (e.g., amount, dilution, contact time, safe use, disposal).

### 7.9.1 CONTROL OF ENVIRONMENTAL CONTAMINATION

---

- Environmental surfaces, which are difficult to decontaminate or clean, shall be covered with a disposable fluid impervious sleeve/drape (e.g., light handles, hand operated controls, X-ray unit head). Coverings shall be changed after each patient.
- Rubber dams shall be used as appropriate.
- **Linen:** Disposable drapes (if not contaminated with blood and body fluids) shall be discarded in the appropriate trash container.
- **Waste disposal:** Sharp items such as needles and scalpel blades shall be placed in puncture-resistant containers marked with the biohazard label for disposal.
- Human tissue may be handled in the same manner as sharp items, but shall not be placed in the same container, but autoclaved/incinerated.
- Solid waste contaminated with blood or other body fluids shall be placed in sealed, strong impervious bags to prevent leakage of the contained items.
- Blood, suctioned fluids, or other liquid waste shall be poured carefully into a drain connected to a sanitary sewer system. Caution shall be taken in emptying the containers to avoid splashes or spilling of potential infectious material.

### 7.10 Sharps safety

---

- Consider sharp items (e.g., needles, scalers, burs, lab knives, and wires) that are contaminated with patient blood and saliva as potentially infective and establish engineering controls and work practices to prevent injuries.
- Do not recap used needles by using both hands or any other technique that involves directing the point of a needle toward any part of the body.
- Use either a one-handed scoop technique or a mechanical device designed for holding the needle cap when recapping needles (e.g., between multiple injections and before removing from a non-disposable aspirating syringe).
- Place used disposable syringes and needles, scalpel blades, and other sharp items in appropriate puncture-resistant containers located as close as possible to the area where the items are used.
- **Multiple-use needle/syringe unit:** Between injections, the multi-use needle/syringe unit shall be re-capped using the standard single hand-scooped method or with a mechanical device such as forceps to stabilize the needle sheath to prevent needle-stick injury. When a multi-use needle syringe unit is used, the unsheathed needle shall be placed in a location where it will not become contaminated or contribute to unintentional needle sticks.

## 7.11 SPECIFIC PROCEDURES IN DENTAL UNITS

- Equipment and environmental surfaces that are contacted by health care workers during patient treatment shall be barrier protected or cleaned and disinfected between patients and at the end of the day, using a 0.05% sodium hypochlorite solution. Plastic wrap or other impervious backed paper may be used to protect surfaces against contamination by blood and/or body fluids and to cover areas that are difficult to disinfect, such as:
  - Handles for the overhead dental lamp
  - Patient's head rest
  - High speed evacuation
  - Low speed evacuation
  - Metal instrument tray beside dentist
  - Air/water syringes on both sides of chair
  - Assistant's instrument tray
  - X-ray head
  - Exposure button for X-ray unit.
- Air/water syringes (if not disposable) shall be:
  - Autoclaved after each patient
  - Covered with a disposable wrap
  - Single-use disposable instruments shall be used for one patient only and discarded appropriately.
- Blood contaminated disposables shall be placed in colour-coded autoclavable trash bags for incineration

## 7.12 DECONTAMINATION, CLEANING & STERILIZATION OF INSTRUMENTS & EQUIPMENT

For more information, please refer to the Disinfection and Sterilization guidelines.

- Dental instruments (Table 9) are classified into the following categories depending on their risk of transmitting infection and the need to sterilize them between uses.

Table 9 – Classification of dental instruments

| Classification | Comments                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Critical       | Surgical and other instruments (forceps, scalpels, burs, etc.) used to penetrate soft tissues or bone. These items should be sterilized by autoclave after each use.                                                                                                                                                                                                                                                                                                                             |
| Semi-critical  | Instruments such as mirrors and amalgam condensers, high-speed and slow-speed handpiece attachments that do not penetrate soft tissues or bone but contact oral tissues. These devices shall be sterilized after each use. If sterilization is not possible, high-level disinfection shall be done. Agents used for high-level disinfectant for those items which cannot be heat sterilized include aldehydes, hydrogen peroxide. These should be used according to manufacturer's instructions. |
| Non-critical   | Instruments or medical devices such as external components of X-ray heads that come into contact only with intact skin. Can be reprocessed between patients with intermediate-level or low-level disinfection or detergent and water washing, depending on the nature of the surface and the degree and nature of the contamination.                                                                                                                                                             |

### • Principles of instrument cleaning (Table 10)

1. Cleaning is considered the most critical step in instrument processing since processes intended to kill micro-organisms (e.g., disinfection and sterilization) may not be effective if organic soil has not been removed by cleaning.

\*\*Examples: high speed evacuator tips, low speed evacuator tips, saliva ejectors, air/water syringes, prophylaxis angles, prophylaxis cups and brushes, all cotton supplies.

2. If instruments cannot be immediately cleaned, they shall be placed in a rigid, leak-proof receptacle containing a holding solution (such as an enzymatic detergent) to prevent hardening of bioburden until ready for processing.
3. The cleaning process shall be physically separated from dental treatment areas and other instrument processing functions. If instrument processing must be performed in patient treatment areas, strict separation of patient treatment, instrument decontamination, wrapping and sterilization shall be observed.

**Table 10 – Summary of recommendations for Reprocessing instruments of dental health care**

| <b>Items and instruments</b>                                                                                                     | <b>Recommended processing between patients</b>                                                                                                                      |
|----------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Surgical instruments, endodontics, periodontics                                                                                  | Sterilization. Autoclave. Use perforated boxes, individual trays and proper packing                                                                                 |
| Examining instruments                                                                                                            | Sterilize between each use. If sterilization not feasible they must undergo high level disinfection. Use perforated boxes, individual trays and proper packing      |
| High and low speed handpieces, prophylaxis angles, triple syringe, burs                                                          | Sterilization. Autoclave. Follow manufacturer's indications.                                                                                                        |
| Impressions, Prostheses, orthodontics items                                                                                      | Clean with water and detergent. High level disinfection according to manufacturer's indications. Must be transferred in safe closed containers to dental laboratory |
| Lamp optic fiber, projection cone                                                                                                | Disinfect surfaces with 70% alcohol and use protective cover. Do not use glutaraldehyde                                                                             |
| Equipment, articles not in contact with oral cavity, that can be contaminated by fluids and cannot be sterilized nor disinfected | Protect with impervious covers. Covers must be changed between patients.                                                                                            |

## MAINTENANCE OF AIR AND WATER LINES

- Anti-retraction valves shall be installed and maintained to reduce the risk of possible aspiration of patient material into the handpieces and the water lines.
- High-speed handpieces shall be run to discharge water and air for a minimum of 20–30 seconds after use on each patient. At the beginning of each day, the water shall be allowed to run for several minutes to flush the water lines that connect to the dental instruments.
- Sterile water or sterile saline shall be used during procedure involving the cutting of bone.
- Devices that do not penetrate the skin or come in contact with sterile areas of the body, such as several types of endoscopes shall be decontaminated, cleaned and disinfected by immersion in a 2% aldehyde solution for 20 minutes.

## 7.13 STERILIZATION AND DISINFECTION OF PATIENT-CARE DEVICES

- Clean and reprocess (disinfect or sterilize) reusable dental equipment appropriately before use on another patient.
- Clean and reprocess reusable dental equipment according to manufacturer instructions. If the manufacturer does not provide such instructions, the device may not be suitable for multi-patient use.
- Have manufacturer instructions for reprocessing reusable dental instruments/equipment readily available, ideally in or near the reprocessing area.
- Assign responsibilities for reprocessing of dental equipment to DHCP with appropriate training.
- Wear appropriate PPE when handling and reprocessing contaminated patient equipment.
- Use mechanical, chemical, and biological monitors according to manufacturer instructions to ensure the effectiveness of the sterilization process. Maintain sterilization records in accordance with state and local regulations.

## 7.14 POST-PROCEDURE CLEANING AND STERILIZATION OF INSTRUMENTS

- High-speed dental handpieces and low-speed hand-pieces components used intra-orally, reusable prophylaxis angles, and oral surgery instruments are decontaminated, cleaned and autoclaved between patients. Sterilization with liquid chemical agents or dry heat is not recommended for dental handpieces and prophylaxis angles.
- Other reusable intra-oral instruments attached to, but removable from, the dental unit air or water lines, such as ultrasonic scaler tips and component parts and air/water syringe tips, shall be reprocessed as described previously.
- Instruments shall be dried for 20 minutes to prevent rusting, then wrapped for autoclaving.
- Heavy duty gloves shall be used for instrument manipulation.
- Following cleaning, all reusable critical and semi-critical dental instruments that are heat stable must be sterilized routinely between uses by autoclaving, or high-level disinfection. Manufacturers' instructions should be followed.
- Sterile Storage – All sterile supplies, including reusable dental items, shall be stored in a manner that will preserve their sterility until used

### Additional disinfection/sterilization issues

- Intra-oral X-ray films are disinfected using low-level disinfectant or barrier films prior to being transported to the developer.
- Laboratory materials and other items used in the mouth, such as impressions, bite registrations, fixed and removable prostheses, and orthodontic appliances shall be decontaminated, cleaned and disinfected prior to being manipulated or transported. These items shall also be decontaminated, cleaned and disinfected before placement in the patients' oral cavity.
- Steam sterilization cycles shall run for 30 minutes at 250° degrees F. However, a 40-minute cycle shall be used for the first run of the day.
- Biological monitoring (spore testing) shall be conducted daily.

## 7.15 DENTAL LABORATORY

- Several procedures that take place in Dental Laboratory can become potential sources of infections from patient to HCW or from patient to patient. Table 11 summarizes activities in dental laboratory with potential risk of transmitting infections, and preventive measures that should be in place for each activity to avoid them.



**Table 11 – Dental procedures and preventive measures**

| <b>Dental Procedure</b>                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|--------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Polishing</b>                                       | <ul style="list-style-type: none"> <li>• Pumice used in the polishing unit should be mixed with water. A detergent may be added to the water.</li> <li>• Change pumice in the polishing through after polishing an old denture. This is so that any infection from the old denture will not be transmitted to the new denture during its subsequent polish.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Acrylic Dust</b>                                    | <ul style="list-style-type: none"> <li>• The operator during working off acrylic dentures can inhale acrylic dust. Such dust can cause respiratory problems if inhaled in large quantities. The use of an appropriate facemask during these procedures will reduce or eliminate the inhalation of the infectious acrylic dust.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Impressions</b>                                     | <ul style="list-style-type: none"> <li>• Impressions are taken out of the patient's mouth and taken to the laboratory for the manufacture of an appropriate prosthesis. These impressions contain oral fluids such as saliva, blood and mucus. Blood may also be found in the impression and this can cause infections to the operator. It is therefore important that these fluids are removed from the impressions in order to reduce the transmission level. Mucus, saliva and blood can be washed away under running water and the impressions dipped in disinfectant according to manufacturer 's instructions. The dental technician shall take precautionary measures and undertake these cleaning and disinfection procedures, while wearing gloves and goggles.</li> <li>• Impressions shall be immersed in an appropriate high-level disinfectant for recommended contact time. The solution is discarded after use.</li> <li>• Re-usable impression trays shall be available in an amount enough that allows proper decontamination, cleaning and sterilization in autoclave before its use in patients.</li> <li>• Rinse alginate impressions under running water; remove mucus, saliva, blood</li> </ul> |
| <b>Treatment of Prostheses Entering the Laboratory</b> | <ul style="list-style-type: none"> <li>• A combination of factors, including time considerations and the lack of heat stability of many items, makes heat sterilization of all prostheses entering the laboratory impractical. For most prostheses, cleaning and chemical disinfection will remain the principal mechanism of reducing contamination.</li> </ul> <p>The following general procedures are recommended:</p> <ul style="list-style-type: none"> <li>• Before they are handled in the laboratory, clean, disinfect, and rinse all dental prostheses and prosthodontic materials.</li> <li>• Scrub all prosthetic devices with a brush and antimicrobial soap to remove gross debris and contamination.</li> <li>• Heat sterile brushes</li> <li>• Immerse prostheses in a solution of 0.5% sodium hypochlorite or other intermediate to high-level disinfectant for the recommended contact time.</li> <li>• After disinfection, rinse the prostheses under running tap water, dry and complete required work.</li> </ul>                                                                                                                                                                                 |

## 7.15.1 WORKING AREAS IN A DENTAL LABORATORY

---

- Designate a central processing area. Divide the instrument processing area physically, or at least spatially, into distinct sections for: 1. Receiving, cleaning and decontamination; 2. Preparation and packing; 3. Sterilization; and 4. Storage. Do not store instruments in an area where contaminated instruments are held or cleaned.
  - Receiving area – A receiving area should be established separate from the production area. Countertops and work surfaces shall be cleaned and then disinfected daily with an appropriate surface disinfectant used according to the manufacturer’s directions. Use PPE when handling items received in the laboratory until they have been decontaminated.
  - Incoming cases – All cases shall be disinfected as they are received. Containers shall be sterilized or disinfected after each use. Packing materials shall be discarded to avoid cross contamination.
  - Disposal of waste materials – Solid waste that is soaked or saturated with blood or body fluids shall be placed in sealed, sturdy impervious bags. The bags shall be incinerated/autoclaved/ burned.
  - Production area – Persons working in the production area shall wear a clean uniform or laboratory coat, a face mask, protective eyewear and disposable gloves (PPE). Work surfaces and equipment shall be kept free of debris and disinfected daily. Any instruments, attachments and materials to be used with new prostheses or appliances shall be maintained separately from those to be used with prostheses or appliances that have already been inserted in the mouth. Brushes and other equipment shall be disinfected at least daily.
  - Outgoing cases – Each case shall be disinfected before it is returned to the dental clinic. Dentists shall be informed about infection control procedures that are used in the dental laboratory.

## 7.16 EDUCATION AND TRAINING IN INFECTION PREVENTION AND CONTROL PRACTICES

---

- All dental staff shall receive education and training on infection prevention and control practices (orientation and initial in- service education). In-service education updates shall be at least annually and more often as the need arises (e.g., when new tasks or procedures affect the employee’s occupational exposure).
- Provide educational information appropriate in content and vocabulary to the educational level, literacy, and language of dental healthcare workers.

## National Post-exposure prophylaxis

- Post-Exposure Prophylaxis works best within the first 3 to 24 hours after the accident occurred. It can also be started up to 72 hours after the accident but is not effective after that (Table 12).
- Immediately encourage site bleeding while washing the wound and skin sites exposed to blood or body fluids. Wash with soap and water or other antiseptics.

Table 12 – Risk assessment at the workplace for HIV exposure

### Risk assessment at the workplace for HIV exposure

|                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|--------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Sharps injury                              | <ul style="list-style-type: none"> <li>• The type (solid or hollow bore) and size of the needle or sharp object</li> <li>• What the needle or sharp object had been used for</li> <li>• The severity of the injury</li> <li>• Whether the penetration site bled</li> <li>• The amount of blood or body substance to which the person was exposed</li> <li>• Whether the injury was through gloves or clothing</li> <li>• When the exposure occurred</li> <li>• How recently the sharp had been used</li> </ul> |
| Splash                                     | <ul style="list-style-type: none"> <li>• The type of body fluids to which the person was exposed</li> <li>• Whether the fluid to which the person was exposed contained blood</li> <li>• The amount of blood or body substance to which the person was exposed</li> <li>• Whether non-intact skin or mucous membrane was exposed</li> <li>• When the exposure occurred</li> </ul>                                                                                                                              |
| Source of the blood, body fluids or tissue | <ul style="list-style-type: none"> <li>• Identity of the source person (known or unknown)</li> <li>• HIV status (if known)</li> <li>• Stage of HIV infection (if known)</li> <li>• HIV RNA viral load (if known)</li> <li>• Antiretroviral therapy history of the source person (if known)</li> <li>• Estimated population prevalence of HIV, including geographical region and country prevalence and prevalence within the cultural, ethnic or behavioural group</li> </ul>                                  |

## Form for self-monitoring or active monitoring of healthcare workers exposed to COVID-19

|                                  |  |
|----------------------------------|--|
| Name of the exposed professional |  |
| Telephone                        |  |
| Email                            |  |
| Health institution               |  |
| Work unit in the institution     |  |
| Profession/ employment           |  |
| Date of last exposure            |  |

### Symptoms (mark all that apply)

| days since last exposure | date | time | temperature | temperature not taken | cough | sore throat | difficulty | breathing | chills | runny nose | muscle pain | abdominal pain | nausea or vomiting | diarrhea | none | other |
|--------------------------|------|------|-------------|-----------------------|-------|-------------|------------|-----------|--------|------------|-------------|----------------|--------------------|----------|------|-------|
| 1                        |      |      |             |                       |       |             |            |           |        |            |             |                |                    |          |      |       |
| 1                        |      |      |             |                       |       |             |            |           |        |            |             |                |                    |          |      |       |
| 2                        |      |      |             |                       |       |             |            |           |        |            |             |                |                    |          |      |       |
| 2                        |      |      |             |                       |       |             |            |           |        |            |             |                |                    |          |      |       |
| 3                        |      |      |             |                       |       |             |            |           |        |            |             |                |                    |          |      |       |
| 3                        |      |      |             |                       |       |             |            |           |        |            |             |                |                    |          |      |       |
| 4                        |      |      |             |                       |       |             |            |           |        |            |             |                |                    |          |      |       |
| 4                        |      |      |             |                       |       |             |            |           |        |            |             |                |                    |          |      |       |
| 5                        |      |      |             |                       |       |             |            |           |        |            |             |                |                    |          |      |       |
| 5                        |      |      |             |                       |       |             |            |           |        |            |             |                |                    |          |      |       |
| 6                        |      |      |             |                       |       |             |            |           |        |            |             |                |                    |          |      |       |
| 6                        |      |      |             |                       |       |             |            |           |        |            |             |                |                    |          |      |       |
| 7                        |      |      |             |                       |       |             |            |           |        |            |             |                |                    |          |      |       |
| 7                        |      |      |             |                       |       |             |            |           |        |            |             |                |                    |          |      |       |
| 8                        |      |      |             |                       |       |             |            |           |        |            |             |                |                    |          |      |       |
| 8                        |      |      |             |                       |       |             |            |           |        |            |             |                |                    |          |      |       |
| 9                        |      |      |             |                       |       |             |            |           |        |            |             |                |                    |          |      |       |
| 9                        |      |      |             |                       |       |             |            |           |        |            |             |                |                    |          |      |       |
| 10                       |      |      |             |                       |       |             |            |           |        |            |             |                |                    |          |      |       |
| 10                       |      |      |             |                       |       |             |            |           |        |            |             |                |                    |          |      |       |
| 11                       |      |      |             |                       |       |             |            |           |        |            |             |                |                    |          |      |       |
| 11                       |      |      |             |                       |       |             |            |           |        |            |             |                |                    |          |      |       |
| 12                       |      |      |             |                       |       |             |            |           |        |            |             |                |                    |          |      |       |
| 12                       |      |      |             |                       |       |             |            |           |        |            |             |                |                    |          |      |       |
| 13                       |      |      |             |                       |       |             |            |           |        |            |             |                |                    |          |      |       |
| 13                       |      |      |             |                       |       |             |            |           |        |            |             |                |                    |          |      |       |
| 14                       |      |      |             |                       |       |             |            |           |        |            |             |                |                    |          |      |       |
| 14                       |      |      |             |                       |       |             |            |           |        |            |             |                |                    |          |      |       |

## References

- [The epidemiological characteristics of an outbreak of 2019 new coronavirus diseases (COVID-19) in China]. Zhonghua Liu Xing Bing Xue Za Zhi. 2020;41(2):145-51.
- Campins Martí M, Uriona Tuma S. [General epidemiology of infections acquired by health-care workers: immunization of health-care workers]. Enferm Infecc Microbiol Clin. 2014 Apr;32(4):259-65
- CDC. Guideline for isolation precautions in hospitals. Available at [http://www.cdc.gov/ncidod/dhqp/gl\\_isolation.html](http://www.cdc.gov/ncidod/dhqp/gl_isolation.html).
- CDC. Infection Prevention Checklist for Dental Settings: Basic Expectations for Safe Care. March 2016. Available at: [www.cdc.gov/oralhealth](http://www.cdc.gov/oralhealth)
- CDC. Interim recommendations for infection control in health care facilities caring for patients with known or suspected Avian Influenza. Available at <http://www.cdc.gov/flu/avian/professional/infect-control.html>.
- CDC. Recommended vaccines for Healthcare workers. Available at <https://www.cdc.gov/vaccines/adults/rec-vac/hcw.html>
- CDC. Summary of Infection Prevention Practices in Dental Settings: Basic Expectations for Safe Care. Atlanta, GA: Centers for Disease Control and Prevention, US Dept of Health and Human Services; October 2016.
- Centers for Disease Control and Prevention (CDC). Criteria for Return to Work for Healthcare Personnel with Confirmed or Suspected COVID-19 (Interim Guidance). Available from: <https://www.cdc.gov/coronavirus/2019-ncov/healthcare-facilities/hcp-return-work.html>.
- Centers for Disease Control and Prevention (CDC). Interim U.S. Guidance for Risk Assessment and Public Health Management of Healthcare Personnel with Potential Exposure in a Healthcare Setting to Patients with Coronavirus Disease (COVID-19). Available from: <https://www.cdc.gov/coronavirus/2019-ncov/hcp/guidance-risk-assesment-hcp.html>.
- Chan JF, Yuan S, Kok KH, To KK, Chu H, Yang J, et al. A familial cluster of pneumonia associated with the 2019 new coronavirus indicating person-to-person transmission:a study of a family cluster. Lancet. 2020.
- Grupo Panamericano de Evaluación de la Infección Hospitalaria. Evaluación de la infección hospitalaria en siete países latinoamericanos. Rev Panam Infectol 2008;10 (4 Supl 1):S112-122.
- Guía de evaluación rápida de programas de infecciones intrahospitalarias. Washington, D.C. Julio de 2005. Área de prevención y control de enfermedades unidad de enfermedades transmisibles. Organización Panamericana de la Salud.

- Guidelines on core components of infection prevention and control programmes at the national and acute health care facility level.WHO. 2016
- Huang C, Wang Y, Li X, et al. Clinical features of patients infected with 2019 new coronavirus in Wuhan, China. *Lancet* 2020; published on-line Jan 24. [https://doi.org/10.1016/S0140-6736\(20\)30183-5](https://doi.org/10.1016/S0140-6736(20)30183-5).
- Infection Control Today. Key Issues in Occupational Health. October2014.
- Joint WHO/ILO guidelines on post-exposure prophylaxis (PEP) to prevent HIV infection. 2007
- New Coronavirus Pneumonia Emergency Response Epidemiology Team. Vital surveillances: the epidemiological characteristics of an outbreak of 2019 novel coronavirus diseases (COVID-19)—China, 2020. *China CDC Weekly*. Accessed February 20, 2020. <http://weekly.chinacdc.cn/en/article/id/e53946e2-c6c4-41e9-9a9b-fea8db1a8f51>
- RP Nagassar, K Daniel, S Ramkissoon, RJ Bridgelal-Nagassar. 2019. “The Epidemiology of sharp injuries at the Sangre Grande Hospital, Trinidad, West Indies”. Poster presentation presented at the 64th annual CARPHA conference, June 21, 2019. Accessed March 14, 2020.
- Normas Técnicas sobre Esterilización y Desinfección de Elementos Clínicos. Ministerio de Salud. Chile 2018.
- Pawapotako J. Development of the sterilization process to prevent the breakage of mouth mirror in central sterile supply department at Wanonniwas hospital. International Congress of the Asia Pacific Society of Infection Control (APSIC). Bangkok, Thailand, Feb. 12-15, 2017.
- Wang D, Hu B, Hu C, Zhu F, Liu X, Zhang J et al. Clinical characteristics of 138 hospitalized patients with 2019 new coronavirus-infected pneumonia in Wuhan, China. *JAMA*. 2020. Epub 2020/02/08. doi: 10.1001/jama.2020.1585. PubMed PMID: 32031570.
- Weber DJ, Rutala WA. Occupational Health Update. Focus on Preventing the Acquisition of Infections with Pre-exposure Prophylaxis and Postexposure Prophylaxis. *Infect Dis Clin N Am* 30(2016) 729-757
- World Health Organization. Rational use of personal protective equipment for coronavirus disease (COVID-19) and considerations during severe shortages. Interim guidance. 6 April 2020.
- World Health Organization. WHO Director-General’s opening remarks at the media briefing on COVID-19 - 11 March 2020 Geneva 2020 [Available from: <https://www.who.int/dg/speeches/detail/who-director-general-s-opening-remarks-at-the-media-briefing-on-covid-19---11-march-2020>].
- Yassi A et al. Collaboration between infection control and occupational health in three continents: a success story with international impact *BMC International Health and Human Rights* 2011, 11(Suppl 2):S8 <http://www.biomedcentral.com/1472-698X/11/S2/S8>.

## Ministry of Health Trinidad and Tobago

---

63 Park Street, Port of Spain  
(868) 627-0012/ 627-1047

[www.health.gov.tt](http://www.health.gov.tt)

---

### Facebook

Ministry of Health Trinidad and Tobago

(<https://www.facebook.com/MinistryofHealthTT>)

### YouTube Channel

TrinidadHealth

(<https://www.youtube.com/channel/UCqXrUlsLAsXJbPszQoNikeA>)

### Instagram

minhealthtt

(<https://www.instagram.com/minhealthtt/>)

### Twitter

@moh\_tt

([https://twitter.com/moh\\_tt](https://twitter.com/moh_tt))