Decontamination and Infection Prevention Control

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Training Objectives

• Recognise current regulation, guidelines and requirements (HTM 01-05, Health and Social Care Act ACOP, NICE CG 139)

• Update current knowledge on the transmission of healthcare associated infections (HCAI)

• Understand decontamination, disinfection and sterilisation

• Understand HTM 01.05 validation requirements

• Recognise common errors
Recognise Your Responsibilities

Duty of Care Regulations
to protect patients, yourself and other team members

• Professional accountability & codes of conduct *(GDC Updated 30th Sept 2013)*

The legislation

• Health and Social Care Act
• Health and Safety at Work etc Act 1974
• HTM 01 05 Guidance-Pg 6 1.22 Training and Education
Health and Social Care Act 2008 (Regulated Activities) Regulations 2010

“Good infection prevention and control are essential to ensure that people who use health and social care services receive safe and effective care”.

“Effective prevention and control of infection must be part of everyday practice and be applied consistently by everyone”.

CQC* Registration

The Code of Practice sets out the 10 criteria against which a registered provider will be judged on how it complies with registration requirements for cleanliness and infection control, making it clear what the dental team need to do to demonstrate compliance.

In addition, Essential standards of quality and safety-Cleanliness and infection control - Outcome 8 (Regulation 12) states

“People should be cared for in a clean environment and protected from the risk of infection”

The CQC will be judging compliance with the Approved Code of Practice (ACOP) and Essential Standards

* England only
You must create an annual statement in line with the Approved Code of Practice. This statement should include:

- Name of the Infection Prevention Control (IPC) Lead
- Notification of any known infection transmissions
- Logs of regular audits that have been put in place
- Risk assessments – including control measures that have been established and records of any improvement
- Evidence of staff training
- Review and update of current policies
Contains 10 Criteria that all Healthcare providers must demonstrate compliance with:

Part 2- Criteria detailed-Page 13

Part 3- Details compliance guidance-Page 14 onwards

Part 4- Guidance tables for each healthcare sector

Appendix B- Examples of interpretation for Primary Dental Care Settings-Page 56 onwards
CQC: Common findings

Outcome 8-Cleanliness and infection control

• No or insufficient audit tool evidence-IPS Audit tool to support HTM 01-05 (Updated June 2013) [www.ips.uk.net/professional-practice/resources/dental-audit-tool/](http://www.ips.uk.net/professional-practice/resources/dental-audit-tool/)

• Health and Social Care Act 2008 -Approved Code of Practice for Prevention and Control of Infection (10 criteria Part 2)

• Re use of single use items/medical devices

• Hand washing posters

• Lack of policy display-Infection control, manual cleaning, sharps management

• Dirty to clean workflow evidence
Health Care Associated Infection

• Any infection that arises as a result of healthcare, regardless of the care setting

Cross infection is the transmission of infectious micro-organisms from one person to another

All Health Care Professionals - **are duty bound to protect their patients and colleagues from the risk of cross infection**

Treat everyone as potentially infectious
Routes of Transmission

- Inhalation
- Ingestion
- Touch
- Inoculation
- Sexual
The Chain of Infection

- Infectious agent
- Reservoirs
- Portal of exit
- Means of transmission
- Portal of entry
- Susceptible host
Risks in Dentistry

Potentially any micro-organism could cause infection in dentistry:

• Herpes Simplex type 1 – cold sores
• Hepatitis B and C
• HIV
• Tuberculosis
• Pseudomonas aeruginosa
• Legionella pneumophila
• Candida albicans
Blood Borne Viruses (BBVs)

- Hepatitis B (HBV)
- Hepatitis C (HCV)
- HIV
Hepatitis B

• Many people who become chronic carriers have NO symptoms and are unaware that they are infected

• 2 billion people affected worldwide

• They will remain infectious and will be at risk of developing cirrhosis and liver cancer

• Can remain on surfaces for 30mins in warm environment and outside the body for up to 7 days
Prevention

- Hepatitis B vaccine available

- Please ensure you and all your team are inoculated and you have the records to prove this (or a risk assessment)

- Staff must have had all 3 vaccines and know their current status every 5 years

- Use sharps safety devices
Hepatitis C

- Estimates suggest over 250,000 infected in UK

- Some feel tired + very unwell
  Weight loss/Fatigue
  Nausea
  Flu like symptoms

- Many experience NO SYMPTOMS AT ALL!

- It is thought that it can take up to 30 years for any symptoms to manifest
HIV

- Now over 100,000 people living with HIV in the UK
- 77,610 diagnosed and accessing care
- 21,900 undiagnosed
- New diagnoses 6360 in 2012

Released by HPA published November 2013
Herpes Simplex Virus

Herpes simplex virus type 1 – cold sores

Best practice is not to treat patients who are developing or already have lesions present, unless the patient is in pain etc.

Remember you can not refuse treatment - Patient Education is best
Standard Precautions ‘help break the chain’

• Hand hygiene
• Personal Protective Equipment
• Safe disposal of clinical waste
• Sharps safety
• Management of blood and body substances spillages
• Cleaning of environment and equipment
Hand Hygiene

Section 6 HTM 01 05 pg 33

- All staff at induction should have hand hygiene training
- Yearly updates for all relevant clinical staff
- Use wall mounted dispensers with pouch or cartridge refills
Hand Hygiene

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- Yearly updates for all relevant clinical staff
- Use wall mounted dispensers with pouch or cartridge refills

Be aware the CQC may ask any member of staff to demonstrate this technique to apply alco-gels or to wash
PPE - Personal Protective Equipment

• Eye Protection Gloves

• Masks/Visors

• Aprons

• Gloves

• Surgery clothing

Remember GAME for removal!

All issued and used in accordance with the Personal Protective Equipment at Work Regulations 1992
Safe Management of Healthcare Waste

(Updated/published 20\textsuperscript{th} March 2013

From January 2014, you have to register as a waste carrier if you regularly transport waste as part of your business.

You can be fined up to £5,000 if you don’t register!

https://www.gov.uk/waste-carrier-or-broker-registration
Body Fluid Spillage Management

- 1% sodium hypochlorite is recommended
- Contact times – min 5 minutes
- The use of alcohol within the same decontamination process is not advised
1.1.4 Safe use and disposal of sharps
Sharps should not be passed directly from hand to hand, and handling should be kept to a minimum.

In dentistry, if recapping or disassembly is unavoidable, a risk assessment must be undertaken and appropriate safety devices should be used.

Used sharps must be discarded immediately by the person generating the sharps waste into a sharps container.

"The Health and Safety (Sharp Instruments in Healthcare) Regulations 2013"

• Came into force May 2013

• Correct use and disposal of sharps

• Information, instruction, training and supervision

• Documented reporting procedure

• Use of sharps safety devices

• Compliance with NICE CG139 updated March 2012
Infection Control Policy

HTM 01 05 clearly states that every practice must have an infection control policy

- Every member of staff should have agreed it, read it, understood it and signed it

- It should contain all 11 areas as stated in the HTM 01 05, page 13 paragraph 2.6

- It should reflect the practices scheme of work
Essential Quality Requirements

- Validated cleaning cycle
- Validated steam sterilizer
- Instruments must be wrapped and stored safely
- IPS 2013 audits—Six monthly
- Appointed person as decontamination lead
- Dedicated hand washing facilities
- Dirty to clean work flow (strict zoning)
- Up to date policies as defined in HTM 01-05

Implemented by end of December 2010
**Manual Cleaning**

- Hard to validate-difficult to ensure it is carried out properly.
- Greater risk of sharps injury
- Audit staff regularly

Written protocol/policy above dirty sink(s)

- Instrument fully immersed, warm water and detergent. Temp 45 deg or lower. (Use mercury free thermometer)
- Ensure CE concentrate is used with the correct ratio of water (if diluted)
- Long handled kitchen brush
- Wash brushes, detergent and hot water, replace each week
- Sharp end pointing away
- Heavy duty gloves
- Protection from splatter-Full PPE
- Rinse in a designated sink/bowl
- Inspect under illuminated magnifier
Aseptic Instrument Storage

- Dried with disposable lint free cloth and covered
- 12 months non vacuum and vacuum (Only applies if storage is suitable)
- Dated, signed and expiry
- (Best Practice away from clinical area)
All decontamination equipment should be subjected to validation, testing, maintenance and servicing as recommended by the manufacturer/supplier.

All records of these procedures should be retained for audit/inspection *HTM 01-05 11.1*

All equipment should also be periodically tested as advised in Chapters 12-14 *HTM 01-05 11.2*

Failure to perform these tasks or retain evidence of their performance may indicate non compliance of the decontamination process *HTM 01-05 11.3*
HTM 01-05 Validation

Protein Residue Test – As per manufacturers guidance/Weekly

This test confirms that cleaning process retains the capability of removing protein

• Protest Q pens
• Dentacheck

All records must be retained for at least two years. (Ideally 11 years)
HTM 01-05 Validation

Cleaning Efficacy Test - Monthly or Quarterly as per manufacturers

This test uses an artificial soil to clean a worst case load, chamber walls and load carriers to confirm the exposure to cleaning parameters is sufficient to remove soil.

- PCD (Process challenge device)
- CEI (Cleaning efficacy Indicator)
- Edinburgh tests

All records must be retained for at least two years. (Ideally 11 years)
Ultrasonic Activity Test – Quarterly/as per manufacturers guidelines

The use of aluminium foil within the cleaner tank indicates a uniform distribution of ultrasonic activity.

A wand meter may be used as long as points of measurement are compatible with the foil test and fully recorded.

All records must be retained for at least two years. (Ideally 11 years)
HTM 01-05 Validation

Automatic Control Test (ACT) - Daily or every cycle

This test is designed to show the operating cycle functions correctly as shown by the values of the cycle variables indicated and/or recorded by the instruments fitted to the decontamination equipment.

- Data logger
- Printer
- Manual validation
(Class 6 indicators do not replace the ACT)

All records must be retained for at least two years
(Ideally 11 years)
HTM 01-05 Validation

Steam Penetration Test – Daily/as per manufacturers guidelines

Required for vacuum autoclaves only. For hollow and porous loads. Tests should be undertaken as per manufacturers guidelines

- Helix device
- Bowie Dick

All records must be retained for at least two years. (Ideally 11 years)
Best Practice Requirements

- Validated washer disinfector
- LDU-Local Decontamination Unit/room(s)
- The development of a local quality system on the safe and orderly storage of instruments away from clinical area
Instrument Transportation

- Rigid, durable, leak proof container with lid
- Clearly labelled
- Clean and Dirty Containers even if no LDU
- Easy to clean – put in WD or fresh detergent solution, rinse and dry
- Policy required

HTM 01 05 page 13
L8 ACOP

Have a Legionella risk assessment, written scheme and emergency plans in line with ACOP L8 (4th edition updated Nov 2013)

- Ensure a nominated individual has been appointed
- Lines should be fitted with anti-retraction valves
- Ensure purging start and end of day and between patients is undertaken

EVIDENCE MUST BE KEPT FOR FIVE YEARS
(Ideally 11 years)
Training Objectives achieved?

• Are you now able to recognise current regulation, guidelines and requirements?

• Has your knowledge been refreshed on the transmission of healthcare associated infections?

• Can you demonstrate a clear understanding of the process of instrument decontamination

• Have you achieved a better understanding of HTM 01.05 validation requirements?

• Can you recognise common errors and how to avoid them?