DENTAL INFECTION CONTROL AUDIT

Guidelines for Dental Healthcare Professionals

Version 1: January 2021
In the name of ALLAH, Most Gracious, Most Merciful
Dental healthcare workers are required to use infection prevention measures during patient care to reduce potential risks of disease transmission to patients and themselves. Implementation & strict adherence to infection control best practices within the dental settings reduces the potential risks of occupational exposures and adverse patient outcomes through a series of practice controls.

In this context, Ministry of Health conducts regular audit visits to ensure high quality dental care is provided to the patients based on international infection control standards.

This manual will serve as a guide for the auditors to evaluate the dental infection control standards within the dental settings using the standardized approach throughout the kingdom.

All dental healthcare personnel (DHCP) have the key responsibility to abide by the infection control standards during provision of dental care which is of significant importance to ensure patient safety.

Good Luck!!

Dr Khalid H. Alanazi
General Director of Infection Prevention & Control (GDIPC)
Ministry of Health
Kingdom of Saudi Arabia
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INFECTION CONTROL STANDARDS IN DENTAL SETTINGS

STANDARD # 01: LEADERSHIP SUPPORT

Leadership support is critical & key driving force for effective implementation & functioning of infection prevention & control program within the dental healthcare settings. The consistent application of proper infection control principles and practices is necessary to achieve the goals of optimum patient safety and ensure best outcomes. Without leadership support & commitment, it is difficult to yield a healthy and safe environment for patients, staff, and visitors.
## LEADERSHIP SUPPORT

<table>
<thead>
<tr>
<th>Sub-standard – 1:01</th>
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<tbody>
<tr>
<td>Adequate resources are allocated to infection control Department (e.g., offices, internet access, IT support ...etc.)</td>
</tr>
<tr>
<td><strong>Weightage: High</strong></td>
</tr>
<tr>
<td><strong>Method of Evaluation:</strong> Observation (O), Staff Interview (SI)</td>
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</table>

### OBSERVE:
- Availability of separate Infection control office with provision of all required resources. *(Computer, printer, photocopier, reliable internet service etc.)*
- IC practitioner must be provided with a separate computer and internet access to carry out IC activates without any interruption / hindrance.

### INTERVIEW:
- IC Practitioner if requests and needs are always considered and provided by the leadership of the dental center.
- Ask staff about the speed and reliability of internet service and **backup plan** to ensure the continuity of work if there is no availability of internet service or system is down.
- Ask staff about IT support & troubleshooting time i.e. IT personnel must have good response to them when needed.
### Sub-standard – 1:02

Adequate infection control supplies are provided to HCWs for successful IC program (e.g., PPE, disinfectants ...etc.) Note: All supplies available must be in conformity with approved MOH specifications.

**Weightage:** Critical  
**Method of Evaluation:** Document (D), Observation (O), Staff Interview (SI)

### REVIEW:

- In the infection Control office documented evidence / Plan for continuous supply of PPE.  
- Review PPE checklist for monitoring consumption for each dental clinic, dental lab, dental radiology area etc.  
- Electronic database / Excel spreadsheets as a mechanism of monitoring consumption of IC supply & to ensure adequacy.  
- The documented supply chain / flowchart describing mechanism of supply provision.  
- Review if the dental center has contingency / emergency plan to address the shortage in unforeseen / outbreak situations in order to ensure continuous supply of PPE, disinfectants & other IC supply *(e.g. Direct purchase, contract with neighboring centers, emergency stock not used in routine etc.)* For example during COVID – 19 Pandemic

- *In outbreak situations there is increased consumption of IC supply including PPE, hand sanitizers, disinfectants etc. so there should be a clear plan to address increased demand in such unforeseen situations.*
- *Any one of mechanisms / methods of IC supply management would be acceptable provided its clearly described documented & center has a clear plan.*
### OBSERVE:

Availability of following infection control resources and supplies in the dental center included but not limited to:

- a. **Gloves** – clean gloves, sterile surgical gloves & utility gloves etc
- b. **Gowns** - clean, impermeable / fluid resistant
- c. **Face shields** / eye goggles
- d. **Surgical facemasks**
- e. **N-95 masks** - different sizes & shapes
- f. **Disinfectants** – Approved by MOH
- g. **Alcohol** based hand rub sanitizers
- h. **Plain** / Antimicrobial soaps
- i. **Waste** Receptacles of various sizes
- j. **Sharp** containers of various sizes etc.

*(Randomly open the hand rub dispenser to check for availability of Alcohol based hand rub sanitizers & ensure if date is valid or expired)*

### INTERVIEW:

- Ask Infection control practitioner about the process of replenishment, maintenance and request of supplies, when and where needed.
- Countercheck by asking dental staff during visit to clinics, dental lab, dental radiology etc regarding the availability of all necessary supplies. *Example in dental clinic ask staff if transportation spray / gel for instruments is available or not.*
- Ask the IC Practitioner about the alternate back up plan if one of the items is not available in stock, for instance utility gloves, face shields etc.
### Sub-standard – 1:03

Infection control team is given full authority to implement the Infection Control (IC) policies & procedures.

**Weightage:** High  
**Method of Evaluation:** Document (D), Staff Interview (SI)

### REVIEW:
- Statement of authority approved by the dental center director or hospital director.  
- This statement of authority is reviewed and authenticated by the administration of the center at least every three years or sooner, as per policy.

- *Infection Prevention and Control department holds the key responsibility and authority to ensure implementation of all policies and procedures by dental healthcare personnel (DHCP).*  
- *IC Practitioner /s must be fully authorized for the overall supervision of infection prevention and control activities in the dental center / settings.*

### INTERVIEW:
- IC Practitioner/s if they have been given the appropriate attention & respect by the dental healthcare personnel (DHCP) during daily rounds, training & education activities etc.
- Ask IC Practitioner/s regarding the authority to make decisions and to influence field implementation & if official authority statement was distributed and communicated to all sections in dental center e.g dental clinics, dental lab etc.
- Ask If dental healthcare personnel (DHCP), fully understand and directly act upon any comments, remarks, recommendations and commands related to infection control practices. *(Verbal or written)*
- Ask IC Practice/s if dental healthcare personnel (DHCP) are continuously working on IPC improvements & corrective actions if any breach of IC practice has been communicated to them based on internal & external audit findings.
Infection Control is the discipline / process by which health care facilities develop and implement specific policies and procedures to prevent the spread of infections among health care staff and patients.

Infection Preventionists play a significant role in providing high quality patient care by continuous monitoring, training & evaluation of infection control practices within the dental settings.

Professional development is essential to keeping the Infection Preventionists up to date with latest knowledge, skills & strategies for preventing infections in the dental settings.
## 02 INFECTION CONTROL DEPARTMENT

<table>
<thead>
<tr>
<th>Sub-standard – 2.01</th>
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</table>
| There is infection control (IC) unit/department in the dental center to implement the infection control program and at least one part time trained staff is assigned for the unit.  
**Weightage: Critical**  
**Method of Evaluation:** Document (D), Staff Interview (SI) |

### REVIEW:

- In the infection control department, following document/s in Personal file for the purpose of verification.

### Assignment Letter / Job Description:

- Verify if the assigned infection control practitioner/s is working part time by reviewing assignment letter from the of dental center leadership.
- Review job description to check the roles and responsibilities of IC practitioner/s.

- Part time IC practitioner/s is the one who has additional assigned duties other than Infection control BUT dedicate at least 50 % of duty hours to infection control department.
- The number of the team members is determined by the total number of clinics and the work load in the center, with a minimum number of one staff for small dental centers.

### INTERVIEW:

- Infection control Practitioner/s if he/she is working part time in the Infection control unit / department.
- Ask about daily activities related to infection control and how she/he manage time to ensure effective implementation of dental infection prevention & control program in all areas of dental unit / center.
### Sub-standard – 2:02

The head of IC unit/department reports directly to the Highest administrative authority (Director of the dental center)

**Weightage:** High

**Method of Evaluation:** Document (D), Staff Interview (SI)

### REVIEW:

- Organizational chart of the dental center / Unit & check for the reporting authority of the IC unit/department.

- Organogram / Organizational chart should clearly delineate that IC department is directly reporting directly to the highest administrative authority i.e. director of dental center.

- Reporting of IC department / Unit to assistant managers / assigned designees, quality director or any other administrative personnel is **NOT** acceptable.

- Ask for any request Letter from Infection Control Department in the past period & check it was addressed to whom. *(As per substandard any letter/issue from IC Director should be directly addressed/communicated to highest administrative authority.)*

### DOCUMENT (D)

- Ask infection control practitioner/s about the reporting mechanism of activities or issues related to infection control.

- Ask if infection control department is working under direct supervision of dental center director or equivalent authority.

### Staff Interview (SI)
<table>
<thead>
<tr>
<th><strong>Sub-standard – 2:03</strong></th>
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<tbody>
<tr>
<td>Infection control practitioners are qualified in infection control through certification, training, or experience.</td>
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</table>

**Weightage: High**

**Method of Evaluation:** Personal File (PF), Staff Interview (SI)

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<thead>
<tr>
<th><strong>REVIEW:</strong></th>
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<tbody>
<tr>
<td>- Review the personal file of the IC practitioner/s to check for educational background. <em>(Doctor, nurse, microbiologist, public health Specialist etc.)</em></td>
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<tr>
<td>- Check degrees / certifications in infection Control <em>(Masters in Infection Control, CIC, Diploma in Infection Control etc.)</em></td>
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<tr>
<td>- Verify attendance in training activities <em>(local, national, international infection control conferences, workshops, seminars &amp; symposiums etc)</em></td>
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<td>- Check for any other documented evidence of training provided by any other institution or dental center.</td>
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<tr>
<th><strong>INTERVIEW:</strong></th>
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<tr>
<td>- IC Practitioner/s to assess his / her knowledge and skills about infection control in the dental settings.</td>
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<tr>
<td>- Ask about various infection control standards like PPE use, sharps safety, instrument processing, disinfection of dental unit waterlines etc.</td>
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<tr>
<td>- Ask about their activities in daily IC rounds and how they monitor the practices of dental staff.</td>
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<tr>
<td>- During the entire audit visit knowledge &amp; orientation of IC Practitioner/s about IC activities in the dental center can be easily assessed.</td>
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<tr>
<td>- If not qualified enough based on evaluation, IC Practitioner/s must be instructed to take another refresher training course to ensure competence in infection control.</td>
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</table>
### 04 Sub-standard – 2:04

There is infection control meeting with representatives from all relevant staff to coordinate the program. They should meet regularly (at least quarterly).

**Weightage:** High  
**Method of Evaluation:** Document (D)

**REVIEW:**
- Terms of reference of infection control meeting which should include the composition of members, their roles & responsibilities, functions of committee, rules of operations like frequency, quorum attendance etc.
- Review infection control meeting minutes of the last 3 infection control meetings conducted in the past months.
- Check if there is representation from all relevant staff e.g. director of dental center, dentists, dental assistants, dental hygienists representative from dental lab, representative from dental radiology, representative from CSSD etc.
- Meeting minutes must be written in a manner of task force tables with time limit for the actions needed and actions must be followed in the next meeting.

### 05 Sub-standard – 2:05

IC practitioner continuously monitor adequacy of facilities & availability of supplies required for hand hygiene, PPE, and disinfectants on regular basis.

**Weightage:** High  
**Method of Evaluation:** Document (D)

**REVIEW:**
- Checklist of routine rounds by infection control practitioner/s to verify if there is continuous monitoring of IC supply on regular basis.
- Review the documented evidence for each area separately e.g. dental clinics, Dental lab, Dental radiology etc.
- There must be regular monitoring of consumption and provision of supply needed to implement the infection control best practices.
- Monitor consumption of alcohol based hand rub sanitizers, PPE items including gloves, gowns, masks & different types of disinfectants etc.
- Ensure adequate amount is available in all patient care & other work areas.
- Any document evidence (manual or electronic) is sufficient, provided monitoring is regular & continuous.
Infection Prevention and Control program is the most important component of safe, high-quality health service delivery to all patients in the dental healthcare settings. Purpose of IC program is to eliminate the risk of Healthcare associated Infections (HAIs) and work related infections to dental healthcare personnel and patients through the implementation of established guidelines and policies.
### Sub-standard – 3:01

There is a program to reduce the risk of (HAIs) which involves patients, staff, trainees, volunteers, families and visitors.

**Weightage:** Critical  
**Method of Evaluation:** Document (D), Staff Interview (SI)

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*Hospital-acquired infections, also known as healthcare-associated infections (HAI), are nosocomial acquired infections that are typically not present or incubating at the time of admission. So there should be an implemented infection prevention & control program to reduce the risk of HAIs which involves patients, staff, trainees, volunteers, families and visitors within the dental healthcare settings.*

- IC program implemented in the hospital is critical not only to prevent HAIs but also to prepare for and respond to communicable diseases crises.

- IPC programme should be in place in each dental healthcare setting for the purpose of preventing HAI and ensuring patient & staff & visitors safety.

**REVIEW:**

Dental infection prevention & control program that must incorporate following core elements of infection control; included but not limited to:

1. **Introduction**  
2. **Mission & Vision of IC Program**  
3. **Scope of service:**
   - IPC activities related to patients, visitors and health care workers' safety and the prevention of infection transmission. *(Hand hygiene program, respiratory protection program. Sharps safety, Employee health Program etc.)*  
   - Ensuring implementation of at least: - standard precautions - transmission-based precautions - appropriate selection and use of IPC supplies *(for example, personal protective equipment, hand hygiene products, antiseptics, safe instrument processing, water quality monitoring etc.)*  
   - Assurance that patient care activities are undertaken in a clean and hygienic environment and supported by adequate infrastructures.  
   - Maintaining effective aseptic technique during all patient care activities.  
   - Health care worker education and practical training.  
   - Education of patients, visitors and families about prevention and control of infection procedures.
- **Assessment and feedback** of compliance with IPC practices.
- Assurance of continuous procurement of adequate **supplies** & equipment relevant for IPC practices.
- **Environmental monitoring** (Environmental cleaning & disinfection, waste management etc.)
- **Monitoring and evaluation** of IPC program (**Process & Outcome indicators**) e.g. *hand hygiene compliance, Number of DHCP with needle stick injuries etc.*

**Aim of Infection prevention & control program is to ensure safety of patients, staff, trainees, volunteers, families and visitors by their involvement.**

**Patients:**

Patients are integrated within the dental infection control program through education. They are aware of their rights, concerns of their safety and standard precautions to be followed. Some examples of how patients can contribute in reducing HAIs.

- Patient must observe dentist or dental assistant whether they cleaned their hands? If not, ask them to wash their hands with soap and water or an alcohol-based hand rub (hand sanitizer) before they start working on them.
- If they cough or sneeze, cover mouth and nose with a tissue and discard the tissue right away. Then clean your hands.

**Staff & Trainees:**

- Hand hygiene, appropriate use of personal protective equipment, compliance with all infection control policies and procedure, reporting exposure to communicable illness & needle stick injury etc.

**Visitors & Families:**

- Visitors & families are educated on precautions to be taken while being in the hospital, the importance of hand and respiratory hygiene etc.

**INTERVIEW:**

- Dental health care personnel (DHCP) working in different areas and assess if they are oriented and aware about various infection control programs & their role in HAI prevention e.g. hand hygiene program, respiratory protection program, employee health program etc.
- Ask dental staff about importance of practicing 5 moments of hand hygiene.

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**Document**

- Review in detail if Dental Infection Prevention & Control program contains the core items of infection control with prime focus on safety of patients, staff & visitors.
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<thead>
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<th>Sub-standard – 3:02</th>
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<tbody>
<tr>
<td><strong>The program is applied to all areas of the dental center according to the scope of services.</strong></td>
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<tr>
<td><strong>Weightage: High</strong></td>
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<tr>
<td><strong>Method of Evaluation:</strong> Document (D), Observation (O), Staff Interview (SI)</td>
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</table>

**Document (D)**

*Scope of services is a structural measure that reflects whether a dental center has the resources, facilities, staff, and equipment - to treat and provide care for the medical conditions affecting potential patients.*

**REVIEW:**
- IPC Policy and procedure for each individual program in an electronic system, manual or any written and printed documents.
- Check if there is documented evidence of program implementation e.g. hand hygiene compliance rates etc. which reflects hand hygiene program is implemented and monitored.

*Some examples of policies & procedures related to specific program to be available for implementation in dental center according to scope of services:*
- Standard Precautions
- Aseptic Technique
- Hand Hygiene & PPE program
- Sharps safety & safe injection practices
- Immunizations for Dental Healthcare Personnel
- Management of Occupational Exposures
- Water quality monitoring
- Infection Control in Dental Radiography
- Infection Control in Dental lab and Prosthodontics
- Environmental Surfaces Infection Control & Waste management etc
### OBSERVE:

If the Dental Health Care Personnel (DHCP) are practicing and providing services in alignment with the IPC standards and measures related to their scope and mandate of their work area such as dental clinic, dental lab, dental radiology etc

- Observe if staff are oriented about and practicing 5’ moments of Hand Hygiene
- If DHCP are using appropriate PPE based on risk assessment.
- Safe sharp disposal & practicing one handed scoop technique when needed.
- Appropriate signage / reminders posted in appropriate languages (Hand hygiene & PPE donning / doffing posters, etc.)
- Observe how DHCP are handling & processing instruments
- Observe if appropriate IC precautions are taken during intraoral radiography to prevent cross contamination of surfaces and equipment.
- Observe if appropriate Personal protective equipment (PPE) is used by dental lab staff when handling contaminated items in the laboratory.
- Appropriate IPC education materials are posted (e.g. Cough etiquettes / Respiratory hygiene etc)
- Observe Dental Center hygiene to verify if environmental program is applied. (*Floors, surfaces, cabinets etc*)

### INTERVIEW:

- Infection Control Practitioner/s if & how IC program is applied to all areas of dental center. Ask to give specific examples Hand hygiene, safe injection practices etc
- Dental Health Care Personnel (DHCP) working in different areas of dental center and ask various questions specific for their work.
- Asses if DHCP are knowledgeable and respond well to your questions regarding how to apply infection control measures while they are working or handling the patients.

**Give them specific tasks to demonstrate according to nature of work:**

- *Ask dental assistant about IC measure taken every morning before starting work shifts & in between patients etc* (For example DHCP must practice for devices that are connected to the dental water system and enter the patient’s mouth, water and air are discharged for few minutes at the beginning of the day and at least 20-30 seconds after use on each patient – e.g hand pieces, ultrasonic scalers, and air/water syringes.)
- Ask how to handle & safely transport instruments to the CSSD?? *(Assess hand hygiene, safe handling, availability of leak proof containers etc)*
- Ask about steps of post exposure follow up & management after a needle stick injuries etc.
- Ask dental staff what PPE items are worn when exposing radiographs and handling contaminated film packets.
- Ask dental lab staff about handling the reusable heat tolerant dental instruments??? *(MUST be replaced between patients and sent to central sterilization department)*
<table>
<thead>
<tr>
<th>Sub-standard – 3:03</th>
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<tbody>
<tr>
<td>The IC program is based on current scientific knowledge, referenced practices guidelines and applicable national laws and regulations.</td>
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</table>

**Weightage:** High  
**Method of Evaluation:** Document (D), Staff Interview (SI)

**REVIEW:**

_Infection Control Program & check for references, which MUST be valid & based on following criteria:_

- IC program should be based on scientific references.
- Each dental center supports a comprehensive infection prevention and control program within the recommendations of the **World Health Organization (WHO)** and Centers for Disease Control and Prevention (CDC), standards of the JCIA, and the guidelines of the **Ministry of Health (MOH)** & IC standards of local accrediting body.
- All relevant references must be kept in Infection control office and used as reference for updating, answering and facing any scientific debates.
- References would include **APIC, CDC, WHO, OSHA, GCC, MOH etc**

1) **Association for Professionals in Infection Control and Epidemiology (APIC)**  
2) **Centers for Disease Control & Prevention (CDC)**  
3) **World Health Organization (“WHO”)**  
4) **Gulf Cooperation Council Center for Infection Control (GCC - CIC)**  
5) **Occupational Safety & Health Administration (OSHA)**  
6) **National References: (Ministry of Health (MOH Guidelines for Dental Settings etc)**

**INTERVIEW:**

- IC team on how they developed their policies in comparison to the references, scientific facts and current regulations.
- They should give an example of how they used these scientific references.
  - **e.g. how they have developed policies & procedures for instruments processing / treatment of dental unit waterlines (DUWLs) program and how & which references they have incorporated.**
Development & implementation of evidence-based Policies & Procedures / guidelines for the dental healthcare personnel is extremely important for the purpose of reducing HAI and AMR. The education and training of relevant dental health care workers on the guidelines and the monitoring of adherence with guideline recommendations should be undertaken to achieve successful implementation.
<table>
<thead>
<tr>
<th>04</th>
<th>Infection Control Manual (IC Policies &amp; Procedures)</th>
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<tbody>
<tr>
<td>01</td>
<td><strong>Sub-standard – 4:01:</strong></td>
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<tr>
<td></td>
<td>There is up-to-date hard copy / electronic access of the MOH manual of infection prevention and control in dental settings in the center.</td>
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<tr>
<td></td>
<td><strong>Weightage:</strong> High</td>
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<tr>
<td></td>
<td><strong>Method of Evaluation:</strong> Observation (O)</td>
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<tr>
<td></td>
<td><strong>OBSERVE:</strong></td>
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<tr>
<td></td>
<td>- Availability of updated MOH manual of infection prevention &amp; control in the dental settings in the infection control department &amp; other areas within the dental center.</td>
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<tr>
<td></td>
<td>- Availability of IC manual in any form is acceptable (<em>Electronic or printed hard copy</em>)</td>
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<tr>
<td>02</td>
<td><strong>Sub-standard – 4:02:</strong></td>
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<tr>
<td></td>
<td>Dental staff members have access to the Infection Control manual and are familiar with the content of the manual and its use.</td>
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<tr>
<td></td>
<td><strong>Weightage:</strong> High</td>
</tr>
<tr>
<td></td>
<td><strong>Method of Evaluation:</strong> Staff Interview (SI)</td>
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<tr>
<td></td>
<td><strong>INTERVIEW:</strong></td>
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<tr>
<td></td>
<td>- Dental healthcare personnel (DHCP) to assess if they are oriented about the infection control manual for the dental settings.</td>
</tr>
<tr>
<td></td>
<td>- Check if Dental healthcare personnel (DHCP) are able to access the IC manual and are well familiarized with its content.</td>
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<tr>
<td></td>
<td>- Ask if they have received any orientation/training from IC practitioner / s on how to use and access the manual.</td>
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<tr>
<td></td>
<td>- Give a task to access any specific policy related to their nature of work for example</td>
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<tr>
<td></td>
<td>- Ask dental assistant to access policy for single use devices &amp; Transporting Contaminated Items etc</td>
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<td></td>
<td>- Ask the dentists to access infection control policy for oral surgical procedures etc</td>
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<tr>
<td></td>
<td>- Likewise ask dental lab personnel to access policy for Infection Control in Dental lab and Prosthodontics etc</td>
</tr>
<tr>
<td></td>
<td><strong>Evaluate if the dental staff are well familiarized with the content of manual and is easily accessible to them when and where needed.</strong></td>
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</table>
Training & education is the most important domain of infection control program to ensure and sustain the competencies of Dental healthcare personnel (DHCPs) in infection control practices by limiting the chances of infectious disease transmission among staff, patients, and visitors.

This can be achieved by ensuring that all DHCWs are properly informed, trained and provided with the required knowledge and skills on infection control best practices within the dental settings.

Ongoing education and training of DHCP are critical for ensuring that infection prevention policies and procedures are understood and followed.
| 05 | INFECTION CONTROL EDUCATION & TRAINING |

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<tr>
<th>01</th>
<th>Sub-standard – 5:01</th>
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<tbody>
<tr>
<td></td>
<td>IC department provides orientation and training on basics of infection control for newly hired staff maximum within 1 month of joining the work.</td>
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<td>Weightage: High</td>
<td></td>
</tr>
<tr>
<td>Method of Evaluation:  Document (D), Personal File (PF), Staff Interview (SI)</td>
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<tr>
<th>REVIEW:</th>
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<tbody>
<tr>
<td><strong>Document (D)</strong></td>
</tr>
<tr>
<td>- Document / policy for new employee orientation program including details about the specific structured contents to be delivered to all newly hired dental healthcare personnel.</td>
</tr>
<tr>
<td>- Time frame MUST be specified in the document / policy that basic infection control training &amp; orientation will be provided to all newly hired dental healthcare personnel within maximum one month of joining work in the dental center / Unit.</td>
</tr>
</tbody>
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<table>
<thead>
<tr>
<th>REVIEW:</th>
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</thead>
<tbody>
<tr>
<td><strong>Personal File (PF)</strong></td>
</tr>
<tr>
<td>- Randomly request a sample of personal files of a newly hired staff in order to look for their IPC training attendance and competencies.</td>
</tr>
<tr>
<td>- Verify if the basic infection control training was conducted within one of joining of work by comparing date of joining &amp; date of training.</td>
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<table>
<thead>
<tr>
<th>INTERVIEW:</th>
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<tbody>
<tr>
<td><strong>Staff Interview (SI)</strong></td>
</tr>
<tr>
<td>- Ask infection control practitioner/s about the maximum timeframe for conducting basic infection control training for the newly hired staff in the dental center.</td>
</tr>
<tr>
<td>- Ask about the contents included in basic infection control training program.</td>
</tr>
<tr>
<td>- Countercheck by interviewing any newly hired staff in the dental center about the date &amp; content of training.</td>
</tr>
<tr>
<td>- Give a specific task e.g. ask them to demonstrate hand hygiene and assess if the message was well taken &amp; understood by staff.</td>
</tr>
<tr>
<td><strong>Sub-standard – 5:02</strong></td>
</tr>
<tr>
<td>------------------------</td>
</tr>
<tr>
<td><strong>IC department provides continuous education and training (formal &amp; on- job training) for HCWs on infection control.</strong></td>
</tr>
</tbody>
</table>

**Weightage: High**  
**Method of Evaluation: Document (D), Personal File (PF), Staff Interview (SI)**

### REVIEW:
- In the infection control department, review training file/s (Electronic / hard version) that includes documentation of previously done training activities including schedule, list of dental staff who had received training with percentage of coverage for each clinic/area.
- Review annual infection control training plan for the dental settings that includes programs and topics based on need assessment and staff interests and include lectures and practical training.
- Annual plan can be updated as per necessity that could significantly pose risk to the patient safety e.g. increased needle stick injuries rate among Dental healthcare personnel (DHCP) in last quarter e.g. necessitates urgent training program for the dental staff.
- Educational program should incorporate basic & specialized program infection control program for all Dental healthcare personnel (DHCP) according to their nature of work.
- Dental IC educational program courses and training workshops shall cover all dental health care personnel belonging to different specialties and categories including dentists, dental assistants / dental hygienists, dental lab staff, dental CSSD staff, trainees, & volunteers etc.

### Personal File (PF)

**REVIEW:**
- Randomly selected personal files of all dental health care personnel belonging to different specialties and categories to review the certificates of pre-employment training and competency together with any documented specific off site training certificates like attendance in infection control conferences, workshops etc.

### Staff Interview (SI)

**INTERVIEW:**
- Ask the staff about last IC course or on job training they attend.
- Ask the staff about knowledge acquired from attending particular IC course and how it helped in practical implementation in practice. *e.g importance of one hand scoop technique when safety devices are not available etc*
<table>
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<tr>
<th>03</th>
<th><strong>Sub-standard – 5.03</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>IC department provides education on infection control for patients, families and visitors.</td>
</tr>
</tbody>
</table>
|    | **Weightage:** Medium  
|    | **Method of Evaluation:** Document (D), Staff Interview (SI), Observation (O) |

**REVIEW:**
- If there is any document that is designed and formulated to help in the education of the patients, families and visitors related to dental health with focus on infection control in the form of **Posters, Brochures, booklets, pamphlets etc.**
- The educational material designated for visitors and patients must be precise, easy to understand and relevant.
- Examples includes education on **importance of respiratory hygiene and cough etiquettes, hand hygiene, self-reporting symptoms of a respiratory infection during registration, importance of maintaining good dental hygiene etc.**

**INTERVIEW:**
- Ask infection control practitioner about the methods used for provision of dental health education to patients, families & visitors.
- Ask the dental staff in clinics if any education is imparted to patients regarding dental hygiene & other IC measures.
- Dental infection control education for patients could be structured and documented in patients’ files.

**OBSERVE:**
- If appropriate infection control education material is posted in different areas of dental center including entrances, waiting areas and other patient care areas.
- Check for availability of **brochures, pamphlets, booklets containing IC education material** e.g **importance of hand hygiene, cough etiquettes & dental hygiene etc**
- Education material on **COVID -19 clinical presentation, modes of transmission, importance of universal masking & social distancing in the COVID – 19 era must also be available for patients and visitors awareness.**
<table>
<thead>
<tr>
<th>04</th>
<th>Sub-standard – 5.04</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>There are regular training activities for sharp injuries prevention.</td>
</tr>
</tbody>
</table>
|     | **Weightage: Medium**  
|     | **Method of Evaluation: Document (D), Personal File (PF), Staff Interview (SI)** |

**REVIEW:**
- Training plan / schedule of training activities and ensure training activities for sharp injuries prevention among dental health care personnel (DHCP) are incorporated.
- Check for evidence of training activities conducted for sharp injuries prevention in the past.
- Check for electronic or printed evidence and compare with number of dental health care personnel (DHCP) working in the dental center.
- Coverage of Training activities must be 100% in order to ensure staff safety.

**REVIEW:**
- Sample of randomly selected personal files belonging to different professional categories and verify if there is documented evidence of sharp injuries training conducted in the past.

**INTERVIEW:**
- Dental health care personnel working in different sections of dental center and ask if they have received any specific training for sharps injury prevention.
- Ask staff to demonstrate one handed scoop technique and assess the practices.

---

**Key Recommendations for SHARPS SAFETY in Dental Settings**

1. 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.
2. 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.
3. 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).
4. 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.
The One-Handed Needle Recapping Method

Step 1
Place the cap on a flat surface then remove your hand from the cap

Step 2
With one hand, hold the syringe and use the needle to “scoop up” the cap

Step 3
When the cap covers the needles completely, use the other hand to secure the cap on the needle hub. Be careful to handle the cap at the bottom only (near the hub)
Employee Health Clinic assist in the provision of a safe working environment for the dental staff. Dental healthcare personnel (DHCP) are at risk of exposure in an environment in which the potential of an unknown infection hazard always exists.

Occupational health Program assist in the prevention and control of occupationally acquired infections and hazards among the dental healthcare personnel.

Establishing an occupational health clinic is the necessity of each dental center for provision of pre-employment screening, immunization & other services related to occupational health for all dental health care personnel.
### EMPLOYEE HEALTH

<table>
<thead>
<tr>
<th>06</th>
<th>Sub-standard – 6:01</th>
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<tbody>
<tr>
<td>01</td>
<td>There is a special clinic for employees’ health that provides pre-employment counseling and screening, immunization, post exposure management and work restriction OR there is written mechanism for prearranged referral of dental healthcare workers to a healthcare facility to receive all appropriate occupational health services.</td>
</tr>
</tbody>
</table>

**Weightage:** High  
**Method of Evaluation:** Document (D), Medical Record (MR), Staff Interview (SI)

<table>
<thead>
<tr>
<th>Document (D)</th>
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</table>

**Check If there is occupational health clinic within the dental center following services must be provided:**

- Pre-employment counselling & baseline screening  
- Establish and maintain accurate and confidential medical records of employees  
- Assess and determine the immune status and immunization requirements of employees for vaccine-preventable diseases and institute the appropriate measures.  
- Provide treatment and medical advice to individual employees and act as a resource for employees to obtain care.  
- Monitor and investigate infectious diseases & potentially harmful infectious exposures among DHCP.  
- Monitor and investigate the needles stick and sharp injuries among DHCP.  
- Implementation of work restrictions when and where needed.  
- Employee health related education & training programs  
- N95 fit testing  
- The clinic has a definite time and assigned staff (either full-time or part-time)

**If there is NO occupational health clinic within the dental center,** there MUST be a written mechanism for prearranged referral of dental healthcare workers to a healthcare facility to receive all appropriate occupational health services.

**REVIEW:**

- Documented evidence of referral mechanism / contract with another healthcare facility / hospital where all dental health care personnel will be referred for provision of above mentioned occupational health services.
### REVIEW:

- Randomly selected staff health files of DHCP belonging to different specialties and categories including dentists, dental assistants / dental hygienists, dental lab staff, dental CSSD staff etc.
- Check for completeness and ensure all required data is documented in staff health files.

**NOTE:** Maintenance of medical records of DHCP is required to be available within the dental center whether occupational health services are provided within the dental center or any other healthcare facility.

### INTERVIEW:

- Infection control practitioner/s regarding the occupational health clinic if it's available within the center or there is a referral mechanism to another healthcare facility.
- Ask about the type of services included and how they are doing follow up and maintain updated records in staff health files.
- There must be an electronic database or any other equivalent manual / electronic tracking system to ensure all required vaccination doses and screening tests are completed on time.

### Sub-standard – 6:02

All employees have a baseline screening for hepatitis B, hepatitis C, HIV and tuberculosis (TB).

**Weightage:** High

**Method of Evaluation:** Medical Record (MR)

- IC Department must have clear written protocol for screening any newly hired employee for hepatitis B, hepatitis C, HIV and tuberculosis (TB).
- All dental health care personnel (DHCP) must undergo baseline screening for hepatitis B, Hepatitis C, HIV & Tuberculosis upon hiring.

### REVIEW:

- Medical records / staff health files of randomly selected DHCP from different categories & check if screening results are available for above mentioned diseases.
- Screening data of all DHCP must be kept in staff files. **(Electronic / Manual)**
- Electronic / Manual records must be complete, updated & well organized.
**Sub-standard – 6:03**

The immune status of newly hired staff against hepatitis B, measles, mumps, rubella and varicella are determined by documented vaccination, or serological evidence of immunity, or documented clinical / laboratory evidence of disease with lifelong immunity. Appropriate vaccine(s) is administered to those who are susceptible.

*Weightage: Medium*

*Method of Evaluation: Medical Record (MR)*

<table>
<thead>
<tr>
<th>Medical Record (MR)</th>
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<tbody>
<tr>
<td><em>IC Department MUST determine immune status of newly hired staff against HBV, Measles, mumps, rubella and varicella:</em></td>
</tr>
<tr>
<td>- Occupational Health Clinic must have a clear plan &amp; written protocols for identifying susceptible staff based on documented vaccination, serological evidence of immunity, or documented clinical / laboratory evidence of the disease.</td>
</tr>
<tr>
<td>- Vaccination programs for susceptible DHCP i.e administration of appropriate vaccine(s) to susceptible HCWs</td>
</tr>
<tr>
<td>- There must be lists of target groups for different vaccines &amp; coverage rates.</td>
</tr>
<tr>
<td>- Occupational health clinic must have a vaccination tracking system / dashboards to track the susceptible staff on vaccination schedule to ensure all doses are received within the recommended time frame.</td>
</tr>
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</table>

**REVIEW:**

Randomly sample of randomly selected staff health files and verify if following records are available:

a) Documented evidence of prior vaccination to confirm DHCP are immune to specific diseases.

b) Verify if there is any serological evidence of immunity i.e. serological test results are available for abovementioned diseases.

c) In the absence of above, check if there is any documented clinical / laboratory evidence of disease as a proof to ensure DHCP has natural immunity to abovementioned diseases (If any)

d) Check if appropriate vaccine is administered to identified susceptible DHCP based on serological test results.

---

- Occupational health clinic must ensure all screening records of newly hired DHCP are complete and updated with vaccination of those who are susceptible based on the serology results.
- Completeness of staff health records is extremely important to ensure HCWs are screened as per requirements and received appropriate vaccines when applicable.

**Level of immunity is defined as:**

- **Hepatitis B virus:** evidence of immunity by level of HBsAb > 10 m IU/ ml
- **Measles:** Presumptive evidence of immunity is written documentation of vaccination with two doses of MMR vaccine administered at least 28 days apart, laboratory evidence of immunity, laboratory confirmation of disease.
- **Mumps:** presumptive evidence of immunity if they have written documentation of vaccination with two doses of MMR vaccine administered at least 28 days apart, laboratory evidence of immunity, laboratory confirmation of disease.
- **Rubella:** Personnel should have documentation of one dose of live rubella vaccine on or after their first birthdays or laboratory evidence of immunity to rubella.
- **Varicella** HCP are considered to have immunity if they have laboratory evidence of immunity, an evidence of clinical diagnosis or verified varicella or zoster, or documentation of age appropriate vaccination.
<table>
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<tr>
<th>Sub-standard – 6:04</th>
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<tbody>
<tr>
<td>The influenza vaccine is administered annually to targeted HCWs as per MOH recommendations.</td>
</tr>
<tr>
<td>Weightage: Medium</td>
</tr>
<tr>
<td>Method of Evaluation: Medical Record (MR)</td>
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</table>

**Medical Record (MR)**

*Occupational health clinic MUST ensure that all targeted DHCP have received influenza vaccination as per recommendations of ministry of health.*

**REVIEW:**

Sample of randomly selected DHCP health files and verify the following:

- Valid annual influenza vaccination records
- Additional evidence would be Basic Infection Control Skills License (BICSL card) with evidence of annual influenza vaccinations. *(For MOH dental centers ONLY)*
- Staff refusals must be documented and escalated to administration (If any)

**INTERVIEW:**

- Infection Control Practitioner/s about annual report of the employee health clinic that includes overall coverage rate of annual influenza vaccination.
- Lists of targeted DHCP for annual influenza vaccination in the dental center.
- Ask if there is influenza vaccination coverage rate among DHCP available for the last year.
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<th>Sub-standard – 6:05</th>
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<tbody>
<tr>
<td><strong>05</strong></td>
</tr>
<tr>
<td>Newly hired staff are screened for tuberculosis upon contracting with PPD test. The test is repeated annually for those who are non-reactive and PPD conversion rates are monitored and calculated.</td>
</tr>
<tr>
<td><strong>Weightage: High</strong></td>
</tr>
<tr>
<td><strong>Method of Evaluation:</strong> Medical Record (MR)</td>
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</table>

**Occupational health clinic MUST ensure following must be completed to rule out evidence of tuberculosis.**

**REVIEW:**
- Sample of randomly selected staff health files of DHCP belonging to different specialties and categories including dentists, dental assistants / dental hygienists, dental lab staff, dental CSSD staff etc & check if screening evidence for tuberculosis upon contracting with PPD test is documented in staff medical records.
- Check for completeness and appropriate follow up based on results of PPD test.

**Review following documents for PPD coverage & conversion rates:**
- Overall coverage rate for baseline PPD-based Tuberculin Skin Testing of DHCP.
- Lists of target groups *(non-reactive DHCP)* for annual PPD-based TST
- Annual report of the employee health clinic that includes coverage rate of annual PPD-based TST & conversion rate.
- Check if all records are available and updated.

**Further Reading:**
- A Purified Protein Derivative based Tuberculin Skin Test (PPD-based TST) should be administered, read, and interpreted by trained personnel.
- Intradermal method (Mantoux) is used to administer the PPD-based TST.
- A two-step TST should be performed when the initial TST is negative and there is no documented negative TST during the preceding 12 months.
- Interpretation of the TST depends on measured TST induration in millimeters, the person's risk for being infected with M. tuberculosis, and risk for progression to active TB if infected.
- If personnel have a positive TST, a chest radiograph should be done promptly to check for active disease.
- A recent converter should be referred to a healthcare provider for consideration of preventive therapy.
- **PPD-based TST conversion:** a 10-mm or greater increase in the size of the TST induration during a 2-year period in a person with a documented negative <10mm baseline 02 step TST result.
- **Conversion rate:** Percentage of persons whose test result has converted within a specified period. (i.e., to calculate a conversion rate, divide the number of conversions among DHCP in the dental setting in a specified period (numerator) by the number of personnel who received tests in the dental setting over the same period and multiply by 100).
<table>
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<tr>
<th>Sub-standard – 6:06</th>
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<tbody>
<tr>
<td>There is an implemented system for reporting, follow up, and management of sharp or needle stick injuries and blood or body fluid exposures.</td>
</tr>
</tbody>
</table>

**Weightage:** Critical  
**Method of Evaluation:** Document (D), Staff Interview (SI)

| Occupational Health Staff must have enough knowledge and expertise on post exposure follow up management protocols whether occupational health services are provided within the dental center or there is an established referral mechanism to a designated healthcare facility. |

**REVIEW:**  
- Annual report of the employee health clinic that includes sharp / needle stick injuries & blood/body fluid exposures rates.  
- Review medical records of the last 2-3 DHCP who had experienced sharp / needlestick injuries or exposed to blood/body fluid.  
- Check & verify if following is available depending to type of exposure:  
  - Incident report / OVR  
  - Documented evidence of follow up and management  
  - Post Exposure Prophylaxis (PEP)  
  - Vaccination against Hepatitis B virus  
  - Hepatitis B immune globulin (HBIG) to susceptible HCWs (if applicable.)  
  - Follow up serological testing  
  - Counselling & treatment of DHCP etc (if needed) |
- **DCHP** working in different sections within the dental center must be well oriented and trained regarding the system of reporting, follow up and management of exposure to needle stick injury and body fluid exposure.
- They must have enough knowledge of when, how, & where to report an incident of sharp, needle stick & blood /body fluid exposure.
- Staff must be well trained on **FIRST AID** measure after sudden exposure or injury.

**INTERVIEW:**

- DCHP working in different areas i.e dental clinic staff, dental lab staff etc & ask about the post exposure management & follow up protocols after accidental exposure to blood & body fluids or sharp / needle stick injury.
- Assess if they have good knowledge and ware of all steps.

**Ask one of dental staff regarding immediate steps to be taken after a needle stick injury by giving a scenario:**

*Example: If you experienced a needle stick or sharps injury during the course of your work, what immediate steps should be followed????*

Answer should include following:

- **First Aid Measures:**
  - Wash needle sticks and cuts with soap and water
  - Then apply isopropyl alcohol 70%
  - Bandage appropriately
  - Reporting the injury to his / her immediate supervisor
  - Fill & submit and complete a reporting form (**OVR : Occurrence Variance report**)
  - The report should include:
    - **Staff Information**
    - The date and time of the incident
    - The location where the incident occurred
    - Details of exposure type

**Occupational Health Nurse / doctor must know and perform the following:** (Refer to National occupational health guidelines for details and stepwise management.

- How to evaluate both the exposed employee and the source patient?
- How to properly apply post-exposure follow up & management plan for HBV, HCV or HIV.
- How to report, manage and follow up a dental assistant who had sharp injury from unknown source.
- How to report, manage and follow up a dental clinic staff who had exposed to needle stick injury from a patient +ve for HBV & HIV etc
<table>
<thead>
<tr>
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<th><strong>Sub-standard – 6:07</strong></th>
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<tbody>
<tr>
<td>07</td>
<td>The IC team regularly monitors different types of staff exposure and take corrective actions to prevent recurrence, e.g., engineering controls as self-sheathing needles, or safety scalpels are applied, correct any wrong practices etc.</td>
</tr>
<tr>
<td></td>
<td><strong>Weightage: High</strong></td>
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<tr>
<td></td>
<td><strong>Method of Evaluation: Document (D), Staff Interview (SI)</strong></td>
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</tbody>
</table>

**Occupational health staff with maintain the following records to ensure continuous monitoring and follow up of various staff exposures followed by corrective actions to prevent recurrences:**

**REVIEW:**

Annual report of the employee health clinic that includes rates of different exposures (or changes in exposure rates with or without corrective interventions)

**Check for documented evidence of corrective interventions:**

- Change in specific policy to replace a risky procedure with a less risky procedure.
- Replacing a risky device or equipment with a device or equipment that has more advanced safety features e.g. availability of devices with safety features like self-sheathing anesthetic needles safety scalpels etc.
- Evidence of retraining of targeted DHCP on importance of one hand scoop technique and use of PPE during patient care to avoid exposure risks.
- Document showing comparison of exposure rates before & after corrective actions or prevention strategies.
- Infection control meeting minutes that discuss and interpret rates of different exposures In the past quarter etc. classified by DHCP category, device-based … etc.
- Documented evidence of feedback that is provided to HCWs involved in corrective interventions or prevention strategies.

**INTERVIEW:**

- Ask Infection control practitioners / Occupation health staff about the monitoring mechanism of different type of staff exposures.
- Ask about the routine monitoring rounds to check for practices of dental staff.
- Ask about the immediate feedback and correction of any risky practice when and where needed.
- Ask about availability of engineering controls such as safety devices in order to ensure staff safety.
**Sub-standard – 6:08**

Reporting through electronic system is active and ongoing (i.e., reliable reports of sharp or needle stick injuries and blood or body fluid exposures are sent to GDIPC through the EPINet or HESN system in a timely manner)

**Weightage:** Critical  
**Method of Evaluation:** Document (D), Staff Interview (SI)

**Role of Occupational health clinic is to ensure safety of healthcare worker by implementing a system for reporting, follow up and management of needle stick injuries & blood and body fluid exposure.**

**REVIEW:**

In the occupational health clinic / IC department review the following records:

- EPINet forms (or other equivalent forms) during the last 3 - 6 months for HCWs who had experienced sharps / needle stick injuries & blood / body fluid exposure.
- Evidence of regular reliable reporting (i.e., ongoing & active reporting in timely manner e.g. incident reports.
- Reporting to GDIPC via EPINet or HESN system include the following depending on the type of exposure:
  - Incident report / OVR  
  - Documented evidence of follow up and management  
  - Post Exposure Prophylaxis (PEP)  
  - Vaccination against Hepatitis B virus  
  - Hepatitis B immune globulin (HBIG) to susceptible HCWs (if applicable.)  
  - Follow up serological testing  
  - Counselling & treatment of DHCP etc (if needed)

**INTERVIEW:**

- IC staff if they have received training regarding reporting system of sharp or needle stick injuries and blood or body fluid exposures via EPINet / HESN.  
- Ask staff to demonstrate how to report a case of sharp/needle stick injury or blood/body fluid exposure to GDIPC through EPINet, HESN electronic system.

**Comment (if any):** Applicable to MOH Dental Centers / UNITS ONLY
<table>
<thead>
<tr>
<th>Sub-standard – 6.09</th>
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<tbody>
<tr>
<td>The screening, immunization, and post exposure management data are kept in staff medical records.</td>
</tr>
</tbody>
</table>

**Weightage: High**  
**Method of Evaluation: Medical Record (MR)**

**Screening, immunization and post-exposure management medical records (or copies) MUST be available for all Dental health care Personnel (DHCP) in the occupational health clinic OR infection control department if there is no employee health clinic within the dental center. Records must be duly updated (Electronic or printed version)**

For each Dental health care Personnel (DHCP) following records must be available, complete & up-to-date:

**REVIEW:**

- Evidence of baseline screening
- Evidence of immunity or administration of appropriate vaccine(s) to those who are susceptible
- Evidence of post exposure follow up and management etc
Hand hygiene is the single most effective measure for preventing disease transmission in the Dental healthcare setting. Hands may easily become contaminated with infectious microorganisms, which can enter the body through a break in the skin or be transmitted to a susceptible host and cause infection.

Its primary purpose is the mechanical removal of transient microorganisms from the skin, preventing cross-contamination and cross-infection from contaminated hands.

All dental healthcare personnel including dentists, nurses, dental assistants & technicians must comply with the hand hygiene policy considering infection control to be everyone’s responsibility.
**HAND HYGIENE**

<table>
<thead>
<tr>
<th>07</th>
<th>Sub-standard – 7:01</th>
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<tbody>
<tr>
<td>01</td>
<td>Visual alerts for Hand Hygiene (WHO 5 moments, how to hand wash, how to hand rub), are available &amp; posted beside every hand rub dispensers and sinks &amp; are easily cleanable.</td>
</tr>
</tbody>
</table>

**Weightage:** High  
**Method of Evaluation:** Observation (O)

**OBSERVE:**
- Availability of visual education tools / Visual alerts as staff reminders at workplaces are posted at appropriate places beside each hand rub dispenser and hand washing sink.  
- Tools must be made of material that is tear resistant & can withstand repeated cleaning.  
  - *WHO 5 moments for hand hygiene are posted at all patient care areas.*  
  - *How to hand wash poster beside each hand washing sink*  
  - *How to hand rub poster beside each hand hygiene dispenser*
Your 5 Moments for Hand Hygiene

Dental Care

1. Before Touching a Patient
   - When: Clean your hands before touching a patient.
   - Why: To protect the patient against harmful germs carried on your hands.

2. Before Clean/Aseptic Procedure
   - When: Clean your hands immediately before performing a clean/aseptic procedure.
   - Why: To protect the patient against harmful germs, including the patient's own, from entering his/her body.

3. After Body Fluid Exposure Risk
   - When: Clean your hands immediately after a procedure involving exposure risk to body fluids (and after glove removal).
   - Why: To protect yourself and the environment from harmful patient germs.

4. After Touching a Patient
   - When: Clean your hands after touching the patient at the end of the encounter or when the encounter is interrupted.
   - Why: To protect yourself and the environment from harmful patient germs.

5. After Touching Patient Surroundings
   - When: Clean your hands after touching any object or furniture in the patient surroundings when a specific zone is temporarily and exclusively dedicated to a patient - even if the patient has not been touched.
   - Why: To protect yourself and the environment from harmful patient germs.
<table>
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<tr>
<th>02</th>
<th><strong>Sub-standard – 7:02</strong></th>
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<tbody>
<tr>
<td>Hand washing facilities and supplies (sinks with hot and cold water, Plain and antiseptic soap, paper towels) are available and easily accessible in all areas such as clinics (at least one in each clinic), lab, x-ray department, sterilization department.</td>
<td></td>
</tr>
<tr>
<td><strong>Weightage:</strong> Critical</td>
<td></td>
</tr>
<tr>
<td><strong>Method of Evaluation:</strong> Observation (O)</td>
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</table>

<table>
<thead>
<tr>
<th>Observation</th>
<th><strong>Availability of hand hygiene supply (Alcohol based hand sanitizers, antiseptic soaps, paper towels etc.) in all patient care areas and other appropriate places is crucial for effective implementation of hand hygiene program.</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>OBSERVE:</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Hand Washing Facilities:</strong></td>
<td></td>
</tr>
<tr>
<td>Observe if hand washing facilities are available that meet the needs of the unit and are clean and in good repair.</td>
<td></td>
</tr>
<tr>
<td>Check the availability of hand washing facilities in each <em>dental clinic, dental lab, x-ray Room/department, sterilization department etc.</em></td>
<td></td>
</tr>
<tr>
<td>Observe availability of water supply (hot and cold) for hand washing <em>(Place hands under the water tap if hands free operation or open the tap to check for hot &amp; cold water supply)</em></td>
<td></td>
</tr>
<tr>
<td>Observe the availability of following supplies:</td>
<td></td>
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<tr>
<td>- Plain (non-antimicrobial) soap</td>
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<tr>
<td>- Antimicrobial soap</td>
<td></td>
</tr>
<tr>
<td>- Paper Towels for drying</td>
<td></td>
</tr>
</tbody>
</table>

**Observe whether hand washing sinks are conveniently fixed to ensure ease of accessibility to staff at the point of care / point of use.**
### Sub-standard – 7:03

Hand washing sinks are dedicated only for hand washing procedure (not used to clean instruments).

**Weightage:** High  
**Method of Evaluation:** Observation (O), Staff Interview (SI)

<table>
<thead>
<tr>
<th>Observation (O)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>OBSERVE:</strong></td>
</tr>
<tr>
<td>- Staff practices during the audit visit that dedicated hand washing sink inside dental clinic is used only for washing hands in case of visible contamination with blood and body fluids.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Staff Interview (SI)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>INTERVIEW:</strong></td>
</tr>
<tr>
<td>- Dental healthcare staff during the audit visit and ask about the available hand washing sink is used for which purposes during dental session &amp; in between patients.</td>
</tr>
<tr>
<td>- Countercheck by asking staff to demonstrate where they will wash contaminated instruments before transportation to CSSD. (This practice is strictly prohibited.)</td>
</tr>
</tbody>
</table>

### Sub-standard – 7:04

Alcohol based hand rub dispensers are available and easily accessible (at least one dispenser in each clinic).

**Weightage:** Critical  
**Method of Evaluation:** Observation (O)

<table>
<thead>
<tr>
<th>Observation (O)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>OBSERVE</strong> the following:</td>
</tr>
</tbody>
</table>

#### Hand Rub Dispensers:

a. **Check** the availability of hand rub dispensers as per requirements:

- One dispenser per dental clinic
- One in dental Lab
- One at dental X-ray department
- One at dental sterilization department etc

**Observe whether Hand rub dispensers are conveniently mounted / placed to ensure ease of accessibility to staff at the point of care / point of use.**
<table>
<thead>
<tr>
<th>Sub-standard – 7:05</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dental health care personnel (DHCP) comply with hand hygiene recommendations and are able to perform hand hygiene with appropriate technique &amp; recommended duration based on WHO guidelines.  <em>(Interview at least 3-5 DHCP)</em></td>
</tr>
</tbody>
</table>

**Weightage: Critical**  
**Method of Evaluation:** Observation (O), Staff Interview (SI)

### OBSERVE:
- Practices of Dental healthcare staff during visit in all area within the dental center i.e dental clinics, dental lab, dental radiology etc to check whether they are compliant with hand hygiene practices or not.
- Observe if DHCP are following the recommended duration, steps and technique of hand rubbing & hand washing.

### INTERVIEW:
- Randomly selected different categories of Dental healthcare Personnel (DHCP) and ask them to simulate hand hygiene.
- *(Focus on technique, steps & duration)*. *(For duration DHCP must have timer to calculate exact duration of 20 – 30 seconds & hand washing for 40-60 seconds.)*
- Interview at least 3 - 5 different categories to get an average about their performance.
  - Dentists
  - Dental assistant / Nurses
  - Dental Lab technician
  - Dental Radiology Personnel
  - Dental CSSD staff
  - Housekeeping / Waste collection Staff etc

**Interview staff by giving a scenario:**

**Example: 1**
You are about to remove your PPE after completing a dental procedure on a patient. How would you like to clean your hands after removing gloves?  
**Answer:** She must opt for **hand rubbing** with alcohol based hand sanitizer unless her hands are visibly soiled

**Example: 2**
Patient XYZ came to the dental OPD for tooth extraction. During the procedure while assisting the doctor you noticed a tear in your gloves while suctioning. Which appropriate hand hygiene practice would you choose and why?  
**Answer:**  
She must opt for **hand washing with soap and water** since there was tear in the gloves and contaminated secretions must have penetrated skin through torn glove.
| 06 | **Sub-standard – 7:06**
Hand hygiene compliance rates are regularly monitored; Results are discussed in IC committee meetings for corrective actions.

**Weightage: High**
**Method of Evaluation: Document (D)**

**REVIEW:**

In the IC department review the following records:

**Hand Hygiene Compliance reports:**
- Review trended data overtime that compares the hand hygiene compliance rate over the months and compare different staff categories & area i.e dental clinic staff, dental lab staff etc.

**Infection Control Committee Meeting Minutes:**
- Review the last 3 committee meeting minutes & verify if hand hygiene trends are presented & discussed.
- Check for suggestive correction actions if hand hygiene compliance is low.

**Corrective actions would include:**
- Continuous education & training of DHCP
- Continuous monitoring & observation
- Performance feedback on compliance
- Ensuring availability of supplies for hand hygiene in adequate amount and at appropriate places.
- Disciplinary action for any breach in practices
- Administrative support
- Performance Improvement Project for hand hygiene
- Motivational & incentive programs etc

- Although hand Hygiene remains a foundation of patient safety and infection prevention but achieving and maintaining adherence still remains a challenge.
- Education alone seldom leads to adequate adherence to hand hygiene in healthcare.
- Behavioral change requires a combination of **Education, Motivation & Leadership support.**
Person protective equipment, commonly referred to as "PPE", is equipment worn to protect the health care workers from acquiring infections and other hazards. Dental Health care personnel (DHCP) are exposed to multiple health risks according to nature of their work. Dental Health care personnel (DHCP) may be exposed to infectious agents, chemical agents, radiological materials, physical, mechanical, or other workplace hazards.

PPE acts as a barrier between infectious materials such as viral and bacterial contaminants and skin, mouth, nose, or eyes (mucous membranes). The barrier has the potential to block transmission of contaminants from blood, body fluids, or respiratory secretions.

Effective use of PPE includes properly removing and disposing of contaminated PPE to prevent exposing both the wearer and patients to infection.
## 8 Personal Protective Equipment (PPE)

### Sub-standard – 8:01

Visual alerts for PPE (donning and doffing), cough etiquette, etc., are available, posted and easily cleanable.

**Weightage:** High  
**Method of Evaluation:** Observation (O)

### OBSERVE:

- Availability of visual education tools as staff reminders for donning & doffing of PPE.  
- These reminders must be posted at appropriate places where DHCP are using PPE i.e. dental clinics, dental lab, dental radiology etc.  
- Observe if visual education tools for cough etiquette are posted at various locations within the dental center.
### Sub-standard – 8:02

Sufficient and appropriate personal protective equipment are easily accessible and available in adequate amount, types, and sizes with proper qualities. (e.g., examination gloves, surgical face masks, protective eyewear/face shields, utility gloves, sterile surgeon’s gloves for surgical procedures).

**Weightage:** High  
**Method of Evaluation:** Observation (O), Staff Interview (SI)

### OBSERVE:

- Availability of different types of personal protective equipment (PPE) in all appropriate locations/areas within the dental center.
- Observe if the supply is adequate in amount and there is no shortage of supply.
- Observe the quality of available PPE e.g gloves must not be loose at wrists and yellow gowns should be of thick material and fluid resistant to withstand splashes and provide good protection to DHCP.
- Observe following PPE is available and used by DHCP during dental procedures and dental lab etc
  - Examination gloves
  - Surgical face masks
  - Protective eyewear/face shields
  - **Utility gloves** for dental lab staff when handling contaminated instruments etc.
  - Sterile surgeon’s gloves during surgical oral procedures

### INTERVIEW:

- Infection control practitioner/s regarding availability of PPE supply in the dental center.
- Ask if all PPE items are available in sufficient amounts and proper qualities.
<table>
<thead>
<tr>
<th>Sub-standard – 8:03</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PPE supplies are selected properly according to the task.</strong></td>
</tr>
<tr>
<td><strong>Weightage: High</strong></td>
</tr>
<tr>
<td><strong>Method of Evaluation: Observation (O), Staff Interview (SI)</strong></td>
</tr>
</tbody>
</table>

**OBSERVE:**
- If DHCP are using appropriate PPE based on the indication.
- Observe in the dental clinics if dental assistants during procedure are wearing appropriate PPE like gown, gloves and face shields as per standard precautions.
- Observe if the **dental lab staff are using protective clothing and utility gloves** when handling contaminated instruments and dental impressions etc.

**INTERVIEW:**
- DHCP in different working areas within the dental center like dental clinics, dental lab, dental radiology, dental CSSD etc. and ask about the selection of PPE for different type of tasks.
- For example, ask dentist what type of gloves will be required during surgical extractions of teeth?
- Ask dental lab personnel about selection of PPE when handling contaminated dental impressions received from dental procedure room.
<table>
<thead>
<tr>
<th>04</th>
<th><strong>Sub-standard – 8:04</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Surgical mask and eye protection with solid side shields or a face shield are worn when performing procedures likely to cause splash or spatter.</td>
</tr>
<tr>
<td></td>
<td><strong>Weightage: High</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Method of Evaluation: Observation (O), Staff Interview (SI)</strong></td>
</tr>
</tbody>
</table>

**OBSERVE:**

- During audit visit observe practices of dental healthcare personnel (DHCP) in different working areas within the dental center.
- Observe if the staff are compliant with appropriate PPE during procedures that are likely to generate splashes or spatters etc.
- DHCP must don **surgical masks & eye protection / faceshields** during these procedures.

**Spatter:** Visible drops of liquid or body fluid that are expelled forcibly into the air and settle out quickly, as distinguished from particles of an aerosol, which may remain airborne indefinitely.

**INTERVIEW:**

- Dental healthcare personnel (DHCP) about the type of PPE to be used while performing or assisting dental procedures that are likely to generate splashes or spatters.
- Ask about importance of compliance with PPE in reducing risk of acquiring infections from accidental exposure during provision of dental care.

Many dental procedures produce aerosols and droplets that are contaminated with bacteria and blood. The aerosols and splatter generated during dental procedures have the potential to spread infection to dental personnel and other people in the dental office.
<table>
<thead>
<tr>
<th>Sub-standard – 8:05</th>
</tr>
</thead>
<tbody>
<tr>
<td>Protective clothing (Gown) is worn over street clothes or uniforms to protect against splash or spatter.</td>
</tr>
</tbody>
</table>

**Weightage: High**

**Method of Evaluation: Observation (O), Staff Interview (SI)**

<table>
<thead>
<tr>
<th>Observation (O)</th>
</tr>
</thead>
<tbody>
<tr>
<td>OBSERVE:</td>
</tr>
<tr>
<td>- During audit visit observe practices of dental healthcare personnel (DHCP) in different working areas within the dental center.</td>
</tr>
<tr>
<td>- Observe if the staff are compliant with appropriate PPE during procedures to protect themselves from splashes or spatters etc.</td>
</tr>
<tr>
<td>- DHCP must don protective clothing i.e. <strong>gown</strong> over street clothes or uniforms in addition to surgical masks &amp; eye protection / faceshields during these procedures</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Staff Interview (SI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>INTERVIEW:</td>
</tr>
<tr>
<td>- Dental healthcare personnel (DHCP) about the type of PPE to be used while performing or assisting dental procedures that are likely to generate splashes or spatters.</td>
</tr>
<tr>
<td>- Ask about importance of using protective clothing during such dental procedures as DHCP are at risk of accidental exposures from splashes and aerosols generated during the treatment session.</td>
</tr>
<tr>
<td>- It is extremely important to ensure strict adherence to standard precautions at all time while providing care to all dental patients.</td>
</tr>
</tbody>
</table>
### Sub-standard – 8:06

Medical gloves are worn when contact with body fluids is expected.

**Weightage: High**  
**Method of Evaluation: Observation (O), Staff Interview (SI)**

### OBSERVE:
- During audit visit observe practices of dental healthcare personnel (DHCP) in different dental clinics if they are compliant with appropriate use of PPE.
- Observe the staff if they are donning **medical gloves** while performing dental procedures in which exposure to body fluids is expected.
- DHCP must don medical gloves in addition to protective clothing i.e. gown over street clothes or uniforms in addition to surgical masks & eye protection / faceshields during these procedures.

### INTERVIEW:
- Dental healthcare personnel (DHCP) about the type of PPE to be used while performing or assisting dental procedures in which contact with body fluids is expected.
- Ask about importance of using **Medical Gloves** during such dental procedures as DHCP are at risk of accidental exposures from exposure to blood and body fluids exposure during such treatment session.
### Sub-standard – 8:07

Sterile surgeon’s gloves are worn when performing or assisting on oral surgical procedures.

**Weightage:** Critical  
**Method of Evaluation:** Observation (O), Staff Interview (SI)

#### OBSERVE:
- During audit visit observe practices of dental healthcare personnel (DHCP) in dental clinics if they are compliant with appropriate use of PPE according to indication.
- Observe the staff if they are donning **Sterile Surgical Gloves** while performing or assisting oral surgical procedures as patient’s sterile tissues will be exposed and there are chances of infection transmission if sterile gloves are not used.

**Oral surgical procedures** involve the incision, excision, or reflection of tissue that exposes the normally sterile areas of the oral cavity. Examples include biopsy, periodontal surgery, apical surgery, implant surgery, and surgical extractions of teeth (e.g., removal of tooth requiring elevation of mucoperiosteal flap, removal of bone or section of tooth, and suturing if needed).

#### INTERVIEW:
- Dental healthcare personnel (DHCP) i.e dentists, dental assistants about the type of PPE to be used while performing or assisting oral surgical procedures which exposes the sterile areas of patients’ oral cavity.
- Ask about importance of using **Sterile Surgical Gloves** during such dental procedures as patients are at risk of acquiring infection if dental staff will not comply with sterile rule.
- So it is extremely important to ensure strict adherence to donning surgical sterile gloves in addition to standard precautions at all time while performing dental oral procedures.
### Sub-standard – 8:08

PPE is changed between patients or when it is visibly soiled or penetrated by blood or other potentially infectious fluids and hand hygiene is performed immediately.

**Weightage:** Critical  
**Method of Evaluation:** Observation (O), Staff Interview (SI)

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<table>
<thead>
<tr>
<th>Observation (O)</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Infection Control Team MUST provide training and education to the dental Health Care personnel (DHCPs) regarding importance of PPE &amp; associated risks if not used as per recommendations.</em></td>
</tr>
<tr>
<td><strong>OBSERVE:</strong></td>
</tr>
<tr>
<td>Observe the DHCP practices during audit visit.</td>
</tr>
<tr>
<td>Following key points must be observed:</td>
</tr>
<tr>
<td><strong>Dental Health Care Personnel (DHCP) are compliant with following in terms of changing PPE:</strong></td>
</tr>
<tr>
<td>- PPE is changed in between patients i.e a new set of PPE must be donned after completion of procedure on one patient. DHCP should NOT provide care to next patient with same PPE used on previous patient.</td>
</tr>
<tr>
<td>- PPE is changed when it is visibly soiled with blood &amp; body fluids</td>
</tr>
<tr>
<td>- PPE is changed when it is penetrated by blood or other potentially infectious fluids due to tear or low quality PPE. <em>(Low quality yellow gowns or gloves)</em></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>INTERVIEW:</th>
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</thead>
<tbody>
<tr>
<td>- Ask Dental healthcare personnel (DHCP) about frequency of changing PPE during the working hours.</td>
</tr>
<tr>
<td>- Ask what steps he/she would follow if the PPE is heavily contaminated or there are clear signs of penetration of blood or other potentially infectious material. <em>(OPIM)</em> ??</td>
</tr>
<tr>
<td>- DHCP must change PPE immediately in case of visible contamination or penetration by blood and other potentially infectious fluid &amp; perform hand hygiene.</td>
</tr>
<tr>
<td>- If hands are visibly soiled in case of tear in gloves, hand washing with soap and water MUST be opted.</td>
</tr>
<tr>
<td>Sub-standard – 8:09</td>
</tr>
<tr>
<td>-------------------</td>
</tr>
<tr>
<td>All types of personal protective equipment are removed before leaving the work area (e.g., dental patient care, instrument processing, or laboratory areas).</td>
</tr>
</tbody>
</table>

**Weightage:** Critical  
**Method of Evaluation:** Observation (O), Staff Interview (SI)

### OBSERVE:

*Observe the DHCP practices during audit visit.*

Following key points must be observed:

**Dental Health Care Personnel (DHCP) are compliant with PPE Doffing practices as below:**

- All types of personal protective equipment must be removed before leaving the work area (e.g., dental patient care, instrument processing, or laboratory areas).
- Dental Health Care personnel (DHCP) should not move with gloved hands or other PPE within the unit during procedure.
- Dental Health Care personnel (DHCP) should never use computer or add notes in patients file with gloved hands in order to avoid risk of contamination.
- Upon completion of any dental procedure all PPE should be removed at the work area before leaving followed by **hand hygiene.**

### INTERVIEW:

- Dental healthcare personnel (DHCP) regarding doffing of PPE.
- Ask where they should discard all PPE items after finishing procedure on patient?
- Ask dental lab personnel where to discard PPE after finishing task in the contaminated area?

**Answer:** To avoid risk of cross infection/cross contamination, all types of personal protective equipment **MUST be** removed before leaving the work area (e.g., dental patient care, instrument processing, or laboratory areas).
<table>
<thead>
<tr>
<th>Sub-standard – 8:10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dental staff members can demonstrate appropriate technique of donning and doffing of personal protective equipment. (correct sequence and appropriate technique).</td>
</tr>
</tbody>
</table>

**Weightage:** Critical  
**Method of Evaluation:** Observation (O), Staff Interview (SI)

### OBSERVE:
- During the audit visit, observe dental healthcare personnel (DHCP) during provision of patient care. Observe their practices regarding donning & doffing PPE.
- Observe if they are following the correct sequence & technique of PPE donning & doffing.
- Observing a real situation would give a true reflection of staff practices. If possible DHCP must be observed at the start and end of procedure through coordination of infection control practitioner.

### INTERVIEW:
- During the audit visit of various sections in the dental center e.g. dental clinics, dental lab, dental radiology etc. randomly select dental staff from different categories and give them specific task to demonstrate.

**Example: 1**  
**Ask dental assistant by giving a scenario:**

*45 years old female patient came for her scheduled dental appointment for surgical excision of an impacted tooth. You need to assist the dental surgeon during the procedure. How will you prepare yourself in terms of protection, which PPE items will you select and in which sequence will you don and doff PPE?*

**Example: 2**  
**Ask dental lab staff by giving a scenario:**

*After receiving the contaminated dental impressions from the dental clinic in the receiving area, what type of PPE items will you select and how will you don & doff PPE?*
**SEQUENCE OF DONNING PPE:**

- Always perform hand hygiene before donning PPE.
- The gown should be donned first.
- The mask or respirator should be put on next and properly adjusted to fit; remember to fit check the respirator.
- The goggles or face shield should be donned next.
- The gloves are donned last.
- Keep in mind, the combination of PPE used, and therefore the sequence for donning, will be determined by the precautions that need to be taken.
- The last item of PPE to be donned is a pair of gloves.
- Be sure to select the type of glove needed for the task in the size that best fits you. Insert each hand into the appropriate glove and adjust as needed for comfort and dexterity.
- If you are wearing an isolation gown, tuck the gown cuffs securely under each glove.

**SEQUENCE OF DOFFING PPE:**

- The gloves are considered the most contaminated pieces of PPE and are therefore removed first.
- The face shield or goggles are next because they are more cumbersome and would interfere with removal of other PPE.
- The gown is third in the sequence, followed by the mask or respirator.
Respiratory hygiene and cough etiquette are terms used to describe infection prevention measures to decrease the transmission of respiratory illness (e.g., influenza and cold viruses).

Respiratory hygiene and cough etiquette are a combination of measures designed to minimize the transmission of respiratory pathogens via droplet or airborne routes such as turning the head away from others and maintaining spatial separation, ideally >3 feet, when coughing. This protocol will prevent the transmission of respiratory infections in the facility.

DHCP must be educated 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.
## RESPIRATORY HYGIENE

<table>
<thead>
<tr>
<th>09</th>
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<tbody>
<tr>
<td><strong>Sub-standard – 9:01</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Signs are posted 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, and perform hand hygiene after hands have been in contact with respiratory secretions).</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Weightage:</strong> Medium</td>
<td></td>
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<tr>
<td><strong>Method of Evaluation:</strong> Observation (O)</td>
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</tbody>
</table>

**OBSERVE:**
- During audit visit in the dental center if appropriate signage / visual education tools are posted related to cough etiquettes / respiratory hygiene at the entrances of the dental center.
- Observe if the signage contains the appropriate content for easy understanding of patients & their companions.
- Signage should be bilingual so that message is well taken by all to apply these precautions for prevention of infection transmission within the dental center.
<table>
<thead>
<tr>
<th></th>
<th>Sub-standard – 9:02</th>
</tr>
</thead>
</table>
| 02 | **Tissues and no-touch receptacles for disposal of tissues are provided at patient waiting areas.**  
**Weightage: Medium**  
**Method of Evaluation: Observation (O)** |

**OBSERVE:**  
- Randomly choose and visit different waiting areas *(Male & Female)* within the dental center & check if all appropriate supply is available.  
- Observe if waiting areas are provided with **paper tissues** to practice respiratory hygiene and cough etiquette.  
- Observe availability of **non-touch, foot operated waste receptacle** to depose of paper tissues after use.  
- This will prevent the cross transmission of infection & environmental contamination if the patients or companions have symptoms of upper respiratory tract infection.

<table>
<thead>
<tr>
<th></th>
<th>Sub-standard – 9:03</th>
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</thead>
</table>
| 03 | **Supplies are provided for patients to perform hand hygiene in or near waiting areas.**  
**Weightage: Medium**  
**Method of Evaluation: Observation (O)** |

**OBSERVE:**  
- During audit visit observe if waiting areas are provided with all needed supply to perform hand hygiene.  
- Check if alcohol based hand rub sanitizers (ABHR) are available within the waiting or close to waiting area i.e. hand rub dispenser is installed at the entry point to waiting areas or any other place that can be quickly accessible.  
- This will facilitate the patients to practice frequent hand hygiene & immediately after discarding used paper tissue.
| 04 | **Sub-standard – 9:04**  
Face masks are offered to coughing patients and other symptomatic persons when they enter the setting.  
**Weightage:** Medium  
**Method of Evaluation:** Observation (O) |
|---|---|
| **OBSERVE:**  
- During audit visit observe what protocols are being followed for the coughing patients or other symptomatic persons at the entrance of dental settings.  
- Observe if there is an implemented process for screening of patients with respiratory symptoms.  
- Observe if there is appropriate signage posted at the reception area instructing patients and accompanying persons to self-report symptoms of a respiratory infection during registration & practice respiratory hygiene and cough etiquette.  
- Check for availability of facemasks at the entrance / reception area to be offered to coughing patients and other symptomatic persons. |
| 05 | **Sub-standard – 9:05**  
Persons with respiratory symptoms are encouraged to sit as far away from others. If possible, a separate waiting area is ideal.  
**Weightage:** Medium  
**Method of Evaluation:** Observation (O) |
| **OBSERVE:**  
- During audit visit observe if persons with respiratory symptoms are encouraged to keep appropriate distance of at least 1 meter from others in the waiting areas.  
- Observe if appropriate instructions are posted for patients with respiratory symptoms to maintain safe distance from other to prevent transmission of infection.  
- In ideal situations, a dedicated respiratory waiting area for patients with respiratory symptoms would help in prevention of infection transmission in between patients. |

*Facemasks MUST be provided to all persons (including persons accompanying patients) who are coughing and have symptoms of a respiratory infection*
Suspected Patient Check in Procedure

انتبه
ATTENTION

هل تعاني من إحدى العوارض التالية؟
Do you suffer from any of these symptoms?

- حمى مع سعال
  - Fever with cough
- سيلان الأنف
  - Runny nose
- آيذ النفس
  - Wheezing
- حكة الحلق
  - Sore throat
- نausea/vomiting
- إسهال
  - Diarrhea
- سعال
  - Sneezing
- صعوبة في التنفس
  - Shortness of breath

For your and other patients' safety, if you are exhibiting these symptoms, please inform a healthcare professional when registering. S/he will give you a mask and escort you to "protected" waiting area.

لديك استفسار؟
Do you have any questions?

- Twitter: @MOHPortel
- Facebook: @SaudMOH
- Arabic: www.moh.gov.sa/CCC

وزارة الصحة
Ministry of Health
_waiting area rules

Keep wearing your mask. If you are wearing a veil to cover your face, wear mask behind the veil.

Sneeze/cough into a tissue

Leave at least 1m between patients

Do you have any questions?

www.moh.gov.sa/DDC
Sharps injuries in the dental healthcare settings pose the risk of blood borne pathogen transmission to DHCP and patients. DHCP should be aware of the risk of injury whenever sharps are exposed. Dental Healthcare Personnel (DHCP) should take all necessary precautions while using sharps, during cleanup, and during disposal to prevent risk of injury.

Engineering and work-practice controls are the primary methods to reduce exposures to blood and other potentially infectious material (OPIM) from sharp instruments and needles.
### SHARPS SAFETY

<table>
<thead>
<tr>
<th>Sub-standard – 10:01</th>
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</thead>
<tbody>
<tr>
<td>Engineering controls (e.g., self-sheathing anesthetic needles, safety scalpels, needle recapping devices) are used whenever possible to prevent injuries.</td>
</tr>
</tbody>
</table>

**Weightage:** Medium  
**Method of Evaluation:** Observation (O), Staff Interview (SI)

#### OBSERVE:
- Practices of Dental Healthcare Personnel (DHCP) during audit round of various sections with in the dental center.  
- Observe the availability of safety devices/engineering controls to prevent injuries to dental staff.  
- Whenever possible, engineering controls should be used as the primary method to reduce exposures to blood borne pathogens.  
- Engineering controls remove or isolate a hazard in the workplace. Safety devices includes following:
  - Self-sheathing anesthetic needles  
  - Safety scalpels  
  - Needle recapping devices  
  - Needleless IV ports etc.

#### INTERVIEW:
- Dental Healthcare Personnel (DHCP) about the availability of devices with safety mechanisms to prevent injuries.  
- Ask DHCP who are directly responsible for patient care (e.g., dentists, hygienists, dental assistants) about importance of using devices with engineered safety features.  
- Ask about the various safety practices/Work practice controls in case of non-availability of devices with safety features. These include:
  - Using a one-handed scoop technique for recapping needles between uses and before disposal.  
  - Not bending or breaking needles before disposal  
  - Not passing a syringe with an unsheathed needle by hand  
  - Removing burs before disassembling the hand piece from the dental unit  
  - Using instruments in place of fingers for tissue retraction or palpation during suturing and administration of anesthesia.

- **Sharps** refers to all invasive objects and instruments with sharp edges used to directly inject or cut into soft or hard tissue of the oral cavity.  
- 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.
<table>
<thead>
<tr>
<th>Sub-standard – 10:02</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>02</strong> Used disposable syringes and needles, scalpel blades, and other sharp items are placed in appropriate puncture-resistant containers.</td>
</tr>
<tr>
<td><strong>Weightage: High</strong></td>
</tr>
<tr>
<td><strong>Method of Evaluation:</strong> Observation (O), Staff Interview (SI)</td>
</tr>
</tbody>
</table>

**OBSERVE:**
- Availability of appropriate puncture-resistant sharp containers in different patient care areas and other work areas like dental lab.
- Observe if the size and material is appropriate to dispose of used disposable syringes and needles, scalpel blades, and other sharp items.
- Containers must be of hard material to withstand punctures & tears.
- Observe any sharps protruding from the top of container.

**INTERVIEW:**
- Dental Healthcare Personnel (DHCP) regarding their practices related to disposal of used needles & syringes, scalpel blades etc.
- Ask about the availability of different sizes of sharp containers in different areas based on the amount of sharp waste generated.

<table>
<thead>
<tr>
<th>Sub-standard – 10:03</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>03</strong> Sharps containers are located as close as possible to the area where the sharps are used.</td>
</tr>
<tr>
<td><strong>Weightage: High</strong></td>
</tr>
<tr>
<td><strong>Method of Evaluation:</strong> Observation (O)</td>
</tr>
</tbody>
</table>

**OBSERVE:**
- Location of sharp containers in the dental clinics and dental lab etc. during audit rounds.
- Sharp containers must be available & placed as close as possible to the work area after finishing task so as to minimize risk of injuries.
- Sharp containers MUST be in close proximity to the dental staff where these items are used to avoid covering long distance to dispose of needles & syringes and other risky sharp waste.
<table>
<thead>
<tr>
<th>Sub-standard – 10:04</th>
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</table>

When needles must be recapped, needle recapping devices or the one-handed scoop technique is used.

**Weightage:** Critical  
**Method of Evaluation:** Observation (O), Staff Interview (SI)

<table>
<thead>
<tr>
<th>OBSERVE:</th>
</tr>
</thead>
</table>
- Observe how the dental staff are handling the needles when recapping is required during the treatment sessions.  
- Ideally needle recapping devices must be available. In case of non-availability of safety devices, dental Healthcare Personnel (DHCP) must be well trained on use of **one-handed scoop technique** to ensure staff safety. |

<table>
<thead>
<tr>
<th>INTERVIEW:</th>
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</thead>
</table>
| - Dental Healthcare Personnel (DHCP) about procedure of recapping needles during and after completion of procedure.  
- Ask randomly selected staff to demonstrate **one-handed scoop technique** and evaluate their practice. |

**Steps of One-handed recapping (scoop technique):**

- Safe way to recap needles in the absence of safety devices.  
- Place the cap on the tabletop and hold the syringe in one hand.  
- Keep the other hand by your side.  
- With one hand hold the syringe and use needle to “SCOOP UP” the cap.  
- When cap covers the needles completely use the other hand to secure the cap on needle hub.  

(Please refer for image under substandard 5.4)

_Needs must **NEVER** be recapped by using both hands or any other technique that involves directing the point of a needle toward any part of the body._
Instrument Processing involves receiving, cleaning, and decontamination, preparation and packaging, sterilization & storage. Strict adherence to infection control measures should be ensured during all phases of instrument processing making it safe to be used on patients.

No repressing of dental instruments should be carried inside the clinics. All the instruments should be sent to the central sterilization department in order to ensure safety of dental healthcare personnel (DHCP).
## INSTRUMENT PROCESSING

<table>
<thead>
<tr>
<th>01</th>
<th><strong>Sub-standard – 11:01</strong></th>
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</thead>
<tbody>
<tr>
<td></td>
<td>No reprocessing of instruments is carried out inside the dental clinic.</td>
</tr>
<tr>
<td></td>
<td><strong>Weightage: Critical</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Method of Evaluation: Observation (O), Staff Interview (SI)</strong></td>
</tr>
</tbody>
</table>

### OBSERVE:
- Practices of Dental Healthcare Personnel (DHCP) about reprocessing of dental instruments.
- Observe how the staff will handle the instruments after being used on the patients.
- Observe if contaminated items are placed in closed containers for safe transportation to CSSD after use.
- Observe to rule out availability of autoclave which reflects processing of contaminated instruments is being done inside dental clinics.

**Reprocessing (of medical or dental instruments): The procedures or steps taken to make a medical or dental instrument safe for use on the next patient. Reprocessing encompasses cleaning and the final or terminal step (i.e., sterilization or disinfection), which is determined by the intended use of the instrument.**  
**Instrument Reprocessing which must be done in the central sterile supply department. (CSSD)**

### INTERVIEW:
- DHCP in the dental clinics about protocols followed for reprocessing of contaminated instruments in the dental clinics.
- Ask how they are handling contaminated instruments after being used on patients?
- Ask about any prior IC education and training given for instruments processing?
- Ask dental staff to differentiate between critical, semi critical & non critical items and which items needs reprocessing inside CSSD.

- **No reprocessing of dental instruments should be carried inside the clinics**
- **All critical and semi critical instruments & heat tolerant items should be sent to the central sterilization department for reprocessing.**
Sub-standard – 11:02

If the sterilization process will be applied after 2 hours or more, instruments inside transferring containers are sprayed with transportation gel/spray.

**Weightage: Medium**

**Method of Evaluation: Observation (O), Staff Interview (SI)**

**OBSERVE:**

- Practices of Dental Healthcare Personnel (DHCP) related to processing of instruments after completion of dental procedures.
- Observe how dental staff are handling contaminated instruments.
- Observe availability of sealed containers for instruments transportation to CSSD.
- Observe availability of transportation gel/spray in the dental clinic to ensure its application if transportation is not expected within 2 hours.

**INTERVIEW:**

- Dental Healthcare Personnel (DHCP) and evaluate if they have enough knowledge and received training regarding all steps of instrument processing.
- **Ask the dental staff about:**
  - Categories / Classification of Dental Patient-Care Instruments form the infection control prospective.
  - Ask which items are needed to be sent for reprocessing in CSSD.
  - Ask about preparation of contaminated equipment and sending them to CSSD (i.e. collection in closed, sealed, and puncture resistant containers / spraying of transportation gel if transportation is not expected within two hours.)

<table>
<thead>
<tr>
<th>Table (2) Categories of Dental Patient-Care Instruments form the infection control prospective</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Category</strong></td>
</tr>
<tr>
<td>Critical</td>
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<tr>
<td>Semi-critical</td>
</tr>
<tr>
<td>Noncritical</td>
</tr>
<tr>
<td>Sub-standard – 11:03</td>
</tr>
<tr>
<td>---------------------</td>
</tr>
<tr>
<td>All heat tolerant dental instruments are replaced between patients and sent to central sterilization.</td>
</tr>
<tr>
<td><strong>Weightage:</strong> Critical</td>
</tr>
<tr>
<td><strong>Method of Evaluation:</strong> Staff Interview (SI), Document (D), Observation (O)</td>
</tr>
</tbody>
</table>

**Staff Interview (SI):**
- During the audit round ask dental healthcare Personnel (DHCP) about the practices related to heat tolerant dental instruments.
- Ask & assess if DHCP are oriented about protocols for replacement of all heat tolerant dental instruments in between patients and sent to central sterilization for reprocessing.

*Examples include: surgical instruments, periodontal scalers, surgical dental burs, dental hand pieces etc*

**Review (D):**
- Instruments **dispatching** logbook / document with details about the quantity & type of dental instruments / devices sent to CSSD for reprocessing.
- Instruments **receiving** logbook / document with details about the quantity & type of dental instruments / devices received from CSSD after reprocessing. *All items MUST be checked for completeness, integrity & presence of chemical indicator in each pouch before signing.*
- Logbook MUST mention name / ID / Date/ Time & signature of both stakeholders (Dental clinic staff + CSSD staff) as documented evidence for future reference.

**Observe (O):**
- During the audit visits in the dental clinic observe how critical and semi critical items are handled after completion of dental procedure. *The critical and semi critical items must not be reprocessed in dental unit (must be sent to CSSD for reprocessing)*
- Observe the presence of autoclave which means items are processed inside clinic.
<table>
<thead>
<tr>
<th>Sub-standard – 11:04</th>
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</thead>
<tbody>
<tr>
<td>Contaminated dental instruments are transferred to the central sterilization department in a closed, sealable and puncture resistant container that is identified with a biohazard label.</td>
</tr>
</tbody>
</table>

**Weightage: High**  
**Method of Evaluation: Observation (O), Staff Interview (SI)**

<table>
<thead>
<tr>
<th>Observation (O)</th>
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<tbody>
<tr>
<td><strong>OBSERVE:</strong></td>
</tr>
<tr>
<td>- During audit visit of dental clinics for availability of sealed containers for transportation of contaminated instruments to CSSD.</td>
</tr>
</tbody>
</table>

**Specifications of container used for transportation of contaminated items to the CSSD should be as follows:**
- Must be rigid & puncture resistant  
- Closed and sealable i.e. it must be fully closed to avoid displacement or falling out of items that would result in contamination of environment and/or transportation carts.  
- Container must be identified with a biohazard label.  
- Container must meet the above specifications in order to ensure safe transportation of items to CSSD for central processing.

<table>
<thead>
<tr>
<th>Staff Interview (SI)</th>
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<tbody>
<tr>
<td><strong>INTERVIEW:</strong></td>
</tr>
<tr>
<td>- Dental staff about the availability of containers with abovementioned specifications for transportation of contaminated items to CSSD for reprocessing.</td>
</tr>
</tbody>
</table>
**Sub-standard – 11:05**

Containers used for transferring contaminated instruments are different than the one used for transferring clean instruments.

**Weightage:** Critical  
**Method of Evaluation:** Observation (O), Staff Interview (SI)

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**Transfer of instruments to and from the CSSD must be done following the infection control guidelines.**  
Containers used for transportation must be separate for contaminated and clean – processed – sterilized instruments identified with a clear label.

**OBSERVE:**  
- Availability of containers used for transporting contaminated instruments to the CSSD.  
- Containers MUST be well sealed with a label and a biohazard sign posted for identification purposes.

**Transfer of clean / sterilized items from CSSD:**  
- Observe availability of closed steel trolley with containers used for transportation of processed dental instruments & other items from CSSD to dental unit.

**INTERVIEW:**  
- During the audit round ask dental healthcare Personnel (DHCP) in the dental clinics about the availability of containers used for transportation of contaminated instruments to CSSD.  
- Ask about the processing of containers used for transportation of contaminated equipment which must be sterilized if heat tolerable or undergo high level disinfection in CSSD.  
- Ask the CSSD staff about the transportation of clean processed supply to dental unit & what type of containers are being used.
### Sub-standard – 11:06

Single-use devices (e.g. endodontic broaches, saliva ejectors, anesthesia carpule…etc.) are discarded after one use and not used for more than one patient.

**Weightage:** Critical  
**Method of Evaluation:** Observation (O), Staff Interview (SI)

#### Observation (O)

- All dental healthcare personnel must ensure full understanding of the best practice of single-use (disposable) devices in dental practice.
- **Single-use disposable item:** Device intended to be used on one patient and then discarded appropriately; these items are not intended to be reprocessed (cleaned, disinfected, or sterilized) and used on another patient.
- Single-use devices MUST be used for one patient only and disposed of appropriately.
- Single-use devices include needles, prophylaxis cups and brushes, and plastic orthodontic brackets etc. are not heat-tolerant and cannot be reliably cleaned so they must be immediately discarded after use on single patient.
- Certain items (e.g., prophylaxis angles, saliva ejectors, high-volume evacuator tips, and air/water syringe tips) are commonly available in a disposable form and should be disposed of appropriately after each use.
- Any single-use device or item (e.g., cotton rolls, gauze, and irrigating syringes) used during oral surgical procedures should be sterile at the time of use.

#### OBSERVE:

- During audit visit observe the dental staff practices related to single use devices.
- Observe if any of abovementioned single use devices are still kept in the clinic and not discarded immediately after use.

#### INTERVIEW:

- During audit round of the dental clinics ask the dental healthcare workers about the single use devices.
- Ask about the universal identification label for SUDs ‘single use only’ on packed items.
- Ask by giving an indirect scenario to verify that single use devices are **NOT** reprocessed and discarded immediately after use.

  > “In emergency situations, how these items are disinfected properly before being used for other patients?” / “what are the situations that justify the reuse of SUDs and precautions that should be strictly followed?” • **The answer should be reuse of SUDs is prohibited**

#### OTHER BEST PRACTICES IN DENTAL CARE:

**Pre-procedural Mouth Rinsing:**  
Patient should rinse with an antimicrobial mouth rinse before a dental procedure to reduce oral flora.

**Unit Dose Concept:**
- Preparing or dispensing a sufficient amount of material for a particular procedure before patient contact and discard any excess at completion.
- Single dose solutions or medications are recommended to prevent cross-contamination.
- Handle disposable items aseptically. If an item is stored in a bulk container or package, use an aseptic technique when retrieving it (e.g., use sterile cotton pliers to retrieve an item for use).
<table>
<thead>
<tr>
<th>07</th>
<th>Sub-standard – 11:07</th>
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<tbody>
<tr>
<td>The sterilized dental instruments should be checked for being clean and rust free.</td>
<td></td>
</tr>
<tr>
<td><strong>Weightage:</strong> Critical</td>
<td></td>
</tr>
<tr>
<td><strong>Method of Evaluation:</strong> Observation (O)</td>
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</table>

**OBSERVE:**
- During audit round of dental clinic observe practices of dental healthcare personnel related to sterilized dental instruments.
- All sterile packages MUST be inspected for integrity, cleanliness and presence of any rust stains etc. before being used on the patients.
- Before opening instrument packages, the packages must be examined to ensure the seal is intact, and the integrity of the package is not broken in any way (e.g. through tears, perforations, or wetness).
- Randomly pick any sterilized instruments pack and check for any stain or rust present on the instrument which reflects improper sterilization.
- Such instruments / compromised packages must not be used on patients and returned to CSSD for reprocessing. *(IC team must be informed in such situation for necessary follow up in CSSD)*
**Sub-standard – 11:08**

In each pack chemical indicator should be present.

**Weightage: Critical**  
**Method of Evaluation: Observation (O)**

<table>
<thead>
<tr>
<th>Observation</th>
<th>Internal Chemical Indicators</th>
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<tbody>
<tr>
<td></td>
<td>- Chemical indicators are devices used to monitor the presence or attainment of one or more of the parameters required for a satisfactory sterilization process, or used in specific tests of sterilization equipment.</td>
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<tr>
<td></td>
<td>- Internal chemical indicators are placed with the items to be sterilized within the packs to ensure the steam has penetrated the packaging material and actually reached the instruments inside.</td>
</tr>
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</table>

**OBSERVE:**  
- During audit round of dental clinics, check the availability of chemical indicator inside each instruments pack received from the CSSD.  
- Internal chemical indicator must be checked to ensure the sterilization conditions have been reached within the package.  
- If the chemical indicator does not indicate that sterilization parameters have been met, the items should not be used for patient care and the package, along with the internal indicator, must be returned to the CSSD and the incident reported to the CSSD supervisor.  

**DHCP must return any pack without chemical indicator or torn / opened packs back to CSSD for reprocessing. Any pack with questionable sterility must never be used on patients.**
Environmental cleaning and disinfection is of significant importance in dental healthcare settings. Cleaning and disinfection of the patient care environment is an important aspect of preventing transmission of microbes that can lead to patient and staff harm.

Failure to comply with environmental cleaning protocols would result in infection transmission within the dental healthcare settings.
<table>
<thead>
<tr>
<th>12</th>
<th>HOUSEKEEPING &amp; DENTAL CENTER ENVIRONMENT</th>
</tr>
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<tbody>
<tr>
<td></td>
<td><strong>Sub-standard – 12:01</strong></td>
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</tbody>
</table>

Clinical contact surfaces are cleaned and disinfected daily at the beginning and the end of each shift, and in between patients if the surface barrier is not used.

**Weightage:** High  
**Method of Evaluation:** Observation (O), Staff Interview (SI)

<table>
<thead>
<tr>
<th><strong>Observation (O)</strong></th>
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</table>

- **Clinical Contact Surfaces:**

  Clinical contact surfaces are those surfaces which are potential risk of contamination with aerosols and spatter or touched with contaminated gloves during any dental procedure.

  - Dental chair  
  - Light handles.  
  - Switches  
  - Dental radiograph equipment  
  - Dental chair-side computers  
  - Reusable containers of dental materials  
  - Drawer handles

**OBSERVE:**

- During audit round dental staff practices regarding cleaning & disinfection of clinical contact surfaces.  
- Observe if clinical contact surfaces are barrier protected or not.  
- Observe the quality of cleaning & disinfection if the surface barriers are not used.  
- Randomly wipe any clinical contact surface to rule out presence of dust or any debris.

**Surface barrier** is a material that prevents the penetration of microorganisms, particulates, and fluids.  
**Disinfection:** Destruction of pathogenic and other kinds of microorganisms by physical or chemical means.

<table>
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<tr>
<th><strong>Staff Interview (SI)</strong></th>
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</table>

**INTERVIEW:**

- Dental healthcare personnel (DHCP) about the cleaning & disinfection of clinical contact surfaces.  
- Ask about the availability of surface barriers in the dental clinic.  
- Ask and evaluate of DHCP are oriented about the clinical contact surfaces & their clinical significance.
- Ask about the frequency of cleaning and disinfection of clinical contact surfaces if surface barriers are not available.

*Clinical contact surfaces MUST be cleaned and disinfected daily at the beginning and the end of each shift, and in between patients if the surface barrier is not used.*
<table>
<thead>
<tr>
<th>Sub-standard – 12:02</th>
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</thead>
<tbody>
<tr>
<td>Clinical contact surfaces (e.g., light handles, bracket trays, switches on dental units, hoses to the air-water syringe and hand pieces, computer equipment) are either barrier protected or cleaned and disinfected with a hospital disinfectant after each patient.</td>
</tr>
<tr>
<td><strong>Weightage:</strong> High</td>
</tr>
<tr>
<td><strong>Method of Evaluation:</strong> Observation (O), Staff Interview (SI)</td>
</tr>
</tbody>
</table>

The spread of microorganism from the clinical contact surfaces can be minimized by following means:

- Using impervious barriers to cover the surfaces during treatment
- Cleaning and disinfecting such surfaces after patient treatment.

**OBSERVE:**

- If surface barriers are available in the dental unit & used appropriately.
- Observe if all clinical contact surfaces are covered with an impervious barrier to prevent cross-contamination from clinical contact surfaces. Using barriers alone will not exclude the need for cleaning and disinfection after each session. So, even if barriers are used, general cleaning and disinfection of clinical contact surfaces, dental unit surfaces, and countertops is required at the end of the work session.
- Observe when barriers are used to prevent cross-contamination, they must be removed between patients. A new set of barriers should be placed with each patient. Barriers should never be used for more than one patient.
- Suitable materials for use as barriers include clear plastic wrap, bags, sheets, tubing, and plastic-backed paper or other materials impervious to moisture.

**Cleaning and Disinfection:**

- Cleaning is using detergents or surface active agents to remove organic matter (e.g. saliva and blood), salts, and visible soils.
- Cleaning must always be preceded by disinfection because if a surface is not cleaned first, the disinfection process may be ineffective because organic matter interferes with the action of some disinfectants. *(depending on the type of disinfectant)*
- Removal of all visible blood and inorganic and organic matter is critical as the germicidal activity of the disinfecting agent. **Even if barriers are used, general cleaning and disinfection of clinical contact surfaces, dental unit surfaces, and countertops is required at the end of the work session.**
**Sub-standard – 12:03**

Housekeeping surfaces (e.g. as floors, walls, and sinks) are routinely cleaned using either a dilute detergent or low-level disinfectant and cleaned and disinfected with an appropriate low-level disinfectant if visibly contaminated with blood saliva or other bodily fluids.

**Weightage:** Medium  
**Method of Evaluation:** Observation (O), Staff Interview (SI)

**INTERVIEW:**

- Dental staff regarding practices and frequency of changing surface barriers in the dental clinic.  
- Ask about what surfaces are classified as clinical contact surfaces and what is the frequency of changing these surface barriers.

Ask staff to demonstrate by giving a scenario:

45 years old male came for his scheduled dental appointment. Procedure is completed and next patient is waiting for his dental treatment. How will you prepare the area and take appropriate infection control measures in order to ensure safe environment for next patient?

- **Evaluate performance of dental staff if all measures are taken as described in substandard.**
- **Provide on-site feedback & provide guidance if any breach of practice is observed.**

**OBSERVE:**

- During audit round of different sections within the dental center, observe if the housekeeping surfaces are appropriately cleaned and disinfected.  
- Use wet tissue or gauze to wipe different housekeeping surfaces especially difficult to reach surfaces, e.g. corners, high up surfaces etc  
- Observe availability of housekeeping supplies that are being used *(detergents, disinfectants and other supplies e.g. lint free wipes ... etc..)*
**INTERVIEW:**

- Ask the housekeeping staff how frequently housekeeping surfaces are cleaned & disinfected
- What are the housekeeping supplies that are being used (e.g., detergent, disinfectants and other supplies e.g. lint free wipes … etc.)?
- Ask about the type of disinfectant being used when a housekeeping surface / area is visibly contaminated with blood saliva or other bodily fluids.

<table>
<thead>
<tr>
<th>Staff Interview (SI)</th>
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<tbody>
<tr>
<td>Sub-standard – 12:04</td>
</tr>
<tr>
<td>There are separate clean and dirty utility rooms in the dental center.</td>
</tr>
<tr>
<td>Weightage: High</td>
</tr>
<tr>
<td>Method of Evaluation: Observation (O)</td>
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<table>
<thead>
<tr>
<th>Observation (O)</th>
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</thead>
<tbody>
<tr>
<td>OBSERVE:</td>
</tr>
<tr>
<td>- During audit visit observe availability of separate clean and dirty utility rooms in the dental center.</td>
</tr>
<tr>
<td>- Visit the clean and dirty utility rooms &amp; observe if appropriately used.</td>
</tr>
<tr>
<td>- Observe if designated clean &amp; dirty utility rooms for keeping clean and dirty utility equipment / materials are identified with a clear label/ signage.</td>
</tr>
<tr>
<td>- Rooms must be dedicated only for its usage i.e. clean and dirty items must always be stored in the specified rooms.</td>
</tr>
<tr>
<td>Sub-standard – 12:05</td>
</tr>
<tr>
<td>Cleaning materials and disinfectants are used in accordance with manufacturer instructions (e.g., dilution, storage, shelf-life, contact time, PPE).</td>
</tr>
<tr>
<td>Weightage: High</td>
</tr>
<tr>
<td>Method of Evaluation: Observation (O), Staff Interview (SI)</td>
</tr>
</tbody>
</table>

- **Observation (O):**

  - **Availability of approved disinfectants & cleaning material is important for effective implementation of environmental surfaces disinfection standards.**
  
  **OBSERVE:**
  - During audit round observe the availability of different cleaning materials, detergents, disinfectants at all areas / sections of the dental center.
  - Observe disinfectant is MOH approved & appropriate for the area / surface to be disinfected.
  
  **(IC department must provide list of approved disinfectants with dilutions and contact time and suitability for intended area / surface based on manufacturer's recommendations)**
  - Observe how housekeeping staff are preparing the disinfectant(s), if applicable (i.e. dilution procedure: water to disinfectant ratio)
  - Observe how cleaning & disinfection process is being done (e.g., back and forth procedure for cleaning and disinfection isn’t advisable)
  - Observe whether recommended contact time is being followed or not.
  - Observe where housekeeping staff are keeping their supplies (observe the janitor’s room, if available).
  - Observe if the housekeeping staff are complaint with use of appropriate Personal protective equipment during cleaning process.

- **Interview (SI):**

  - Housekeeping staff about the different disinfectants, detergents & cleaning other cleaning materials like mops, cleaning cloths etc

  **Ask to demonstrate by giving a specific task.**

  **Example:** After completion of dental procedure on the last scheduled patient on list, dental staff called you for cleaning and disinfection of dental clinic. How will you proceed with the cleaning process? What cleaning items will you use and how will you protect yourself?

  - Evaluate the performance and assess if he / she is well trained in terms of PPE selection & use, disinfection use & its dilution, contact time etc
  - Ask about the storage of disinfectants and their shelf life. Check if manufacturer recommendations are being followed.
Shelf life is the length of time that a product such as disinfectant, detergent etc may be stored without becoming unfit for use.

<table>
<thead>
<tr>
<th>Sub-standard – 12:06</th>
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</thead>
<tbody>
<tr>
<td>Environmental cleaning tools are available, adequate in number and meet required specifications to be used in the right way.</td>
</tr>
<tr>
<td><strong>Weightage:</strong> High</td>
</tr>
<tr>
<td><strong>Method of Evaluation:</strong> Observation (O), Staff Interview (SI)</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Observation (O)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>OBSERVE:</strong></td>
</tr>
<tr>
<td>- Availability of adequate amount of different cleaning tools in the dental center to ensure clean and safe environment.</td>
</tr>
<tr>
<td><strong>Environmental cleaning tools includes:</strong></td>
</tr>
<tr>
<td>- Cleaning trolleys with 2 or 3 buckets technique.</td>
</tr>
<tr>
<td>- Cleaning mops of appropriate sizes.</td>
</tr>
<tr>
<td>- Mop heads of appropriate material that can be easily washed / disinfected after each use.</td>
</tr>
<tr>
<td>- Observe if mop and cleaning buckets are dry and kept clean after use. Housekeeping staff MUST Never leave soiled mop heads and cleaning cloths soaking in buckets.</td>
</tr>
<tr>
<td>- Observe if the left over clearing and disinfection solution is discarded or still kept inside buckets for next use. This practice will facilitate cross contamination of environment.</td>
</tr>
<tr>
<td>- Observe if cleaning tools are used to ensure a minimal turbulence and aerosolization of dust.</td>
</tr>
</tbody>
</table>

- **Turbulence:** (violent or unsteady movement of air or water)
- **Aerosolization of dust particles** (Aerosols are fine solid particles or liquid droplets which remain suspended in air for certain period of time e.g. dust, fog, mist etc)

<table>
<thead>
<tr>
<th>Staff Interview (SI)</th>
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<tbody>
<tr>
<td><strong>INTERVIEW:</strong></td>
</tr>
<tr>
<td>- Housekeeping staff and assess if they are oriented about use and selection of appropriate cleaning tools according to particular area / location.</td>
</tr>
<tr>
<td>- Ask if they have dedicated equipment for clinical areas.</td>
</tr>
<tr>
<td>- Ask about the tools used for cleaning the floors. Household brooms that can generate and spread dust are prohibited within the healthcare settings.</td>
</tr>
</tbody>
</table>
Sub-standard – 12:07

Housekeepers are well trained on hand hygiene, proper use of PPE (PPE can include gloves, gowns, masks, and eye protection), methods of cleaning, and proper and safe mixing of chemicals.

**Weightage:** High  
**Method of Evaluation:** Staff Interview (SI)

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Infection Control Department must conduct training of housekeeping staff followed by monitoring & auditing the staff practices.

All housekeeping staff shall be trained on standard precautions and must be educated on the cleaning agents, disinfectants, proper dilution and contact time.

**INTERVIEW:**

- Housekeeping staff and assess if they are well trained about the cleaning methodology, hand hygiene, appropriate use of PPE & safe mixing of chemicals etc

Give them specific task to demonstrate and assess the performance:

**HAND HYGIENE:**

Observe if housekeeping staff will perform hand hygiene as the first and most important and effective measure to prevent the spread of nosocomial infections. Hand hygiene must be practiced:

- Before initial patient environment contact (e.g., before coming into the dental clinic etc)
- After potential body fluid exposure (e.g., after cleaning bathroom, equipment or waste).
- After patient environment contact (e.g., after cleaning client/patient/resident room; after cleaning equipment such as after changing mop heads).
- It is necessary to clean hands after removing gloves. The use of gloves does not replace the need for hand hygiene.

**PERSONAL PROTECTIVE EQUIPMENT (PPE):**

Cleaning staff should wear and use Personal Protective Equipment (PPEs). Observe if appropriate PPE is selected based on task / area.

- **Gloves** - when there is risk of hand contact with contaminated items with blood and body fluids.
- **Gown** - if contamination of uniform or clothing is anticipated (e.g., cleaning bed of incontinent patient).
- **Mask and eye protection or face shield** - where appropriate to protect the mucous membrane of the eyes, nose and mouth during activities where sprays of secretion are likely
**METHODS OF CLEANING:**

- Assess if they are well trained on proper use of dusting methods for all patient care areas & other areas within the dental settings.
- Ask about frequency of cleaning of horizontal surfaces which should be wiped at least daily or in between patients’ all high touch horizontal surfaces (e.g., in procedure rooms) and when visibly soiled with a clean cloth impregnated with a hospital-approved disinfectant.
- Ask about cleaning methods like mopping from cleaner to dirtier areas etc.

- **Mop MUST be done in a systematic manner, proceeding from area farthest from the exit and working towards the exit.**
- **Use of wet floor or caution signs to prevent injuries.**
- **Never shake mop heads and cleaning cloths—it disperses dust or droplets that could contain microorganisms.**
- **Never leave soiled mop heads and cleaning cloths soaking in buckets.**
- **Prepare cleaning solution daily, or as needed and replace with fresh solution as needed.**

<table>
<thead>
<tr>
<th>Sub-standard – 12:08</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mops or cloths used to clean housekeeping surfaces are either cleaned after use and allowed to dry before reuse, or are single-use items.</td>
</tr>
</tbody>
</table>

**Weightage:** Medium  
**Method of Evaluation:** Staff Interview (SI)
**Sub-standard – 12:09**

Fresh cleaning or low-level disinfecting solutions are prepared daily and as instructed by the manufacturer.

**Weightage: Medium**

**Method of Evaluation:** Observation (O), Staff Interview (SI)

<table>
<thead>
<tr>
<th>Observation (O)</th>
<th>Staff Interview (SI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>OBSERVE:</td>
<td>INTERVIEW:</td>
</tr>
<tr>
<td>- During tour of dental center observe if housekeeping staff are complaint to manufacturers instruction for preparing the cleaning solutions. <em>(Observe if any visual poster etc is available for housekeeping to follow instructions in their appropriate language)</em></td>
<td>- Ask about frequency of preparing the cleaning &amp; disinfectant solutions.</td>
</tr>
<tr>
<td></td>
<td>- Observe if there is any leftover cleaning &amp; disinfection solution with visible contamination &amp; discoloration.</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Table 3: Categories of Disinfectants/ Sterilants and Recommended Uses In Dentistry.**

<table>
<thead>
<tr>
<th>Category</th>
<th>Definition</th>
<th>Examples</th>
<th>Uses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sterilant</td>
<td>Destroys all microorganisms- including high numbers of bacterial spores</td>
<td>Glutaraldehydes, Hydrogen peroxide, (Depending on the contact time).</td>
<td>Semi-critical heat sensitive items. Immersion only.</td>
</tr>
<tr>
<td>High-level disinfectant</td>
<td>Destroys all microorganisms- but not necessarily high numbers of bacterial spores</td>
<td>Glutaraldehydes. Hydrogen peroxide. (Depending on the contact time).</td>
<td>Semi-critical heat sensitive items. Immersion only.</td>
</tr>
<tr>
<td>Intermediate level disinfectant</td>
<td>Inactivates Mycobacterium tuberculosis (tuberculocidal) and destroys vegetative bacteria, most fungi and most viruses.</td>
<td>Chlorine and chlorine compounds. Iodophors. Phenolics. Quatamery ammonium Compounds with alcohol.</td>
<td>Clinical contact surfaces. Non-critical items visibly soiled with patient material Spills of patient material.</td>
</tr>
<tr>
<td>Low-level disinfectant</td>
<td>Does not inactivate Mycobacterium tuberculosis (is not tuberculocidal) but destroys vegetative bacteria, some fungi, and some viruses.</td>
<td>Quatamery ammonium compounds.</td>
<td>Clinical contact surfaces (if active against HBV, HIV). Spills of patient material (if active against HBV, HIV). Housekeeping surfaces (e.g. floors and walls). Non-critical items without visible patient material.</td>
</tr>
</tbody>
</table>
### Sub-standard – 12:10

Suctions are cleaned and disinfected daily.

**Weightage:** High  
**Method of Evaluation:** Staff Interview (SI), Observation (O)

| Observation | **Maintaining the suction system along with other equipment in a dental facility, is critical to proper functioning. Cleaning and disinfection of the suction lines and changing the solids collectors (traps) must be performed regularly to maintain proper functionality.**  
- Suction lines in the dental clinics should be cleaned every day with an evacuation system cleaner to remove blood and debris, and a disinfectant that is compatible with the evacuation system should be run through the tubing.  
- Cleaning & disinfection suction tubes must be performed at least daily to keep the system running effectively, since debris can accumulate and clog the lines.  

**OBSERVE:**  
- During audit visit of dental clinic observe the staff practices in relation to the suction tubes.  
- Observe if dental staff are complaint with appropriate technique of cleaning and disinfection of suction tubes using approved disinfectants and recommended dilution.  
- At the start of the day flushing of the suction lines should be done with high-level disinfectant for two minutes.

| Staff Interview (SI) | **INTERVIEW:**  
- During the audit visits ask the dental staff about cleaning and disinfection of suction tubes.  
- Ask about the frequency and methodology used for suction process.  
- Ask about disinfectants used and their dilution.

---

**Suction** is an essential part of dental treatment and is used to remove fluids (e.g. saliva, blood, and irrigation water) and debris (e.g. tooth particles, dental calculus and dental amalgam) from the oral cavity during dental procedures.  
- It is also used to minimize the release of aerosols during the preparation of tooth surfaces using high-speed dental drills and cutting instruments and during the use of ultrasonic scalers.  
- In practice, the disinfection process involves aspirating a volume of disinfectant through the suction hoses, very often with the suction hand pieces attached. This process is referred to as **aspiration disinfection**.
### Sub-standard – 12:11

The dental center implements effective procedures for pest control that address the regular schedule of visits and pest threshold / pesticides list / time and place of exposure.

**Weightage:** High  
**Method of Evaluation:** Document (D), Staff Interview (SI), Observation (O),

<table>
<thead>
<tr>
<th>Document (D)</th>
</tr>
</thead>
<tbody>
<tr>
<td>The presence of cockroaches, flies, maggots, ants, mosquitoes, mice, rats, and other pests indicate an unhealthy environment in a healthcare facility. The key to minimizing pests is to eliminate food sources, eradicate areas for nests and burrows, install screens on windows and doors, seal off penetrations to the outside, and apply pesticides as a last resort.</td>
</tr>
</tbody>
</table>

**REVIEW:**  
- Policies and procedures in the infection control department for pesticide spraying in the dental center.  
- There must be a schedule indicating frequency of visits, list of pesticides, pest threshold, date & time of visits and place / areas where pesticide spraying will be done.  
- Review the last documented visits reports for at least 3 months for purpose of verification and check if all areas of dental center were covered.

- Pesticides used MUST be approved & not included in the list of banned pesticides: Refer to GCC manual for list of banned pesticides. *(ICM - X-08 Pest Control Pg 377)*  
- Regular follow up must be done with environmental services staff to ensure if pesticide spraying was done and only approved pesticides were used.

<table>
<thead>
<tr>
<th>Staff Interview (SI)</th>
</tr>
</thead>
</table>
| **INTERVIEW:**  
- Infection Control Practitioner/s about the pest control procedures in the dental center.  
- Ask about the frequency of visits and type of pesticides being used. Assess if ICPs are oriented about that.  
- Ask about the list of approved list of pesticides.  
- Ask about the list of **banned pesticides** which were banned due to their inherent toxicity, carcinogenic tendency & other health risks.  
- Dental healthcare personnel (DHCP) about the last pesticide spraying done in their area e.g dental clinics, dental lab, dental radiology etc |

<table>
<thead>
<tr>
<th>Observation (O)</th>
</tr>
</thead>
</table>
| **OBSERVE:**  
- During tour of different areas of dental center, observe the general cleanliness of the dental center.  
- Rule out presence of cockroaches, lizards or any other insects in patient care or other working areas. |
<table>
<thead>
<tr>
<th>Sub-standard – 12:12</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biological spill kits are available in dental clinics and HCWs have access to the kits and capable of using them properly.</td>
</tr>
</tbody>
</table>

**Weightage:** High  
**Method of Evaluation:** Observation (O), Staff Interview (SI)

<table>
<thead>
<tr>
<th>Observation (O)</th>
</tr>
</thead>
<tbody>
<tr>
<td>All work locations where employees may come into contact with blood or other potentially infectious material must have blood spill kits available to safely and effectively clean up any spills.</td>
</tr>
</tbody>
</table>

**OBSERVE:**
- Availability of biological spill kit in different sections to manage any accidental spill of **blood or body fluids** in order to avoid risk of contamination & infection transmission.  
- Review if the contents are complete and not expired.

**The spill kit must include the following:**
- **Personal protective equipment (PPE)** such as gown, gloves, eyewear, mask.  
- Supplies such as forceps, plastic scoop and scraper, absorbent granules or absorbent pads,  
- **Hospital-approved disinfectant**  
- **Yellow plastic bag and sharp container**

<table>
<thead>
<tr>
<th>Staff Interview (SI)</th>
</tr>
</thead>
</table>
| **INTERVIEW:**  
- Dental Healthcare personnel in different dental clinics & assess if they are well trained on the appropriate use of spill kit.  
- Ask about its importance and hazards if not done according to recommendations.  
- Dental staff must supervise the entire process in order to ensure spill is managed appropriately in dental settings where housekeeping staff are responsible for biological spill clean-up as per policy.  

**Ask dental staff / housekeeping staff at random to demonstrate management of blood spill.**  
- Provide feedback on performance and correct the mistakes. (If any)

**STEPS INVOLVED** when cleaning and decontaminating spills of blood or other potentially infectious materials:

**Control access to area:**
- Prevent people from walking through affected area and spreading the blood or other potentially infectious material to other areas.  
- Use the signage for wet floor sign

**Contain spill:**
- Use other absorbent granules or absorbent pads to contain the spill.
- Put on appropriate PPEs.
- Use plastic scoop or other mechanical means to remove any broken glass or other sharp objects from the spill area, and dispose into the sharp container.
- Sprinkle absorbent granules over the spill and leave for two minutes or as per the manufacturer’s recommended contact time. Allow the spill to solidify before removing.
- Remove the solidified waste material using the scoop and scraper and carefully dispose all contaminated materials into the infectious waste bag.
- If there is no available absorbent granules contain the spill by placing absorbent pads (i.e. paper towel) on top of the spill and apply the appropriate disinfectant. To avoid creating aerosols, never spray disinfectant directly onto the spilled material. Instead, gently pour disinfectant on top of paper towels covering the spill or gently flood the affected area, first around the perimeter of the spill, then working slowly toward the spilled material. If sodium hypochlorite solution (5.25% household chlorine bleach) is used, prepare a fresh solution on a daily basis. Leave for the recommended contact time.
- Pick up all absorbent material and carefully place in the infectious yellow bag for disposal. Remove PPEs and place in a yellow bag for disposal.
- Seal the yellow bag.
- Wash hands thoroughly with soap and water.
Dental unit water systems (DUWS) can be contaminated by nonpathogenic and pathogenic organisms. The DUWS are contaminated by organisms that colonize the system and water lines and soon after form biofilms inside the lumens of the water lines.

This contamination occurs because dental unit water line factors (e.g., system design, flow rates, materials) promote bacterial growth and development of biofilm.

Appropriate approaches and acceptable methods must be used for reduction of the number of microorganisms and bacterial endotoxins exiting the waterlines.
<table>
<thead>
<tr>
<th>01</th>
<th><strong>DENTAL UNIT WATERLINES</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sub-standard – 13:01</strong></td>
<td></td>
</tr>
<tr>
<td>The products and protocols recommended by dental unit manufacturer to maintain water quality are followed. (if the manufacture instructions are not available, water lines are disinfected daily / weekly with an approved MOH solution and as per the manufacturer’s instructions).</td>
<td></td>
</tr>
<tr>
<td>Weightage: High</td>
<td></td>
</tr>
<tr>
<td>Method of Evaluation: Document (D), Staff Interview (SI)</td>
<td></td>
</tr>
</tbody>
</table>

**REVIEW:**

a) During visit in IC department review following in case of availability of manufacturer’s instructions:

- Documented evidence / records of regular maintenance of dental unit waterlines (DUWLs)
- Review the schedule and checklists to verify if disinfection of dental unit waterlines (DUWLs) is done on regular basis.
- Review the instruction manual from dental unit manufacturer and check the frequency and products / protocols are matching with schedule / disinfection checklist. (*In situations where instruction manual for disinfection of DUWLs is available and followed*)
- Documented evidence of disinfection MUST match the manufacturer recommendations.

b) In case of non-availability of manufacturers’ instructions, check following records for disinfection of water lines daily / weekly with an approved MOH solution and as per the manufacturer’s instructions for use (IFU) for these solutions:

- Documented evidence / records / checklists of daily / weekly disinfection of dental unit waterlines (DUWLs)
- MSDS of MOH approved solutions used for disinfection.

**INTERVIEW:**

- Dental Health Care Workers (DHCWs) in the dental clinics & Infection Control Practitioner/s about the products and protocols being followed for disinfection of dental unit waterlines (DUWLs).
- Ask staff about the instruction manual from company and steps and frequency of DUWL disinfection according to manufacturers’ instructions for use. Assess if dental staff are aware about the instruction written in manual.
| - Ask dental staff if there is non-availability of instructions from dental unit manufacturer for disinfection of DUWL what protocols are they following to ensure safe and quality product water is available for patients during dental procedures.  
- Ask dental staff if daily / weekly disinfection solutions are available and staff are trained on method & frequency of their use. |

| - The air–water syringes, ultrasonic scalers, high speed air turbine hand pieces are connected to dental units by a network of small-bore plastic tubes through which water and air travel. This system is extensively contaminated with microbial biofilms and pose a potential risk of infection for patients as well as dental professionals.  
- Biofilm re-growth in DUWLs usually occurs within a week following disinfection/cleaning and so DUWLs need be treated regularly  
- Adherence to maintenance protocols is necessary as non-compliance has been associated with persistence of contamination of the water. |
**Sub-standard – 13:02**

In order to ensure that the water used in routine patient treatment meet standards for drinking water (that is, less than 500 CFU/mL of bacteria), water sampling is taken from all water outlets at all the clinics with a minimum frequency of semiannually and sent to the microbiology lab.

**Weightage: High**  
**Method of Evaluation:** Document (D), Staff Interview (SI)

**REVIEW:**
- In the infection Control Department / Dental clinics, results / records of water sampling which is done semiannually i.e twice per year.
- Check the results if water used in routine patient treatment meet standards for drinking water (that is, less than 500 CFU/mL of bacteria).
- For non-surgical procedures, regardless of the source water, the number of bacterial counts of non-pathogenic bacteria in the water exiting the device into the oral cavity should be as low as reasonably achievable without exceeding 500 CFU/ml.
- Check if available results from lab are reported as qualitative or quantitative. Results mentioned in qualitative terms as **No growth or Negative / Positive result** must not be accepted and returned to the lab for appropriate reporting in quantitative terms.
- Biannual records of water quality must be available for each dental clinic separately.

**Bacterial count:**  
A method of estimating the number of bacteria per unit sample. The term also refers to the estimated number of bacteria per unit sample, usually expressed as colony forming units (CFUs) per square centimeter (cm²) per milliliter (mL).

**Biofilm:**  
An aggregate of microorganisms in which cells adhere to each other on a surface.

**Colony forming unit (CFU):**  
Minimum number of separable cells on the surface of or in semi-solid agar medium which gives rise to a visible colony of progeny is on the order of tens of millions.

**Independent water reservoir:**  
Container used to hold water or other solutions and supply it to hand pieces and air/water syringes attached to a dental unit.

Dental unit water that remains untreated or unfiltered is unlikely to meet drinking water standards, <500 CFU/mL, therefore, one or more commercial devices and procedures designed to improve the quality of water should be employed. At the present time, commercially available options for improving dental unit water quality include the use of:

- Independent water reservoirs
- Chemical treatment regimens
- Source water treatment systems
- Daily draining and air purging regimens
- Point-of-use filters
### INTERVIEW:

- Dental health care workers (DHCWs) / IC practitioner/s regarding frequency of water sampling taken from water outlets.
- Ask who is responsible for taking water samples & what is the applied technique of collecting water samples?
- Ask about different sites to be included in the water sampling process (must be all sites / outlets, i.e. hand pieces, ultrasonic scalers, three-way air/water syringes …etc.)
- Ask the dental staff how to interpret the results and what is the minimum acceptable range?

### Sub-standard – 13:03

Water monitoring records are maintained for at least (2) years.

**Weightage:** Medium  
**Method of Evaluation:** Document (D)

### REVIEW:

- Records of water quality monitoring for each clinic MUST be kept for at least 2 years for the purpose of verification.
- Verify if the records of past 2 years are available for each clinic i.e 4 test results of all water outlets MUST be kept in IC Department / Dental clinics etc.
- In addition, corrective active intervention evidence MUST also be available in case of exceeding limits of CFU/ml. *(If any)*
<table>
<thead>
<tr>
<th>Sub-standard – 13:04</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sterile saline or sterile water is used as a coolant / irrigant when performing surgical procedures.</td>
</tr>
</tbody>
</table>

**Weightage:** Medium  
**Method of Evaluation:** Staff Interview (SI), Observation (O)

### OBSERVE:
- During audit rounds, observe the availability of supplies of sterile solutions that are used in dental surgical procedures and check for opened sterile solution bottle(s) that is (are) not discarded after being used for one patient (e.g. sterile saline, sterile water).
- Sterile irrigating solutions used during surgical procedures must be dedicated to one patient only and leftover must be discarded after procedure.
- Opened sterile solution must never be kept / stored to be used for next patient or the same patient.
- Observe a real procedure (if possible) and check what type of water is being used as coolant / irrigant during surgical procedures.

### INTERVIEW:
- During the audit visit ask dental healthcare workers, what types of sterile solutions being used for different dental surgical procedures? (Sterile saline or sterile water)?
- Ask how these sterile solutions are being used either for single patient, or for multiple patients??
- Ask DHCP on the importance of aseptic technique i.e. using sterile water during oral surgical procedures in order to prevent risk of acquiring infections etc

**Oral surgical procedures:**  
Involve the incision, excision, or reflection of tissue that exposes the normally sterile areas of the oral cavity. Examples include biopsy, periodontal surgery, apical surgery, implant surgery, and surgical extractions of teeth (e.g., removal of tooth requiring elevation of mucoperiosteal flap, removal of bone or section of tooth, and suturing if needed).

**Sterile water:**  
water that is sterilized and contains no antimicrobial agents.
<table>
<thead>
<tr>
<th>Sub-standard – 13:05</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>05</strong></td>
</tr>
<tr>
<td>For devices that are connected to the dental water system and enter the patient’s mouth, water and air are discharged for few minutes at the beginning of the day and at least 20-30 seconds after use on each patient. (Such devices include hand pieces, ultrasonic scalers, and air/water syringes.)</td>
</tr>
</tbody>
</table>

**Weightage:** Medium  
**Method of Evaluation:** Observation (O), Staff Interview (SI)

<table>
<thead>
<tr>
<th>Dental Healthcare Personnel (DHCP) MUST be well trained regarding infection control measures to be taken at beginning of the day, in between patients and at the end of day for devices that are connected to the dental water system and enter the patient’s mouth.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patient’s oral microorganisms, blood, and saliva can enter the dental water system during patient treatment so dental waterlines should be operated to discharge water and air at the beginning of the clinic day for a minimum of 20--30 seconds after each patient to reduce the microbial load.</td>
</tr>
</tbody>
</table>

**OBSERVE:**

*During tour of dental clinics observe if dental healthcare staff are compliant with following recommendations must be adopted as part of daily routine:*

- Flushing for at least 2 minutes in the morning and for 20–30 seconds after each patient should be considered the norm for dental procedures, and longer flushing is done after weekends.
- Flushing at the beginning of the day is performed without hand pieces connected to the waterlines.
- Hand pieces are removed and water lines are allowed to run and discharge water for several minutes to reduce **overnight microbial accumulation** at the beginning of each clinic day.

If possible, use an enclosed container or high-velocity evacuation during discharge procedures to minimize the spread of spray, spatter, and aerosols.  
At the end of each working day, the water supply should be disconnected and the water lines purged with air.

**INTERVIEW:**

- During tour of dental clinics, ask dental healthcare personnel (DHCP) about the daily routine before starting the shift and on between patients in terms of dental unit waterlines.
- Ask about the duration to flush the lines every morning, in between patients & after weekend / vacations etc.
- Ask about to demonstrate technique and rationale behind in reducing microbial load.
- Evaluate if dental staff is oriented and well trained on infection control practices.
### Sub-standard – 13:06

Municipal water tanks are regularly cleaned according to maintenance and cleaning contracts in the center.

**Weightage: High**  
**Method of Evaluation: Document (D), Staff Interview (SI)**

<table>
<thead>
<tr>
<th>Review:</th>
</tr>
</thead>
</table>
| - In the infection control department review the cleaning & maintenance contract for regular cleaning and maintenance of municipal water tanks and check for validity of contract and frequency of visits etc  
- Review cleaning schedule / checklist or any other documented evidence to verify if maintenance & regular cleaning of municipal water tanks is done as per contract. |

<table>
<thead>
<tr>
<th>Interview:</th>
</tr>
</thead>
</table>
| - Infection control practitioner/s about the cleaning and maintenance of municipal water tanks.  
- Ask about frequency of visits and methodology & match with contract documents. |
<table>
<thead>
<tr>
<th>Sub-standard – 13:07</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water reservoir for the clinic is separated from the municipal water supply, use filters that will keep microorganisms out of the water, the water filters should be changed according to manufacturer instruction.</td>
</tr>
</tbody>
</table>

**Weightage: High**  
**Method of Evaluation:** Document (D), Staff Interview (SI), Observation (O)

<table>
<thead>
<tr>
<th>REVIEW:</th>
</tr>
</thead>
<tbody>
<tr>
<td>- During visit of infection control department review the document for changing the water filters based on the manufacturer’s instruction.</td>
</tr>
<tr>
<td>- All filters installed must be changed as per frequency specified by the manufacturer because filters may become contaminated &amp; dysfunctional over time. Left unchecked, the debris collected in these filters builds up and can compromise the quality of water.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>INTERVIEW:</th>
</tr>
</thead>
<tbody>
<tr>
<td>- During visit of dental clinic, ask dental healthcare personnel (DHCP) &amp; Infection control team about the source of water supply to the dental unit.</td>
</tr>
<tr>
<td>- Ask if water reservoir for the clinic is separated from the municipal water supply.</td>
</tr>
<tr>
<td>- Ask about the manufacturer’s recommended frequency for changing the water filters.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>OBSERVE:</th>
</tr>
</thead>
<tbody>
<tr>
<td>- During visit in dental clinic observe the water supply for the dental unit water system which MUST be separate from municipal water supply.</td>
</tr>
</tbody>
</table>

**Further Reading:**
- An alternate water supply that bypasses community water systems and DUWS by providing sterile or distilled water directly into water line attachments (i.e., separate reservoir) combined with chemical treatment.
- Public water system must not be delivered to the patient through the dental operative unit, ultrasonic scaler, or other dental equipment.
- Do not use water from the public water system for dental treatment, patient rinsing, or hand washing.
- Water reservoir for the clinic must be separated from the municipal water supply.
<table>
<thead>
<tr>
<th>Sub-standard – 13:08</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>08</strong></td>
</tr>
<tr>
<td>Regular maintenance of the dental units is done and all the filters in the unit is changed according to the manufacturer instruction.</td>
</tr>
<tr>
<td><strong>Weightage:</strong> Medium</td>
</tr>
<tr>
<td><strong>Method of Evaluation:</strong> Document (D)</td>
</tr>
</tbody>
</table>

**Infection control team must emphasize that all policies and procedures are implemented for treatment of dental unit waterlines to ensure high quality water to be used for patients.**

**REVIEW:**
- During visit of infection control department review the documented evidence that all filters installed in the dental unit are changed as per frequency specified by the manufacturer.
- Review the maintenance records including filter change and disinfection of DUWL separately for each clinic.

*Filters may become contaminated & dysfunctional over time. Left unchecked, the debris collected in these filters builds up and can cause suction problems. So it is important to conduct regular maintenance of the unit to ensure patient safety.*

**FURTHER READING:**
- *Microfiltration devices MUST be placed inside DUWLs to treat water exiting the waterlines i.e. in-line filters to remove bacteria immediately before dental unit water enters instrument attachment*
- *Micro filters placed near the exit of waterlines reduce the number of bacteria in dental treatment water.*
- *Sediment filters commonly found in dental unit water regulators have pore sizes of 20-90 μm and do not function as microbiological filters.*
- *Microfiltration occurs at a filter pore size of 0.03-10 μm.*
- *The nearer the filters are placed to the exit of the tubing, the lower the bacterial counts achieved.*
- *Filters are not sufficient to manage the water-line problem alone, but they may be used in conjunction with other water-line treatment methods to improve the quality of outgoing water.*

*Combined Approach to ensure availability of quality water for patients.*

An ideal water-line treatment regimen would be **FILTERS** combined with treatment of the **Dental Unit water-lines** to remove the biofilm making water safe for patient use.
Infectious waste is any hazardous waste capable of causing infections in humans, including contaminated waste, human blood and blood products, isolation waste, pathological waste, and discarded sharps (needles, scalpels, or broken medical instruments).

Dental healthcare personnel MUST ensure full understanding on the best practice of Waste Management in dental practice.
## INFECTIOUS MEDICAL WASTE

<table>
<thead>
<tr>
<th>Sub-standard – 14:01</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Supplies required for waste segregation (waste containers, colored coded bags, and sharp containers) are of appropriate sizes, adequate in number and easily accessible at points of production, and meet MOH approved specifications.</strong></td>
</tr>
</tbody>
</table>

**Weightage:** High  
**Method of Evaluation:** Observation (O)

### OBSERVE:

**In all patient care & other work areas (Dental Clinics, Dental lab etc.):**

1. Availability of different sizes of color-coded waste bags.  
2. If the number of waste receptacles are adequate according to amount of waste generated in specific unit.  
3. If the number of sharp containers are adequate in number & appropriate sizes.  
4. Observe if waste receptacles are placed at convenient and easily accessible place for dental health care workers.  
5. Waste receptacles, sharp containers and color coded bags must meet the regulations of Ministry of Health.

**Waste bags & Waste containers:**

- Should be tear-resistant and leak proof  
- Must not contain Polyvinyl Chloride (PVC).  
- Thickness must not be less than 70 microns thick.  
- All designated infectious waste containers should have a biohazard symbol or labeled with the word “Infectious” both in Arabic and English or be color-coded (i.e., yellow bags), rendering them identifiable by hospital staff.

**Sharps containers:**

- Must be rigid, puncture-proof, leak-proof and closable.  
- Equipped with a hermetical seal with an opening aperture which allows insertion of sharp items (e.g., needles and lancets).  
- Have a biohazard logo and labeled as “Sharp Items” which must be printed in both Arabic and English. etc
<table>
<thead>
<tr>
<th>Sub-standard – 14:02</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-sharp generated medical waste disposed in black bags as general waste except that heavily soiled with liquid blood or other body fluid (dribbling)</td>
</tr>
</tbody>
</table>

**Weightage:** High  
**Method of Evaluation:** Observation (O), Staff Interview (SI)

| OBSERVE:  
| Observation (O)  
- During audit round of dental clinics, observe the practices of dental healthcare workers (DHCWs) regarding appropriate waste management.  
- Observe the type of medical waste being discarded in receptacles lined with black bags & with Yellow bags.  
- Randomly open and verify type of previously discarded medical waste in receptacles dedicated for general waste and yellow infectious waste. |

| INTERVIEW:  
| Staff Interview (SI)  
- During audit round of dental clinics assess the staff knowledge by asking about different type of waste generated in dental clinics.  
- Ask about the type of waste to be discarded in yellow waste receptacles & black waste receptacles.  
- Ask about different kind of non-sharp waste generated in dental settings? |

**FURTHER READING:**  
**NON SHARP WASTE IN DENTAL SETTINGS:**

a) **Infectious Waste:**  
This is the waste that contains biological agents such as bacteria, viruses, parasites, and fungi which might cause a disease for individuals susceptible to get infected. Infectious waste includes any discarded contaminated instruments or materials that have been in contact with blood or body fluids of infected persons (i.e. contaminated clinical waste such as gloves, aprons, masks, disposable bibs, swab, gauze, cotton, used impression and bite registration materials, single-use materials and instruments, used custom trays, sutures, and disposable gowns).

b) **Chemical Waste:**  
This is the waste that contains discarded solid, liquid or gaseous chemicals resulting from diagnostic, therapeutic (including local anesthetic solutions), and laboratory activities or those used in cleaning and disinfecting or sterilizing procedures. It also includes photographic and radiographic chemicals (developer and fixer), lead foil (within intraoral radiographic film packets), and waste amalgam.

c) **Pathological Waste:**  
This is the waste that contains human tissues (including extracted teeth), blood, blood components, and body fluids.

d) **Pharmaceutical Waste (Medications):**  
Trace medications and pharmaceutical items likely to be contaminated are to be disposed of by collecting them in leakproof containers, then in color-coded plastic bags bearing the phrase “Chemical Waste-Medications” in (Arabic and English) as well as the biohazard logo.
### e) Dental Amalgam:

Amalgam waste, amalgam capsules and extracted teeth that contain amalgam restorations should not be placed in biohazard containers, infectious waste containers or regular garbage. Amalgam waste should be stored in wide-mouthed, covered, rigid plastic container.

### Sub-standard – 14:03

Sharp containers are wall mounted or held on a stand at points of production.

**Weightage:** High  
**Method of Evaluation:** Observation (O),

<table>
<thead>
<tr>
<th>Observation</th>
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<tbody>
<tr>
<td><strong>OBSERVE:</strong></td>
</tr>
<tr>
<td>In all patient care &amp; other work areas (Dental Clinics, Dental lab etc.):</td>
</tr>
</tbody>
</table>

- Location of the sharp containers that should be wall mounted or placed on stand at the point of production in order to avoid risk of sharp injuries.  
- Observe if height of sharp container is meeting the international standards.

*(You may observe sharp containers placed directly on floor, mounted very high above the eye level & at locations inaccessible for dental healthcare workers)*

Sharp boxes should be puncture proof, leak-proof, and present no risk to staff or patients

- Healthcare workers should be able to view the entire opening of the sharps disposal container while comfortably standing within arm’s reach.  
- NIOSH provides an ergonomically ideal formula by establishing the eye-level height, maximum thumb tip reach of the worker population, and including a drop angle 15 degrees (see illustration ).

**Sharps disposal container height should be:**

- **Standing workstation:** 52 to 56 inches above the standing surface of the user  
- **Seated workstation:** 38 to 42 inches above the floor on which the chair rests

These height installation suggestions will “comfortably accommodate 95% of all adult female workers,” according to NIOSH.
<table>
<thead>
<tr>
<th>Sub-standard – 14:04</th>
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</thead>
<tbody>
<tr>
<td><strong>No infectious medical waste or sharps are observed outside specified containers.</strong></td>
</tr>
</tbody>
</table>

**Weightage: High**  
**Method of Evaluation: Observation (O)**

<table>
<thead>
<tr>
<th>OBSERVE:</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Observe during audit visit in all patient care &amp; other work areas (Dental Clinics, Dental lab etc.) if the dental healthcare workers (DHCWs) are discarding the waste in specified containers or not.</td>
</tr>
<tr>
<td>- Randomly open the containers to observe if discarded waste is appropriate for that receptacle.</td>
</tr>
</tbody>
</table>

You may observe card boxes, papers & plastic wrappers & sharp object discarded in infectious waste receptacle and N – 95 masks & blood soaked gauzes discarded in general waste. Sometimes you may observe a paper tissue & surgical mask discarded in sharp container.

Observe if DHCWs are compliant with waste segregation Protocols.):

- **Black:** To dispose general waste  
- **Yellow:** To dispose infectious waste, soaked items with blood or body fluid  
- **Sharp Containers:** To dispose all kinds of sharps (needles, broken/ glass, syringes with attached needles, blades; etc)

*Sharp items (e.g., burs, disposable blades, and orthodontic wires should be disposed of in puncture-resistant containers)*
### Sub-standard – 14:05

Medical waste bags/sharp containers are securely closed after being filled to 3/4 of its maximum capacity and labeled with date and place of production.

**Weightage:** High  
**Method of Evaluation:** Observation(O), Staff Interview (SI)

#### OBSERVE:

- Medical waste bags in the temporary holding areas in & Infectious waste room with in the dental center / settings which shouldn’t be overfilled above 3/4th of their capacity.
- Observe if waste bags are well secured & tied with a **self-lock plastic tie** before placing them in a temporary holding area such as a dirty utility room.
- Observe the label of infectious waste bags with the following information:
  a. **Generating Clinic, area**  
  b. **Date collected**  
  c. **Time etc**

#### INTERVIEW:

- Housekeeping / waste collection staff about the procedure / mechanism of waste collection.
- Ask at which level / capacity / level are they going to remove waste bag from the specified receptacles/containers. (should be collected when filled to 3/4 of its maximum capacity.
- Ask if they have tags / stickers for labeling the waste bags & what is the necessary information that needs to be recorded (Date / area /clinic etc)
- Ask what are they using to tie the waste bags at the time of collection.

---

**Extreme care must be taken while handling waste bags.**

- Waste bags should be handled at the top so that the bags do not come in contact with body.
- Never use hands to compress (squeeze) waste in containers/bags.
### Sub-standard – 14:06

**Collection & transportation of medical waste** is done by allocated workers wearing proper PPE (heavy duty gloves with aprons, mask and face shield if needed), at fixed times and on demand, housekeepers carry the waste away from their body.

**Weightage:** High  
**Method of Evaluation:** Document (D), Staff Interview (SI), Observation (O),

<table>
<thead>
<tr>
<th>REVIEW:</th>
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</table>
| - Schedule of waste collection within the clinics / dental lab etc and verify the frequency of waste collection.  
- Frequency of waste collection should be clearly specified in the schedule / log sheet that must be at fixed intervals. (Every 2 hours, once per shift etc)  
- Any evidence of collection on demand e.g. contacts numbers to call the medical waste staff when needed (*In case of increased demand etc*) |

<table>
<thead>
<tr>
<th>INTERVIEW:</th>
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</thead>
</table>
| - Waste collection staff about frequency of waste collection from different clinics/ areas.  
- Ask where they will keep the waste bags and for how long it stays.  
- Ask about the appropriate PPE and frequency of changing PPE?  
- Ask them at random to simulate PPE donning and doffing and assess their performance.  
- Ask if they have received any infection control training?  
Waste collection staff may use below mentioned PPE based on type of work (Collection, transportation, cleaning / disinfection of carts etc): |

  - Clean Gloves / Heavy duty gloves  
  - Safety Shoes  
  - Mask & Eye protection  
  - Protective Gown/Apron etc.

<table>
<thead>
<tr>
<th>OBSERVE:</th>
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</table>
| - In the temporary holding areas i.e. dirty utility rooms etc if collection frequency is matching with what is specified in schedule. (*You may observe large number of waste bags and sharp containers not collected as per schedule)*  
- Observe the practice of waste collection staff waste regarding using appropriate PPEs.  
- Observe the practices of waste collection staff if they are carrying waste bags away from body. |

---

**PPE must be changed frequently when moving from one station to another station. Staff must perform hand hygiene after removing PPE. This has been observed that waste collection staff use on set of PPE throughout the collection process and use elevators with same gloved hands contributing / posing to infection risk.**
<table>
<thead>
<tr>
<th>Sub-standard – 14:07</th>
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</thead>
</table>
Infectious medical waste is transported in closed and impervious specified carts with biohazard sign. Carts are cleaned after each use or at least daily.

**Weightage:** High  
**Method of Evaluation:** Observation (O), Staff Interview (SI)

### OBSERVE:

**Availability of carts used for transportation of Infectious medical waste** and assess if meeting the specifications.

- Closed  
- Impervious  
- Leak proof & readily cleanable  
- Clearly visible biohazard signage posted

Observe if transportation carts are regularly cleaned and well maintained (Free from dust / Blood stains etc)

### INTERVIEW:

- Waste collection staff about frequency of cleaning the transportation carts.  
- Where & how carts are being cleaned??  
- Which disinfectant they are using?

Transportation carts used for transporting waste within the dental center must be decontaminated after each use or daily using a hospital approved disinfectant solution.
### Sub-standard – 14:08

The medical waste storage room is consistent with the approved MOH specifications: (adequate in space, away from traffic, secured, with biohazard sign, well ventilated with temperature <18 °C., provided with water source & adequate drainage, cleanable walls & floors).

**Weightage: High**  
**Method of Evaluation:** Document (D), Observation (O)

<table>
<thead>
<tr>
<th><strong>Document (D)</strong></th>
<th><strong>REVIEW:</strong></th>
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</table>
| - Log sheet for temperature monitoring *(Check for any fluctuations in the log sheet)*  
- Cleaning schedule / checklist |

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<thead>
<tr>
<th><strong>Observation (O)</strong></th>
<th><strong>OBSERVE:</strong></th>
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</table>
| - Secured and locked (away from traffic)  
- Biohazard signage posted  
- Adequate space  
- Clean and well maintained. Walls and floors are smooth and of easily cleanable material. No cracks, openings etc.  
- Well ventilated with temperature monitor (displaying temperature <18 °C)  
- The room must have a smooth floor (easy cleanable) and door well-sealed to protect it from water leakage, rain, and spread of odor, rodents, insects, birds and stray animals.  
- Equipped with hygiene washing sink with required supplies like soap paper tissues etc sewage hole must be well sealed etc. |
<table>
<thead>
<tr>
<th><strong>Sub-standard – 14:09</strong></th>
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</thead>
<tbody>
<tr>
<td>Infectious medical waste is transported outside the dental center every 24 hours to be disposed through the nationally approved system for medical waste management, with cleaning and disinfection of the waste storage room after transport or at least daily.</td>
</tr>
</tbody>
</table>

**Weightage: High**  
**Method of Evaluation:** Document (D), Observation (O), Staff Interview (SI)

<table>
<thead>
<tr>
<th><strong>REVIEW:</strong></th>
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</thead>
</table>
| - Daily collection log sheet / or any document provided by company for transportation & waste disposal outside the dental center with date and time.  
- **Infectious medical waste is transported outside the hospital every 24 hours** |

<table>
<thead>
<tr>
<th><strong>OBSERVE:</strong></th>
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</thead>
</table>
| - Check the label on medical waste bags & sharp containers to confirm if exceeded 24 Hours collection time or as per standard there is daily collection of medical waste.  
- Observe the number of available waste bags and assess if its matching with policy of daily collection. *(Huge number would reflect lack of compliance)* |

<table>
<thead>
<tr>
<th><strong>INTERVIEW:</strong></th>
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</table>
| - Responsible staff regarding frequency of waste collection by the designated waste management company.  
- Ask on which day & time company is collecting waste and match with the document for purpose of verification. |
<table>
<thead>
<tr>
<th>Sub-standard – 14:10</th>
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<tbody>
<tr>
<td>Allocated infectious waste workers are vaccinated against blood borne pathogens and trained on hand hygiene, use of PPE and safe handling of waste.</td>
</tr>
<tr>
<td>Weightage: High</td>
</tr>
<tr>
<td>Method of Evaluation: Document (D), Medical Record (MR), Staff Interview (SI)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>REVIEW:</th>
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<tbody>
<tr>
<td>- Evidence of training conducted for infectious waste workers.</td>
</tr>
<tr>
<td>- Review the content of training provided.</td>
</tr>
<tr>
<td>Training activities include but not limited to:</td>
</tr>
<tr>
<td>- Hand hygiene</td>
</tr>
<tr>
<td>- PPEs selection &amp; technique of donning/doffing</td>
</tr>
<tr>
<td>- Safe handling &amp; other waste management protocols during collection, transportation etc</td>
</tr>
<tr>
<td>- Labeling / coding that designates an item as infectious waste</td>
</tr>
<tr>
<td>- Sharp injuries &amp; post exposure protocols etc.</td>
</tr>
<tr>
<td>- Cleaning &amp; disinfection procedures etc.</td>
</tr>
</tbody>
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<tr>
<th>REVIEW:</th>
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<tbody>
<tr>
<td>- Medical records of infectious waste workers in the employee health clinic &amp; check if they have received vaccination against Hepatitis B. <em>(Review files in the infection control department or in Employee health clinic if dental unit is related to hospital etc.)</em></td>
</tr>
<tr>
<td>- Verify if they have completed the required dosing schedule.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>INTERVIEW:</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Infectious waste workers if they have received vaccination against hepatitis B.</td>
</tr>
<tr>
<td>- Ask if they have received any prior training from infection control team on hand hygiene, proper use of personal protective equipment &amp; safe handling of waste etc</td>
</tr>
<tr>
<td>- Ask them to simulate hand hygiene &amp; PPE donning / doffing assess their performance.</td>
</tr>
<tr>
<td>- Ask about handling of waste and protocols to be followed in case of accidental needle stick injuries. <em>(refer to sharps safety for steps)</em></td>
</tr>
</tbody>
</table>
Dental Radiographs poses the risk of infection to dental healthcare personnel (DHCP). Education & training of dental healthcare personnel (DHCP) on appropriate infection control measures is extremely important during dental radiography for their safety. All healthcare workers hold the key responsibility to ensure strict adherence to all infection control parameters.

Infection control principles for dental radiography are identical to those used in the dental operatory. They are based on standard precautions and aimed at preventing disease transmission from patient to dental worker, from dental worker to patient, and from patient to patient.
### DENTAL RADIOGRAPHS

<table>
<thead>
<tr>
<th>01</th>
<th>Sub-standard – 15:01</th>
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<tbody>
<tr>
<td></td>
<td>Appropriate personal protective equipment are worn by dental workers when exposing radiographs and handling contaminated film packets.</td>
</tr>
<tr>
<td></td>
<td><strong>Weightage: High</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Method of Evaluation: Observation (O), Staff Interview (SI)</strong></td>
</tr>
</tbody>
</table>

#### OBSERVE:

- During visit of dental radiology area / dental clinics and observe if dental healthcare workers are compliant to use of personal protective equipment while radiography and handling contaminated film packets.
- DHCP must wear gloves when taking radiographs and when handling contaminated film packets. Other PPE (e.g., mask, protective eyewear, protective clothing) is required when spatter or splashes of blood or other potentially infectious materials is anticipated.
- Observe the staff practices like if they are moving around with gloved hands and other PPE items or remove PPE before leaving work area.

#### INTERVIEW:

- During visit of dental radiology area / dental clinics ask randomly selected dental healthcare workers about the required PPE during dental radiography and while handling contaminated films.
- Assess if they are trained on appropriate selection & technique of PPE donning and doffing by asking one of the staff to demonstrate.
- Ask about the associated risks if infection control safety measures are not taken and recommended technique of PPE donning & doffing is not followed.
<table>
<thead>
<tr>
<th><strong>Sub-standard – 15:02</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Hand hygiene facilities and supplies are available and easily accessible, staff comply with hand hygiene recommendations and can demonstrate the appropriate technique and time.</td>
</tr>
</tbody>
</table>
| **Weightage:** Critical  
**Method of Evaluation:** Observation (O), Staff Interview (SI) |

**Observation (O):**

| **Availability of hand hygiene supply (Alcohol based hand sanitizers, antiseptic soaps, paper towels etc.) in the dental lab is crucial for effective implementation of hand hygiene program.** |
| **OBSERVE the following during visit of dental radiology section / area:** |
| **Hand Washing Facilities:** |
| - Observe if hand washing sink/s are available, well maintained, clean and provided with all needed supply. |
| - Observe availability of water supply (hot and cold) for hand washing *(Place hands under the water tap if hands free operation or open the tap to check for hot & cold water supply)* |
| - Observe the availability of following supplies: |
|  - Plain (non-antimicrobial) soap |
|  - Antimicrobial soap |
|  - Paper Towels for drying |
| **Observe whether hand washing sinks are conveniently fixed to ensure ease of accessibility to dental radiology staff at point of use.** |
| **OBSERVE:** |
|  - Practices of DHCP to check whether they are compliant with hand hygiene practices or not. |
|  - Observe if DHCP are following the recommended duration, steps and technique of hand rubbing & hand washing. |

**Staff Interview (SI):**

| **INTERVIEW:** |
| - During visit of dental radiology section ask randomly selected staff to simulate hand hygiene. *(Focus on technique, steps & duration)* |
|  - *(For duration, DHCP must have timer to calculate exact duration of 20 – 30 seconds & hand washing for 40–60 seconds.)* |
|  - Ask about the importance of hand hygiene and associated risks if appropriate technique & recommended duration is not followed. |
### Sub-standard – 15:03

Only heat-tolerant or disposable radiographic devices are used (such as film holders, positioners).

**Weightage:** Critical  
**Method of Evaluation:** Observation (O), Staff Interview (SI)

<table>
<thead>
<tr>
<th>Observation (O)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>OBserve:</strong></td>
</tr>
<tr>
<td>- During visit of dental radiology area / x-ray room &amp; observe what type of radiographic devices are being available &amp; used.</td>
</tr>
<tr>
<td>- Observe how dental staff are handling film holding devices and position indicating devices after use.</td>
</tr>
</tbody>
</table>

*Film holding devices and position indicating devices should be either disposable and not reused between patients or they may be autoclavable and heat-sterilized between patients. Disinfecting such semi-critical items between patients is unacceptable and should not be attempted.*

| Items which enter the oral cavity must be either sterilizable, disposable, or covered with a disposable barrier between patients. Such semi-critical items should never be processed between patients with disinfection alone. |

<table>
<thead>
<tr>
<th>Staff Interview (SI)</th>
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<tbody>
<tr>
<td><strong>INTERVIEW:</strong></td>
</tr>
<tr>
<td>- During visit of dental radiology area / x-ray room ask the dental healthcare worker about the processing of handling film holding devices and position indicating devices after use. <em>(Will be disposed if single use OR processed in CSSD if heat tolerant???)</em></td>
</tr>
<tr>
<td>- Assess if they are oriented and well trained about handling / processing of such items.</td>
</tr>
<tr>
<td>Sub-standard – 15:04</td>
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<tr>
<td>---------------------</td>
</tr>
<tr>
<td>Heat-tolerant devices are sent to central sterilization for cleaning and heat-sterilizing between patients.</td>
</tr>
</tbody>
</table>

**Weightage:** Critical  
**Method of Evaluation:** Observation (O), Staff Interview (SI)

<table>
<thead>
<tr>
<th>Observation (O)</th>
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<tbody>
<tr>
<td>Heat tolerant / heat resistant devices MUST be sent to the CSSD for processing before being used for next patients e.g. heat tolerant film holders, positioning devices etc</td>
</tr>
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</table>

**OBSERVE:**
- Practices of dental radiographer/s if the heat tolerable devices are sent to CSSD for reprocessing before using on next patient.

<table>
<thead>
<tr>
<th>Staff Interview (SI)</th>
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</thead>
<tbody>
<tr>
<td>Heat tolerant / heat resistant devices MUST be sent to the CSSD for processing before being used for next patients e.g. heat tolerant film holders, positioning devices etc</td>
</tr>
</tbody>
</table>

**INTERVIEW:**
- During visit of dental radiology area / X ray room ask dental radiographer and assess if they are oriented about the heat tolerable dental instruments used in the dental radiography.  
- Ask about the protocols to be followed after use to assess their knowledge and practice,  
- All reusable heat tolerant devices MUST be replaced between patients and sent to central sterilization supply department for reprocessing or immediately discarded of single use.
<table>
<thead>
<tr>
<th>Sub-standard – 15:05</th>
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<tbody>
<tr>
<td>Exposed radiographs films are transported and handled aseptically to prevent contamination.</td>
</tr>
</tbody>
</table>

**Weightage:** Medium  
**Method of Evaluation:** Observation (O), Staff Interview (SI)

In order to prevent contamination of developing equipment, exposed radiographs films must be transported and handled aseptically. When taking radiographs, the potential to cross-contaminate equipment (including the processor and processing solutions) and environmental surfaces with blood or saliva is high if the aseptic technique is not practiced.

**OBSERVE:**
- During the audit visit, observe in the dental radiology area / X ray room / dental clinics, how the dental healthcare personnel are handling the exposed radiograph films.  
- Observe if aseptic technique is followed to prevent the environmental contamination e.g. The radiographer must wear gloves when making intraoral radiographs, contaminated gloves must not contact any surface not protected by a barrier, used gloves must be removed and hands washed before entering the dark room etc.

**INTERVIEW:**
- Dental radiographer / DHCP regarding the precautions to be taken while transporting and handling the exposed radiographs films.  
- Assess if DHCP are trained on rules of aseptic technique. Ask about the prior training conducted by IC department

**Further Reading:**
- Aseptic technique: a procedure that breaks the cycle of cross-infection and ideally eliminates cross-contamination.
- Intraoral radiography involves direct contact with saliva which may contaminate the films, film holders, position-indicating devices, x-ray tube-head, door handles, as well as the timing controls and exposure switch.
- When taking radiographs, the potential to cross-contaminate equipment (including the processor and processing solutions) and environmental surfaces with blood or saliva is high if the aseptic technique is not practiced.
- Although no direct evidence suggests that disease can be transmitted via dental x-ray procedures, the activities surrounding dental radiography (taking and processing x-rays) offer lots of chances for spreading contamination.
- Film packets used in the mouth are contaminated, touched, and then transported to another location within the practice setting.
- All surfaces that contact film packets or sensors that have been used in the mouth become contaminated, as do all surfaces touched with contaminated gloves. X-ray equipment also can become contaminated when intraoral x-rays are taken, and film processing equipment can be contaminated when x-ray film is developed.
- Research shows that oral microorganisms can remain viable on radiographic equipment for at least 48 hours and can survive in developer/fixer for up to two weeks.
### Clinical contact surfaces (e.g., frequently touched surfaces) in radiographic area are either barrier protected or cleaned and disinfected after each patient.

**Weightage:** High  
**Method of Evaluation:** Observation (O), Staff Interview (SI)

<table>
<thead>
<tr>
<th>Sub-standard – 15:06</th>
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<tbody>
<tr>
<td>Clinical contact surfaces (e.g., frequently touched surfaces) in radiographic area are either barrier protected or cleaned and disinfected after each patient.</td>
</tr>
</tbody>
</table>

#### Clinical contact surfaces
- Environmental surfaces that are touched by contaminated gloved hands, instruments, contaminated film packets, or devices used in the mouth during the procedure etc. Even in filmless digital radiography, the potential for surface contamination exists.

#### Surface barrier
- Material that prevents penetration of microorganisms, particulates, and fluids, and contamination of the underlying surface.

#### OBSERVE:
- Availability of surface barriers in the dental radiography area if used for protecting frequent touched clinical contact surfaces.
- Observe if barriers are not available / used, there is appropriate cleaning and disinfection of frequently touched clinical contact surfaces.
- To ensure if cleaning is done appropriately, wipe over any surface to rule out presence of dust or other contaminated secretions etc.
- Observe availability of approved disinfectants in the area.

#### INTERVIEW:
- Dental radiographer / DHCP about the availability of surface barriers in the radiography area.
- Ask about the protocol to be followed if barriers are not available & used.
- Ask about the type of disinfectant used for cleaning & disinfection of frequently touched surfaces.
- Give specific task to demonstrate by giving a scenario:

**QUESTION 1:** After completion of procedure and before seating the new patient, how will you prepare the area for next patient ???

**QUESTION 2:** Patient XYZ left the x ray room and you observed gross contamination of contact surfaces, how will you proceed ???

**ANSWER:**
- Hand Hygiene.
- Use personal protective equipment.
- Remove contaminated surfaces barriers followed by disinfection of surfaces.
- Apply new set of disposable, fluid-proof surface barriers to cover surfaces/objects that may be touched with contaminated hands or contaminated objects. For example:

**Some frequently touched Clinical Contact Surfaces include:**

- Tube head / yoke
- X-ray cone
- Control panel
- Exposure button
- Headrest
- Chair adjustment controls
- Work surfaces
- Darkroom equipment and surfaces
- Computer equipment / devices
Dental laboratory is a place to manufacture or customize a variety of products to assist in the provision of oral healthcare by a dentist. All dental lab personnel must ensure full understanding on the best practice of infection control in dental lab.

Aim is to prevent/minimize the risk of infection in dental settings & to promote awareness for each dental personnel in the importance of infection control in dental lab.
<table>
<thead>
<tr>
<th>16</th>
<th><strong>DENTAL LABORATORY</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sub-standard – 16:01</strong></td>
<td></td>
</tr>
<tr>
<td>The dental laboratory is divided into the following areas: a) Receiving area. b) Production area. c) Shipping area.</td>
<td></td>
</tr>
<tr>
<td><strong>Weightage:</strong> Medium</td>
<td></td>
</tr>
<tr>
<td><strong>Method of Evaluation:</strong> Observation (O)</td>
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<tr>
<td><strong>OBSERVE:</strong></td>
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</table>

*During the audit visit observe the design of dental lab which should include the following areas:*

1. Receiving area. 2. Production area. 3. Shipping area.

**Receiving Area:**
- The receiving area should be separate from the production area.
- Persons working in the receiving area should wear a clean uniform or laboratory coat, a face mask, protective eyewear, and disposable gloves.
- Personnel working in the receiving area should remove their PPE before moving to an uncontaminated area of the lab.
- Receiving area must be equipped with running water and hand-washing facilities.

**Production Area:**
- Separate areas should be designated for new work and repairs inside the production area.
- If this area is separated adequately and all incoming cases are known to have been disinfected, DHCP can handle new cases as non-infectious once they have been decontaminated.
- Full PPE should be used when handling these items and every effort should be made to avoid cross-contamination from such items.

**Shipping Area:**
- This area is designed for final inspection, cleaning and disinfection of prostheses and appliances.
- The disinfected devices should be shipped in a labelled and sealed plastic bag (*information such as type of disinfectant used, disinfection method, and duration should all be mentioned)*.
| 02 | **Sub-standard – 16:02**  
Hand hygiene facilities and supplies are available and easily accessible, staff comply with hand hygiene recommendations and can display the appropriate technique and time.  
**Weightage:** Critical  
**Method of Evaluation:** Observation (O), Staff Interview (SI) |

|  | **Observation (O)**  
*Observation of hand hygiene supply (Alcohol based hand sanitizers, antiseptic soaps, paper towels etc.) in the dental lab is crucial for effective implementation of hand hygiene program.*  
**OBSERVE** the following during visit of dental lab:  
**Hand Washing Facilities:**  
- Observe if hand washing facilities are available, clean and provided with needed supply.  
- Observe availability of water supply (hot and cold) for hand washing *(Place hands under the water tap if hands free operation or open the tap to check for hot & cold water supply)*  
- Observe the availability of following supplies:  
  - Plain (non-antimicrobial) soap  
  - Antimicrobial soap  
  - Paper Towels for drying  
*Observe whether hand washing sinks are conveniently fixed to ensure ease of accessibility to lab staff at point of use.*  
**OBSERVE:**  
- Practices of Dental lab staff to check whether they are compliant with hand hygiene practices or not.  
- Observe if DHCP are following the recommended duration, steps and technique of hand rubbing & hand washing. |

|  | **Staff Interview (SI)**  
**INTERVIEW:**  
- Randomly selected the Dental lab staff and ask them to simulate hand hygiene. *(Focus on technique, steps & duration)*  
- *(For duration, DHCP must have timer to calculate exact duration of 20 – 30 seconds & hand washing for 40-60 seconds.)* |
### Sub-standard – 16:03

Sufficient amount with different types and sizes of personal protective equipment are available in the lab (gloves, masks, gowns, utility gloves, face shield) and staff wear appropriate PPE when handling contaminated items

**Weightage:** Critical  
**Method of Evaluation:** Observation (O), Staff Interview (SI)

<table>
<thead>
<tr>
<th><strong>OBSERVE:</strong></th>
<th></th>
</tr>
</thead>
</table>
| - Availability of different types of **personal** protective equipment (PPE) in the dental lab.  
- Observe if the supply is adequate in amount and there is no shortage of supply.  
- Observe the quality of available PPE e.g gloves must not be loose at wrists and yellow gowns should be of thick material and fluid resistant to withstand splashes and provide good protection to DHCP.  
- Observe following PPE is available and used by dental lab staff during dental procedures and dental lab etc  | Clean gloves  
Surgical face masks  
Protective eyewear/ face shields  
Utility gloves for dental lab staff when handling contaminated instruments etc. |

<table>
<thead>
<tr>
<th><strong>INTERVIEW:</strong></th>
<th></th>
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</thead>
</table>
| Dental lab staff & Infection control practitioner/s regarding availability of PPE supply in the dental lab.  
Ask if all PPE items are available in sufficient amounts and proper qualities. |
| 04 | **Sub-standard – 16:04**  
No reprocessing of instruments is carried inside the dental lab.  
**Weightage:** Critical  
**Method of Evaluation:** Observation (O), Staff Interview (SI) |
|---|---|
| **OBSERVE:** | - Practices of dental lab staff related to reprocessing of contaminated instruments within the dental lab.  
- Dental lab staff is not permissible to reprocess any contaminated item within the dental lab in order to avoid risk of acquiring infection.  
- Rule out presence of autoclave within the dental lab which reflects instruments are reprocessed inside the dental lab and not sent to central sterile supply department (CSSD). |
| **INTERVIEW:** | - Dental lab staff and ask about their practices related to reprocessing of contaminated instruments.  
- Ask how they are handling the contaminated instruments. |
### Sub-standard – 16:05

**Single-use devices are discarded after one use.**

**Weightage:** Critical  
**Method of Evaluation:** Observation (O), Staff Interview (SI)

<table>
<thead>
<tr>
<th>Observation (O)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>OBSERVE:</strong></td>
</tr>
<tr>
<td>- During audit visit of the dental lab observe staff practices related to single use items.</td>
</tr>
<tr>
<td>- Observe if dental health care personnel (DHCP) are discarding single use items after completion of task / procedure.</td>
</tr>
<tr>
<td>- Single use devices MUST never be reused / reprocessed &amp; should be immediately discarded.</td>
</tr>
</tbody>
</table>

**Contaminated materials and items used intra-orally that cannot be cleaned, sterilized, are to be discarded, for example:**

- Plastic impression trays
- Custom trays
- Disks
- Brushes
- Waxes

<table>
<thead>
<tr>
<th>Staff Interview (SI)</th>
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</thead>
<tbody>
<tr>
<td><strong>INTERVIEW:</strong></td>
</tr>
<tr>
<td>- During audit visit interview different categories of DHCP – dental lab staff &amp; ask them to name certain single use items and how they will handle them after use.</td>
</tr>
</tbody>
</table>

Countercheck by asking an indirect question and assess their knowledge and practice **“How will you clean and disinfect a plastic orthodontic bracket / impression tray after completion of dental procedure”??**  
**Answer should be I will discard after use and will not reprocess.**

- Single-use disposable item: a device intended to be used on one patient and then discarded appropriately; these items are not intended to be reprocessed (cleaned, disinfected, or sterilized) and used on another patient.
- Single-use devices in dentistry (e.g., needles, prophylaxis cups and brushes, and plastic orthodontic brackets.) are not heat-tolerant and cannot be reliably cleaned.
- Certain items (e.g., prophylaxis angles, saliva ejectors, high-volume evacuator tips, and air/water syringe tips) are commonly available in a disposable form and should be disposed of appropriately after each use.
<table>
<thead>
<tr>
<th>Sub-standard – 16:06</th>
</tr>
</thead>
<tbody>
<tr>
<td>All reusable heat tolerant dental instruments are replaced between patients and sent to central sterilization.</td>
</tr>
<tr>
<td><strong>Weightage:</strong> Critical</td>
</tr>
<tr>
<td><strong>Method of Evaluation:</strong> Observation (O), Staff Interview (SI)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Observation (O)</th>
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</thead>
<tbody>
<tr>
<td>Heat tolerant items used in the mouth and on contaminated laboratory items and materials should be cleaned and sterilized before being used for another patient or another laboratory case.</td>
</tr>
<tr>
<td>Examples of such items are:</td>
</tr>
<tr>
<td>- Metal impression trays</td>
</tr>
<tr>
<td>- Burs &amp; Laboratory knives</td>
</tr>
<tr>
<td>- Face bow forks</td>
</tr>
<tr>
<td>- Hand pieces and instruments</td>
</tr>
<tr>
<td>- Orthodontic pliers &amp; Impression guns etc</td>
</tr>
<tr>
<td><strong>OBSERVE:</strong></td>
</tr>
<tr>
<td>- Practices of dental staff if they are sending the above-mentioned heat tolerant dental instruments to CSSD.</td>
</tr>
<tr>
<td>- Observe to rule out availability of autoclave since no reprocessing of any item is allowed inside the dental lab.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Staff Interview (SI)</th>
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<tbody>
<tr>
<td><strong>INTERVIEW:</strong></td>
</tr>
<tr>
<td>- Dental lab staff and assess if they are oriented about the heat tolerant dental instruments used in the dental lab.</td>
</tr>
<tr>
<td>- Ask about the protocols to be followed after use assess their knowledge and practice,</td>
</tr>
<tr>
<td>- All reusable heat tolerant dental instruments MUST be replaced between patients and sent to central sterilization supply department for reprocessing.</td>
</tr>
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<td>07</td>
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</table>

**Weightage:** Medium  
**Method of Evaluation:** Observation (O), Staff Interview (SI)

<table>
<thead>
<tr>
<th><strong>OBSERVE:</strong></th>
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</thead>
<tbody>
<tr>
<td>- Practices of Dental Lab staff related to processing of instruments after completion of dental procedures.</td>
</tr>
<tr>
<td>- Observe how dental lab staff is handling contaminated instruments.</td>
</tr>
<tr>
<td>- Observe availability of transportation gel/spray in the dental clinic to ensure its application if transportation is not expected within 2 hours.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>INTERVIEW:</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>- Dental Lab staff and evaluate if they have enough knowledge and received training regarding all steps of instrument processing.</td>
</tr>
<tr>
<td>- <strong>Ask the dental staff about:</strong></td>
</tr>
<tr>
<td>- Items that need to be sent for reprocessing in CSSD.</td>
</tr>
<tr>
<td>- Ask about preparation of contaminated equipment and sending them to CSSD (i.e. spraying of transportation gel if transportation is not expected within two hours after keeping in a closed, sealed, and puncture resistant containers.</td>
</tr>
</tbody>
</table>
## Sub-standard – 16:08

Contaminated dental instruments are transferred to the central sterilization department in a closed, sealable and puncture resistant container.

**Weightage:** High  
**Method of Evaluation:** Observation (O), Staff Interview (SI)

### OBSERVE:
- During audit visit of dental lab for availability of sealed containers for transportation of contaminated instruments to CSSD.

**Specifications of container used for transportation of contaminated items to the CSSD should be as follows:**
- Must be rigid & puncture resistant
- Closed and sealable i.e. it must be fully closed to avoid displacement or falling out of items that would result in contamination of environment and/or transportation carts.
- Container must be identified with a **biohazard label**.
- Container must meet the above specifications in order to ensure safe transportation of items to CSSD for central processing.

### INTERVIEW:
- Dental lab staff about the availability of containers with abovementioned specifications for transportation of contaminated items to CSSD for reprocessing.
<table>
<thead>
<tr>
<th>Sub-standard – 16:09</th>
</tr>
</thead>
<tbody>
<tr>
<td>Items that will come in contact with mucous membranes, but which are not used between patients are cleaned and disinfected. (e.g., prostheses, and orthodontic appliances).</td>
</tr>
<tr>
<td><strong>Weightage:</strong> High</td>
</tr>
<tr>
<td><strong>Method of Evaluation:</strong> Observation (O), Staff Interview (SI)</td>
</tr>
</tbody>
</table>

### OBSERVE:
- During audit visit observe practices of dental lab health care workers in relation to items that comes in contact with mucus membranes but are **NOT** used in between patients such as dental prosthesis, occlusal & orthodontic appliances, custom trays etc.
- For such items, intermediate - to - high level disinfection is sufficient, if laboratory infection control protocols are adequate to prevent cross-contamination.

### INTERVIEW:
- Interview dental lab technicians regarding handling the items that will come in contact with mucous membranes, but which are **NOT** used between patients are cleaned and disinfected. (e.g., prostheses, and orthodontic appliances etc.)
- Ask if these items will be sent to CSSD for reprocessing or the will undergo intermediate to high level disinfection within dental lab?
- Ask about all required supply available to ensure appropriate cleaning & disinfection i.e PPE items including thick utility gloves, protective gear, approved disinfectants of various levels etc.
- Ask if they have received prior training on handling & processing such items inside the dental lab.
- Assess if dental lab technicians have enough knowledge and expertise to handle these items following appropriate infection control measures.

---

**High-level / intermediate level disinfection products MUST be used and maintained according to manufacturer instructions for appropriate dilution, immersion time and other safety measures.**
### Sub-standard – 16:10

Heat tolerant items used in the mouth and on contaminated laboratory items and materials are sent to central sterilization before being used for another patient or another laboratory case (e.g.: Metal impression trays, Burs, Hand pieces, Metal rulers, Metal spatulas, Orthodontic pliers).

**Weightage:** High  
**Method of Evaluation:** Observation (O), Staff Interview (SI)

<table>
<thead>
<tr>
<th>Observation (O)</th>
<th>INTERVIEW:</th>
</tr>
</thead>
</table>
| - During audit visit observe practices of dental lab staff / technicians in relation to the items that are heat resistant / heat tolerant & used in mouth & on contaminated lab items and materials.  
- Observe if such heat tolerant items are transported to CSSD for reprocessing before being used for another patient or another laboratory case.  
**Some Heat tolerant items include:**  
- Metal impression trays  
- Burs  
- Hand pieces  
- Metal rulers  
- Metal spatulas  
- Orthodontic pliers | - Interview dental lab technicians regarding handling the items that will be used in mouth & on contaminated lab items and materials.  
- Ask about protocols being followed for transporting such items to CSSD for reprocessing.  
- Ask if they have received prior training on appropriate IC safety measures for handling and transporting items to CSSD.  
- Assess if dental lab technicians have enough knowledge about handling these heat tolerant items following appropriate infection control measures. |

<table>
<thead>
<tr>
<th>Staff Interview (SI)</th>
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</table>
| - Interview dental lab technicians regarding handling the items that will be used in mouth & on contaminated lab items and materials.  
- Ask about protocols being followed for transporting such items to CSSD for reprocessing.  
- Ask if they have received prior training on appropriate IC safety measures for handling and transporting items to CSSD.  
- Assess if dental lab technicians have enough knowledge about handling these heat tolerant items following appropriate infection control measures. |
Sub-standard – 16:11

Items that do not normally contact the mucous membranes but frequently become contaminated and cannot withstand heat-sterilization are cleaned and disinfected between patients and according to the manufacturer’s instructions. (e.g.: articulators, face-bows, lathes, case pans, shade guide, wooden-handled spatulas, rubber mixing bowls and torch).

Weightage: High
Method of Evaluation: Observation (O), Staff Interview (SI)

**OBSERVE:**
- During audit visit observe practices of dental lab staff / technicians related to the items that do not normally contact the mucous membranes but frequently become contaminated during dental procedures & cannot withstand / tolerate heat sterilization.
- Observe if these items are appropriately cleaned and disinfected in between patients.
- Observe availability of disinfectants used e.g. iodophors, phenolic etc.

**Such Items include:**
- Articulators
- Face-bows
- Lathes
- Case pans
- Pressure pots
- Water baths
- Shade guide
- Wooden-handled spatulas
- Rubber mixing bowls
- Torch

**INTERVIEW:**
- During audit visit, ask the dental lab technicians / staff regarding some frequently contaminated items, that don’t contact mucus membrane and are heat intolerant.
- Ask about all required supply available to ensure appropriate cleaning & disinfection i.e PPE items including thick utility gloves, protective gear, approved disinfectants of various levels etc.
- Ask if they have received prior training on handling & processing such items inside the dental lab.
- Assess if dental lab technicians have enough knowledge and expertise to handle these items following appropriate infection control measures.

**KEY NOTES: Chemical Disinfectants:**
- Only MOH-registered hospital disinfectants with a tuberculocidal claim should be used.
- Examples of acceptable disinfectants are sodium hypochlorite (in concentrations ranging from 0.05% to 0.5% (500 to 5,000 ppm) diluted with water)
- Iodophor (1% stock iodine diluted to the range of 0.05% to 0.5% in 70% isopropyl alcohol) and phenolic. 6.2.3.3
- Immersion disinfectants to be used once & then discarded. Concentrations of solutions should be regularly assessed as dilutions will occur with time.
Appropriate storage of all medical supply based on the infection control standards is extremely important in ensuring the integrity of items and prevention of contamination. It’s the patient right to receive the high quality dental care based on the best practices to ensure safety of patients.

All sterilized & decontaminated and items must be stored in such a way that their integrity and decontaminated state is maintained.
### STORAGE ROOM

<table>
<thead>
<tr>
<th>01</th>
<th>Sub-standard – 17:01</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Medical stores are of adequate capacity, cleaned, secured, away from contamination, air vents and direct sunlight.</td>
</tr>
<tr>
<td></td>
<td><strong>Weightage:</strong> Medium</td>
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<td></td>
<td><strong>Method of Evaluation:</strong> Observation (O)</td>
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</table>

#### OBSERVE:

During audit visit of storage rooms that are used for keeping the medical supply & observe the following key points:

- If medical storage room is appropriately maintained & clean without any contamination from dust etc.
- Observe if storage room have adequate space in order to ensure effective ventilation by avoiding overcrowding of items.
- Observe if there is any direct exposure to sunlight or other sources of potential contamination & are away from air vents.

- **While in the medical storage rooms, randomly wipe over surfaces to ensure if cleaned appropriately.**
- **Wipe the inside of plastic containers to rule out presence of dust etc.**
<table>
<thead>
<tr>
<th>Sub-standard – 17:02</th>
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</thead>
<tbody>
<tr>
<td>Medical stores have controlled ventilation with adjusted temperature and humidity (temperature ranges from 22 °C to 24 °C / relative humidity up to 70%)</td>
</tr>
</tbody>
</table>

**Weightage:** High  
**Method of Evaluation:** Document (D), Observation (O)

### REVIEW:
During visit of the medical store ask and review the following documents:

- Local records for regular monitoring (daily) of temperatures and relative humidity during the last month.
- Local records for corrective interventions which are taken if readings are not matching the acceptable values.

### OBSERVE:

- Visit the medical storage room & observe if environmental control parameters such as temperature, humidity etc are being monitored in the area or not.
- Observe availability of a fixed monitor / device installed for continuous monitoring of humidity & temperatures.
- Storage area(s) is (are) centrally air conditioned with adjusted temperature and relative humidity.
- Observe if the device of displaying the recommended temperature & humidity ranges and compare with readings mentioned in log sheet on the visit day for the purpose of verification.
  - **Recommended temperature Range is:** 22 - 24°C  
  - **Recommended relative Humidity is up to 70%.**
Sub-standard – 17:03

Storage shelves are 40 cm from the ceiling at least, 20 cm from the floor, and 5 cm from the wall.

Weightage: Medium
Method of Evaluation: Observation (O)

OBSERVE:
- During audit visit observe if following specifications of storage shelves are being followed:

  **Storage shelves are placed following these specifications.**

  - 40 cm from the ceiling
  - 20 cm from the floor
  - 5 cm from the wall

  Appropriate distance must be ensuring to ensure good ventilation, avoid exposure to moisture & contamination.

Sub-standard – 17:04

Storage shelves are made of easily cleanable material, e.g., fenestrated stainless steel, Aluminum or hard plastic, they are regularly cleaned.

Weightage: High
Method of Evaluation: Observation (O)

OBSERVE:
- During audit visit observe which type of storage shelves are available in the medical store for keeping the medical supply i.e shelves are made up of steel or plastic etc

Observe if storage shelves meet the following specifications:

- Made up of easily cleanable material (*e.g.*, fenestrated stainless steel, Aluminums or hard plastic).
- If containers are used inside medical stores, they are made of easily cleanable material (e.g., hard plastic).
- To verify if appropriate cleaning is done, wipe the surfaces of shelves and inside of containers with wet tissue or gauze piece and rule out presence of accumulated dust. It’s preferable to choose hard to reach surface for wiping.
<table>
<thead>
<tr>
<th>05</th>
<th><strong>Sub-standard – 17:05</strong></th>
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</thead>
<tbody>
<tr>
<td></td>
<td><strong>Medical stores are physically separated from patients care areas and dirty areas, there is NO personal items, foods or drinks.</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Weightage: High</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Method of Evaluation: Observation (O)</strong></td>
</tr>
</tbody>
</table>

**OBSERVE:**

During the audit round, observe the storage area for the following:

- Ensure that only sterile and clean items are allowed & stored in the medical stores
- Exclude the presence of any personal items, foods and drinks in the medical stores to prevent risk of contamination & insects etc

**Additional Points to be checked:**

- Rule out presence of any expired, broken packs or stained item.
- Expired, broken or soiled items/packs are not allowed inside medical stores (i.e., it should be discarded)
- If any stained item is found it would most likely reflect that item was restocked after being brought from patient care areas in dental clinics which is against the rules of aseptic technique. Such practices must be strictly prohibited.
<table>
<thead>
<tr>
<th>Sub-standard – 17:06</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Items are kept in the original shipping boxes.</td>
</tr>
<tr>
<td><strong>Weightage:</strong> high</td>
</tr>
<tr>
<td><strong>Method of Evaluation:</strong> Observation (O)</td>
</tr>
</tbody>
</table>

**OBSERVE:**

- During tour of medical stores, check if any shipment boxes are placed inside storage room. *(i.e., boxes made of thick cardboard for shipping.)*
- Internal shipping boxes (made of thin smooth glazed cardboard used to dispense sterile and clean supplies can be kept inside medical stores (e.g., small boxes of medical supplies: clean gloves, surgical masks, syringes ...etc.) but should be discarded immediately when the box has been emptied.

- Only sterile and clean items are allowed inside medical stores *(i.e., keeping personal items, foods and drinks inside medical stores is strictly prohibited)*
- It is strictly prohibited to keep items inside their original shipping boxes, especially for medical stores of the clinical areas whereas it is allowed to keep non-shipping boxes made of thin smooth glazed cardboard inside medical stores *(e.g., small boxes of medical supplies: clean gloves, surgical masks, syringes ...etc.)*
- Expired, broken or soiled items/packs are not allowed inside medical stores *(i.e., these items MUST be immediately discarded)*
Construction & Renovation in the dental healthcare setting MUST incorporate defined steps and precautionary measures to ensure that environmental health risk assessments, interventions, and infection control practices are being followed.

There must be an established multidisciplinary team composed of IP&C, Safety and Engineering staff, with the involved clinical areas to ensure patient safety during any construction & renovation activity within the dental settings.
## CONSTRUCTION & RENOVATION

### 01 Sub-standard – 18:01

There is a written policy and procedures for IC considerations during demolition, renovation, and construction projects.

**Weightage: Medium**

**Method of Evaluation: Document (D), Staff Interview (SI)**

### REVIEW:

- During visit in the infection Prevention and Control Department, review policies & procedures for construction & renovation in the dental health care settings.
- Policies and procedures MUST include infection control precautions during demolition, renovation & construction projects:

**Following items must be incorporated in Policies and procedures:**

1. **Policies and procedures must be Comprehensive and Descriptive:**

   - Policy & procedures should include establishment of a multidisciplinary team which is composed of Infection Control and relevant departments like maintenance, environmental services, construction project team etc
   - The team should be responsible for planning and implementing proactive preventive measures for the whole duration of the construction project and in establishing clear lines of communication among all concerned to ensure patient safety within the dental settings.
   - Policy must clearly states that IC team is authorized to be informed before starting any construction activity in the dental settings and construction team will obtain an Infection Control Construction Permit from infection control department.
   - Policy & procedures clearly describe all phases of construction & renovation:

**Infection Control Risk Assessment Matrix of Precautions for Construction & Renovation (ICRA):**

**STEP 1:** Type of Construction Project Activity *(i.e., type A, B, C and D)*

**STEP 2:** Identification of PATIENT RISK GROUP that will be affected during construction & renovation activities *(i.e. LOW RISK, MEDIUM RISK, HIGH RISK and HIGHEST RISK)*

**Step 3:** Matching the Patient Risk Group (from step 2) with the type of Construction Project (from step 1) according to the IC Matrix-Class of Precautions.

**Step 4:** Class / category of infection control precautions during construction & renovation and upon completion of project *(i.e., Class I, II, III, and IV)*
- Policy & procedures must describe the role of infection control personnel in providing education to workers and staff involved in the project to ensure through periodic follow up.
- Policy should state authority of infection control department to stop construction projects if breaches in preventive measures arise that may expose patients and HCWs to infections or environmental hazards

2. **Fully applicable:** all elements of the policy can be applied and comply with the hospital's scope of services; The policy applies to all construction/renovation works within dental healthcare facilities by ensuring preventive maintenance are done (i.e., heating, ventilation and air conditioning (HVAC) system, ventilator cleaning, filter replacement, etc.) that may compromise and/or contaminate air and water supply.

3. **Based on scientific references approved by MOH (GCC, CDC, WHO & APIC)**

4. **Signed from authorized personnel** (i.e., owner of the policy / dental center director or medical director)

5. Approved by IC committee

6. Valid (updated within 2 - 3 years and when indicated)
<table>
<thead>
<tr>
<th><strong>02</strong></th>
<th><strong>Sub-standard – 18:02</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>IPC team is involved prior to, during, and after any construction, demolition, and renovation project (Planning, ICRA, IC permit, continuous follow-up and authority to stop the project).</td>
<td></td>
</tr>
</tbody>
</table>

**Weightage: High**  
**Method of Evaluation:** Document (D), Staff Interview (SI)

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<table>
<thead>
<tr>
<th><strong>Document (D)</strong></th>
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</thead>
<tbody>
<tr>
<td>Infection Prevention and Control Department <strong>MUST</strong> ensure availability of all required documents related to construction &amp; renovation activities in the Dental health care settings.</td>
</tr>
</tbody>
</table>

**REVIEW:**

- **Multidisciplinary team meetings minutes** that indicate involvement of infection control team in planning any executing any construction & renovation

- **Infection Control Construction Permit:** Infection control department’s permission must be taken before starting any construction & renovation activities. *(Review IC permit of any previous construction project in the dental center)*

- **Infection Control Risk Assessment Matrix (ICRA):** Review and assess if complete and assessment is done correctly.

- **Periodic follow up of IC Practices and other preventive measures.** *(Review IC checklists that were used to monitor IC measures during and after completion of project.)*

- **Review any evidence to prove the authority of infection control department like authority statement / Circular /MEMO issued from administration / leadership for Infection control department to stop the construction project** if there are significant breaches in IC practices that may expose patients and HCWs to infections or environmental hazards.

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<table>
<thead>
<tr>
<th><strong>INTERVIEW:</strong></th>
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<tbody>
<tr>
<td>- Infection Control Practitioner/s to assess if they are well familiarized with all steps of construction &amp; renovation activates including ICRA, follow up, identifying &amp; responding to breaches in infection control practices.</td>
</tr>
</tbody>
</table>

- **Ask Infection control Practitioner/s** if he/she is aware of role of IC department’s involvement in planning and executing any construction & renovation projects (e.g., prior to execution of construction & renovation activities how to plan to reschedule dental appointments, isolation of construction & renovation site, creation of dust barriers, isolation
- Ask site manager or project’s supervisor of the ongoing shift *(If there is any ongoing construction activity about)* infection control precautions during all phases of such activities & assess if message is well communicated to them.
**Sub-standard – 18:03**

IPC measures are followed during the construction, demolition, and renovation projects by using infection control risk assessment (ICRA).

**Weightage:** High  
**Method of Evaluation:** Document (D), Observation (O), Staff Interview (SI)

**REVIEW:**
*During audit visit, review the following documents in the infection control department.*

**Infection Control Risk Assessment Matrix (ICRA):**

- Should be formulated and posted at the construction & renovation site –
- Check if IC team has identified accurately the type of construction project activity (*i.e.*, **type A, B, C and D**) & patient risk group that will be affected during construction & renovation activities (*i.e.* **LOW RISK, MEDIUM RISK, HIGH RISK and HIGHEST RISK**) – *(as applicable to dental settings)*
  - Entail all required IC precautions (Class I, II, III, and IV precautions), that must to be strictly implemented, maintained and periodically observed through follow up visits during different phases of the project
  - Document must be signed by all involved stakeholders.

**Observe:** *(If there is any ongoing construction / renovation activity)*

- During the audit visit observe if **Infection Control Risk Assessment form - Construction Permit** is posted at the construction & renovation site with all precautions *(proactive preventive measures)* outlined in the document.
- Observe if the construction / maintenance staff are compliant with Infection control precautions depending on type of construction activity.

**INTERVIEW:**

- Infection control practitioners if they are oriented about the steps involved in ICRA and IC precautions to be taken during all phases of construction & renovation project.
- Ask the construction staff / project supervisor *(If applicable)* about the type of infection control precautions to be followed according to type of construction activity.
- Assess if message was well understood by the receiver i.e. construction project staff.
- IC precautions MUST be strictly implemented and maintained during all phases of the project as described in the ICRA.

| CLASS III | 1. Obtain Infection Control permit before construction begins.  
2. Isolate HVAC system in area where work is being done to prevent contamination of the duct system  
3. Complete all critical barriers or implement control cube method before construction begins.  
4. Maintain negative air pressure within work site.  
5. Do not remove barriers from work area until complete.  
6. Vacuum work with HEPA filtered vacuums.  
7. Wet mop with disinfectant.  
8. Remove barrier materials carefully to minimize spreading of dirt and debris associated with construction.  
10. Cover transport receptacles or carts. Tape covering.  
11. Remove or isolate HVAC system in areas where work is being performed.  
12. Provide SDS for paint and disinfectants prior to use. |

| CLASS IV | 1. Obtain Infection Control permit before construction begins.  
2. Isolate HVAC system in area where work is being done to prevent contamination of duct system.  
3. Complete all critical barriers or implement control cube method before construction begins.  
4. Maintain negative air pressure within work site.  
5. Seal holes, pipes, conduits, and punctures appropriately.  
6. Construction anteroom and require all personnel to pass through this room so they can be vacuumed using a HEPA vacuum cleaner before leaving work site or they can wear cloth or paper coveralls that are removed each time they leave the work site.  
7. All personnel entering work site are required to wear shoe covers.  
8. Do not remove barriers from work area until completed project is thoroughly cleaned by the Environmental Services Department.  
9. Vacuum work area with HEPA filtered vacuums.  
10. Wet mop with disinfectant.  
11. Remove barrier |
### Appendix 3–X-09:
Determining Patient Risk Groups that will be Affected by the Construction / Renovation

<table>
<thead>
<tr>
<th>Group 1 Low Risk</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Office areas</td>
<td>Non-patient areas</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Group 2 Medium Risk</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Patient areas not listed in Groups 3 or 4</td>
<td></td>
</tr>
<tr>
<td>Materials management</td>
<td></td>
</tr>
<tr>
<td>Physical therapy / occupational therapy / speech therapy</td>
<td></td>
</tr>
<tr>
<td>Admission / discharge</td>
<td></td>
</tr>
<tr>
<td>Public corridors (thoroughfare for patients, and supplies)</td>
<td></td>
</tr>
<tr>
<td>Laboratories not specified in Group 3</td>
<td></td>
</tr>
<tr>
<td>Echocardiography</td>
<td></td>
</tr>
<tr>
<td>Nuclear medicine</td>
<td></td>
</tr>
<tr>
<td>MRI</td>
<td></td>
</tr>
<tr>
<td>Respiratory therapy</td>
<td></td>
</tr>
<tr>
<td>Cafeteria</td>
<td></td>
</tr>
<tr>
<td>Dietary</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Group 3 High Risk</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Critical care units (CCU)</td>
<td></td>
</tr>
<tr>
<td>Emergency room</td>
<td></td>
</tr>
<tr>
<td>Radiology</td>
<td></td>
</tr>
<tr>
<td>Labor and delivery</td>
<td></td>
</tr>
<tr>
<td>Microbiology / Virology laboratories</td>
<td></td>
</tr>
<tr>
<td>Intensive care units (ICU)</td>
<td></td>
</tr>
<tr>
<td>Intermediate care nursery</td>
<td></td>
</tr>
<tr>
<td>Newborn nursery</td>
<td></td>
</tr>
<tr>
<td>Long term / sub-acute units</td>
<td></td>
</tr>
<tr>
<td>Dialysis</td>
<td></td>
</tr>
<tr>
<td>Endoscopy</td>
<td></td>
</tr>
<tr>
<td>Outpatient surgery</td>
<td></td>
</tr>
<tr>
<td>Pediatrics</td>
<td></td>
</tr>
<tr>
<td>Pharmacy</td>
<td></td>
</tr>
<tr>
<td>Post-anesthesia care unit</td>
<td></td>
</tr>
<tr>
<td>Surgical units</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Group 4 Highest Risk</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Any area caring for immunocompromised patients</td>
<td></td>
</tr>
<tr>
<td>Burn unit</td>
<td></td>
</tr>
<tr>
<td>Cardiovascular intensive care unit (CVICU)</td>
<td></td>
</tr>
<tr>
<td>Cardiac</td>
<td></td>
</tr>
<tr>
<td>Catheterization</td>
<td></td>
</tr>
<tr>
<td>Angiography areas</td>
<td></td>
</tr>
<tr>
<td>Central sterile supply / processing areas</td>
<td></td>
</tr>
<tr>
<td>Pharmacy admixture</td>
<td></td>
</tr>
<tr>
<td>Negative pressure isolation rooms</td>
<td></td>
</tr>
<tr>
<td>Oncology</td>
<td></td>
</tr>
<tr>
<td>Radiology oncology suite</td>
<td></td>
</tr>
<tr>
<td>Anesthesia and pump areas</td>
<td></td>
</tr>
<tr>
<td>Operating rooms</td>
<td></td>
</tr>
</tbody>
</table>
## Appendix 2-X-09: Determining the Type of Construction / Renovation

<table>
<thead>
<tr>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
</table>
| **Type A** | Inspection and non-invasive activities including, but not limited to:  
- Removal of ceiling tiles for visual inspection limited to tile per 50 square feet  
- Painting (but no sanding)  
- Wall covering, electrical trim work, minor plumbing, and activities which do not generate dust or require cutting of walls or access to ceilings other than for visual inspection |
| **Type B** | Small scale, short duration activities which create minimal dust. Includes, but is not limited to:  
- Installation of telephone and computer cabling  
- Access to close spaces  
- Cutting of walls or ceiling where dust migration can be controlled |
| **Type C** | Work which generates a moderate to high level of dust or requires demolition or removal of any fixed building components or assemblies. Including, but not limited to:  
- Sanding of walls for painting or wall covering  
- Removal of floor coverings, ceiling tiles and caseworks  
- New wall construction  
- Minor duct work or electrical work above ceilings  
- Major cabling activities  
- Any activity which cannot be completed within a single work shift  
- Painting in medium and high risk areas  
- Moderate to high level of noise (cutting steel) |
| **Type D** | Major demolition and construction projects including, but not limited to:  
- Activities which require consecutive work shifts  
- Requires heavy demolition or removal of a complete cabling system  
- New construction |
### Appendix 1-X-09:
Infection Control Risk Assessment Permit Form - Construction Permit

<table>
<thead>
<tr>
<th>Type of Construction:</th>
<th>Project Start Date:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construction Location:</td>
<td>Estimated Duration:</td>
</tr>
<tr>
<td>Project Coordinator:</td>
<td>BN #:</td>
</tr>
<tr>
<td>Contractor Performing Work:</td>
<td>Tel. Ext.:</td>
</tr>
<tr>
<td>Supervisor:</td>
<td>BN #:</td>
</tr>
<tr>
<td>Mobile #:</td>
<td>Tel. Ext.:</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>YES</th>
<th>NO</th>
<th>CONSTRUCTION ACTIVITY</th>
<th>YES</th>
<th>NO</th>
<th>INFECTION CONTROL RISK GROUP</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td><strong>Type A:</strong> Inspection, non-invasive activity</td>
<td></td>
<td></td>
<td><strong>Group 1:</strong> Low Risk</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Type B:</strong> Small scale, short duration, moderate to high level of dust.</td>
<td></td>
<td></td>
<td><strong>Group 2:</strong> Medium Risk</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Type C:</strong> Activity generates moderate to high levels of dust and/ or noise requires greater work shift for completion</td>
<td></td>
<td></td>
<td><strong>Group 3:</strong> Medium / High Risk</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Type D:</strong> Major duration and construction activities requiring consecutive work shifts</td>
<td></td>
<td></td>
<td><strong>Group 4:</strong> Highest Risk</td>
</tr>
</tbody>
</table>

### CLASS I
1. Implement work methods to minimize dust dispersion from construction operations.
2. Immediate replace any ceiling tile displaced for visual inspection.
3. Minor demolition for remodeling.
4. Provide Safety Data Sheet (SDS) for paint and disinfectants prior to use.

### CLASS II
1. Provide active means to prevent air-borne dust from dispersing into atmosphere.
2. Water mist work surfaces to control dust while cutting.
3. Seal unused doors with duct tape.
4. Block off and seal air vents.
5. Wipe surfaces with disinfectant.
7. Wet mop and/or vacuum with HEPA filtered vacuum before leaving work area.
8. Place dust mat at entrance and exit of work area.
9. Remove or isolate HVAC system in areas where work is being performed.
10. Provide SDS for paint and disinfectants prior to use.
REFERENCES:

1. Ministry of Health; Manual of Infection Prevention & Control in Dental Settings Second Edition, 2018
2. GCC Infection Prevention & Control Manual 3rd Edition 2018
3. Association for Professionals in Infection Control (APIC) and Epidemiology, Inc. (2014), Chapter 53 : Dental Services