

Infection Prevention & Control Study

Guide for Dental Nurses

NEBDN-aligned revision and refresher resource

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1. Overview

Infection prevention and control (IPC) is a fundamental responsibility of the dental team and a core examinable area within the NEBDN syllabus. Dental nurses must understand how infections are transmitted, how risks are controlled, and how standards are applied consistently to protect patients, staff, and the wider public.

This guide supports NEBDN examination preparation and also serves as a structured refresher for qualified dental nurses. IPC is assessed heavily across MCQs and OSCEs, with particular emphasis on cross-infection risks, decontamination processes, and compliance with UK guidance.

2. Core Principles

Effective infection prevention and control in dentistry is based on the following principles:

- **Breaking the chain of infection**
Infection occurs when a pathogen is transmitted from a source to a susceptible host. IPC aims to interrupt this process at multiple stages.
- **Standard precautions**
All patients must be treated as potentially infectious, regardless of medical history.
- **Risk assessment**
Identifying contamination risks allows appropriate control measures to be applied.
- **Decontamination**
The correct cleaning, disinfection, and sterilisation of instruments and equipment.
- **Consistency and compliance**
IPC measures must be applied at all times, not selectively.

Routes of transmission relevant to dentistry include:

- Direct contact
- Indirect contact (fomites)
- Droplet transmission
- Aerosol transmission

3. Clinical / Practical Application

In practice, IPC is embedded throughout the patient journey.

Before treatment

- Perform effective hand hygiene
- Don appropriate personal protective equipment (PPE)
- Prepare a clean clinical environment
- Ensure instruments are sterile and correctly packaged

During treatment

- Maintain clean-to-dirty workflows
- Avoid cross-contamination between surfaces, instruments, and patients
- Use high-volume suction to reduce aerosol spread
- Dispose of waste correctly

After treatment

- Safely remove and dispose of PPE
- Decontaminate instruments following local protocols
- Clean and disinfect clinical surfaces
- Segregate and dispose of waste appropriately

NEBDN questions commonly test sequence, method, and what action is inappropriate.

4. Dental Nurse Roles & Responsibilities

Dental nurses play a central role in IPC compliance.

Key responsibilities include:

- Adhering to standard infection control precautions
- Preparing and maintaining a clean clinical environment

- Assisting with safe instrument handling and transfer
- Operating decontamination equipment correctly
- Monitoring stock and integrity of PPE
- Reporting breaches or incidents promptly

Dental nurses must not:

- Shortcut decontamination procedures
- Reuse single-use items
- Ignore breaches in protocol

Role accountability and consistency are frequently examined.

5. Risks & Common Pitfalls

Common IPC errors tested in exams include:

- Poor hand hygiene technique or timing
- Incorrect PPE selection or removal order
- Mixing clean and dirty instruments
- Inadequate surface disinfection
- Failure to follow correct waste segregation

Students are often assessed on recognising unsafe practice, not just correct actions.

6. UK Regulations & Standards

Infection prevention and control is governed by UK professional and regulatory guidance, including:

- **GDC Standards for the Dental Team**
 - Duty to protect patients and colleagues
 - Requirement to work within established protocols

- **HTM 01-05**
 - Decontamination of reusable dental instruments
 - Zoning, workflow, and equipment validation
- **Health and Safety legislation**
 - Employer and employee responsibilities
 - Risk assessments and safe systems of work

Dental nurses are expected to understand how standards are applied, not memorise policy text.

7. Exam-Focused Takeaways

- Treat all patients as potentially infectious
- Hand hygiene is the single most effective IPC measure
- Clean-to-dirty workflow prevents cross-contamination
- PPE selection must match the clinical risk
- Decontamination follows defined stages
- Breaches in IPC are professional and examinable issues

If a question asks:

- “What is the most effective control?” → Hand hygiene
- “What action is unsafe?” → Identify protocol breaches

How to Use This Guide

This guide should be used alongside:

- Infection Prevention & Control flashcards for recall and reinforcement
- Online MCQs and OSCE practice for exam technique and application

This resource supports revision and professional refreshment. It does not replace supervised clinical training or local infection-control protocols.