

## National Unit Specification: general information

**UNIT** HIV, Hepatitis B and Hepatitis C Infections (Higher)

**CODE** DM5T 12

### COURSE

#### SUMMARY

This Unit is designed to enable candidates to develop knowledge and understanding of the methods of spread of HIV, Hepatitis B and Hepatitis C and ways of preventing this spread. Candidates will gain knowledge of the signs, symptoms and the possible progression of each infection. Candidates will also examine the effects of prejudice and discrimination on infected individuals and how this may be challenged. Finally, candidates will investigate how infected individuals can use support services to promote their own well-being.

This Unit is an Optional Unit in the *National Certificate Group Award: Early Education and Childcare (Higher)*. It is suitable for candidates wishing to study the Unit on its own. The Unit is suitable for candidates who wish to gain employment, or may already be employed, in the early education and childcare sector working under supervision. They may wish to progress onto higher level early education and childcare qualifications. It is also intended that the generic nature of this Unit will facilitate its use by candidates studying a variety of subjects.

#### OUTCOMES

1. Explain the entry and spread of HIV and possible progress of the infection towards AIDS.
2. Explain the entry and spread of Hepatitis B and C and possible effects of the infection.
3. Explain how people's attitudes can influence the care given to those with HIV infection or Hepatitis B and C.
4. Evaluate how the carer can assist those with HIV infection or Hepatitis B and C to assume responsibility for the well-being of themselves and others.

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### Administrative Information

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## **National Unit Specification: general information (cont)**

### **UNIT**      HIV, Hepatitis B and Hepatitis C Infections (Higher)

#### **RECOMMENDED ENTRY**

While entry is at the discretion of the centre there are a variety of prior learning experiences which are relevant to candidates wishing to undertake this Unit.

They may also benefit from having attained one of the following, or equivalent:

- ◆ Standard Grade at Credit level in any relevant subject
- ◆ A Course or Unit in Care at Intermediate 2
- ◆ Courses or Units in any relevant subject at Intermediate 2
- ◆ Scottish Group Award at Intermediate 2
- ◆ SVQ or SVQ Units at level 2 in a related subject.

#### **CREDIT VALUE**

1 credit at Higher (6 SCQF credit points at SCQF level 6\*)

*\*SCQF credit points are used to allocate credit to qualifications in the Scottish Credit and Qualifications Framework (SCQF). Each qualification in the Framework is allocated a number of SCQF credit points at an SCQF level. There are 12 SCQF levels, ranging from Access 1 to Doctorates.*

#### **CORE SKILLS**

There is no automatic certification of core skills or core skills components in this Unit.

## **National Unit Specification: statement of standards**

### **UNIT HIV, Hepatitis B and Hepatitis C Infections (Higher)**

Acceptable performance in this Unit will be the satisfactory achievement of the standards set out in this part of the Unit Specification. All sections of the statement of standards are mandatory and cannot be altered without reference to the Scottish Qualifications Authority.

#### **OUTCOME 1**

Explain the entry and spread of HIV and possible progress of the infection towards AIDS.

##### **Performance Criteria**

- a) In line with current information and research, describe how the HIV virus enters and spreads through the body.
- b) In line with current information and research, describe the possible signs, symptoms and progression of HIV infection.
- c) In line with current risk management policies, explain the importance of strategies to prevent the spread of HIV.

#### **OUTCOME 2**

Explain the entry and spread of Hepatitis B and C and possible effects of the infection.

##### **Performance Criteria**

- a) In line with current information and research, describe how the Hepatitis B and C viruses enter and spread through the body.
- b) In line with current information and research describe the possible signs, symptoms and progression of Hepatitis B and C infections.
- c) In line with current risk management policies, explain the importance of strategies to prevent the spread of Hepatitis B and C infections.

#### **OUTCOME 3**

Explain how people's attitudes can influence the care given to those with HIV infection or Hepatitis B and C.

##### **Performance Criteria**

- a) Explain the candidate's own values, beliefs and prejudices in relation to how it could affect interaction with those infected with HIV or Hepatitis B and C.
- b) Explain ways in which prejudice, intolerance and labelling can affect the care given to infected individuals.

#### **OUTCOME 4**

Evaluate how the carer can assist those with HIV infection or Hepatitis B and C to assume responsibility for the well-being of themselves and others.

##### **Performance Criteria**

- a) Investigate available resources for those affected by HIV or Hepatitis B and C.
- b) Explain the importance of measures that may enhance the quality of life of infected individuals.
- c) Investigate types of support for 'significant others'.
- d) Draw conclusions about the importance of available resources for those affected by HIV or Hepatitis B and C.

## **National Unit Specification: statement of standards (cont)**

### **UNIT        HIV, Hepatitis B and Hepatitis C Infections (Higher)**

#### **EVIDENCE REQUIREMENTS FOR THIS UNIT**

Written and/or recorded oral evidence is required to demonstrate that the candidate has achieved all Outcomes and Performance Criteria.

#### **Specific Advice**

Outcomes 1, 2 and 3: The evidence for this part of the Unit should be obtained under controlled, supervised conditions and should last no more than one hour. A single question paper with both extended and restricted response questions, such as illustrated in the National Assessment Bank item for this Unit, could be used. A brief case study or scenarios could be used to assess Outcome 3. This should be taken upon the completion of the Outcomes. Achievement can be decided by the use of a cut off score.

Outcome 4: The evidence for this Outcome should be assessed through an investigative report written in class or in the candidate's own time. This investigative report should be no more than 500 words and should include the following:

- ◆ A description of two available resources for those affected by HIV or Hepatitis B and C. One should be a national resource, the other local.
- ◆ A description of two measures that may enhance the quality of life of infected individuals.
- ◆ A description of two types of support for significant others.
- ◆ Evidence of candidate's research, e.g. leaflets.

## National Unit Specification: support notes

### UNIT HIV, Hepatitis B and Hepatitis C Infections (Higher)

This part of the Unit Specification is offered as guidance. The support notes are not mandatory.

While the exact time allocated to this Unit is at the discretion of the centre, the notional design length is 40 hours.

#### GUIDANCE ON THE CONTENT AND CONTEXT FOR THIS UNIT

##### Outcome 1

##### PC (a)

Candidates should be taught very brief details about viruses. They cannot reproduce themselves and must hijack living cells in order to make new viruses. They are unaffected by antibiotics but do not usually survive very long outside the body. HIV stands for Human Immunodeficiency Virus. Current UK and world wide infection data could be shared with students.

##### Sexual transmission

Semen and vaginal fluid both contain the virus. Anal sex carries a higher risk of infection than vaginal sex because the rectum has a delicate lining that is easily torn during sex, allowing semen to enter the blood stream. Although spread through the gay community is still an important route of infection, heterosexual spread has taken over as the most important source of new cases in the UK. In Africa, heterosexual sex is the main route of spread. There have been no reported cases of HIV transmission via oral sex, but there is still a theoretical risk of infected semen entering through cuts or sores in the partner's mouth. Before screening was introduced it was possible to become infected through artificial insemination from a donor.

##### Transmission from Mother to Baby

Viruses such as the HIV virus can cross the placenta. If the mother is in good health and if she takes the drug AZT during pregnancy, there is a lower risk of the baby becoming infected in the womb. During labour, when the placenta comes away from the lining of the womb, this creates an internal raw surface and at this stage the baby's and mother's blood can mix, transmitting infection. Infected women are therefore advised to have their babies by caesarean section. Breast milk carries the virus and can be a cause of infection. Infected women are therefore advised to bottle feed. This causes major problems for poor, infected women in the third world who do not have the facilities to make up sterile bottles.

##### Blood Transmission

Blood to blood contact is possible during blood transfusion, administration of blood products such as Factor VIII, and organ transplants (pre 1985 when screening in the UK was introduced); ear piercing; tattooing; surgery using unsterile, infected equipment; electrolysis; someone with an uncovered cut coming in contact with a blood spill.

## **National Unit Specification: support notes (cont)**

### **UNIT HIV, Hepatitis B and Hepatitis C Infections (Higher)**

#### **PC (b)**

Candidates should be given a very basic explanation of how HIV affects the body. The immune system is the body's system that fights infection. It does this by producing antibodies to attack germs and also by directly killing infected cells and their contents. Cells of the immune system called helper T cells (or CD4 cells) help to co-ordinate the whole immune response. It is these T cells that are infected and destroyed by the HIV virus. As the virus takes hold, the person's immune system is progressively weakened. The person eventually starts to experience opportunistic infections. Infection is usually diagnosed by screening for antibodies to the virus. A reliable test for HIV infection cannot take place until the body has developed antibodies to HIV and these can take up to 3 months to be detectable in a person. The progress of the disease can be monitored by counting healthy T cells, or counting how many actual viruses there are in the body. Since antibodies can also cross the placenta, an HIV test screening for antibodies on a new baby of an infected mother will not necessarily identify whether or not the baby is infected. Antibodies from the infected mother are always present at birth in the baby. They take up to 18 months to leave the baby's system. Mothers can have an anxious wait of many months to see if their child has HIV in its own right.

Possible effects of HIV infection start with asymptomatic infection where the person may experience brief flu like illness and then feel quite well. Following a delay of up to eight to ten years, this usually progresses onto a phase where the person suffers from HIV related illnesses. These infections include night sweats, weight loss, sickness and diarrhoea, thrush infections and persistently swollen glands.

As far as we know, the HIV infection eventually develops into AIDS. AIDS stands for Acquired Immuno Deficiency Syndrome. A syndrome is a collection of symptoms or diseases. Candidates should be taught the current criteria by which the WHO identifies someone as having AIDS - currently, the presence of a major opportunistic infection such as specific types of pneumonia, cytomegalovirus, tuberculosis or Kaposi's sarcoma. The HIV virus can also directly affect the brain, causing AIDS dementia. A person can catch HIV but they cannot catch AIDS – AIDS is a possible consequence of infection with HIV.

#### **PC (c)**

The health and safety of workers, infected individuals, their partners, relatives, friends and the community is of paramount importance. All actions should be consistent with health and safety guidelines. Candidates should be aware that it is their responsibility as an employee to read and adhere to the Health and Safety guidelines. The very high mutation rate of the HIV virus means that it is constantly changing. This is making it extremely difficult to develop a vaccine to the virus.

Prevention strategies should include situations that are most relevant to the vocational area the students are going in to. For example, beauty therapists could consider sterilisation of electrolysis probes. Childcare candidates could consider how to deal with nose bleeds at nursery. Health care students could look at disposal of clinical waste. Students should also cover the following basic strategies:

#### **Good Hygiene Standards**

It is important that good basic hygiene standards are observed. These include regular hand washing; the immediate cleaning up of blood spills with a 10% bleach solution (or according to the employer's health and safety manual), avoiding handling contaminated articles, e.g. the bagging for the parent of a child's jumper after a nose bleed, the use of protective gloves for all procedures where blood is

## **National Unit Specification: support notes (cont)**

### **UNIT HIV, Hepatitis B and Hepatitis C Infections (Higher)**

involved. Blood to blood contact should always be avoided since anybody could be infected. The measures protect both the candidate and the individuals they are working with. Cuts should be covered with a waterproof plaster.

#### **Safer Sex Measures**

These include abstinence from penetrative sexual practices; the correct use and disposal of condoms; the reduction of sexual partners.

#### **Infected Needles and Syringes**

It is important not to share used syringes and needles. It is also important that needles and syringes are disposed of in a recognised manner, e.g. in a sharps bin and sent for incineration. Needle exchanges should be set up for injecting drug addicts. Equipment for ear piercing, electrolysis and tattooing should always be sterile.

#### **Outcome 2**

##### **PC (a)**

Hepatitis B and C are huge problems in terms of world health. Current estimates (2004) by WHO suggest that there are 2 billion people infected with Hepatitis B worldwide and that 350 million of these are at risk of death from the disease. Hepatitis C already has a high prevalence in injecting drug users and has been described as a ‘sleeping giant’ as many people have yet to discover that they are infected. The Hepatitis B and C viruses are present in all body fluids of infected individuals, including blood, faeces, urine, saliva, tears, vomit, and sexual fluids. They are also more ‘robust’ than the HIV virus and can live for longer outside the body. This makes them easier to catch than HIV. Transmission is via the same routes as HIV with the added risk associated with sharing toothbrushes and razors (both practices common in prisons) and coming into contact with infected urine/faeces/vomit. A screening test for Hepatitis C only became available in 1990 and therefore people who received blood products before this time are at risk of having been infected. Hepatitis C is similar to HIV in that the body’s antibodies do not seem to neutralise the virus or prevent it from multiplying.

##### **PC (b)**

Hepatitis means ‘inflammation of the liver’. Infection with Hepatitis B or C usually results in an acute phase of infection where the liver becomes inflamed as the virus starts to damage it. During this phase the infected person may experience symptoms such as a tender abdomen, a high temperature, flu-like symptoms and jaundice. After the acute phase, the person will either make a good recovery from the infection or will develop chronic Hepatitis.

Symptoms of chronic Hepatitis B include abdominal pain, anorexia, weight loss, aching joints and itching.

Symptoms of chronic Hepatitis C are milder, and many people may have no symptoms but are carriers of the disease and go on to have chronic infection (cirrhosis of the liver, liver failure or liver cancer). A carrier is a person who may or may not have symptoms but carries the disease and is infectious to others. It can take many years, up to 30, for the symptoms of chronic disease to manifest and that is why the disease is known as the “sleeping giant”. Many people will not know for a long time they are even infected.

It would be useful for candidates to be made aware that these are not the only sexually transmitted diseases and that they might care to widen their knowledge by looking at diseases such as

## National Unit Specification: support notes (cont)

### UNIT HIV, Hepatitis B and Hepatitis C Infections (Higher)

gonorrhoea, syphilis, chlamydia, genital warts and herpes. These conditions are all on the increase in this country and are causing great anxiety in the Medical World.

#### PC(c)

Prevention strategies are similar to those identified in Outcome 1 but because the viruses are spread via all body fluids then extra measures have to be taken. For all procedures that involve body fluids the candidate should wear protective gloves, i.e. changing nappies, changing a child or adult after wetting or soiling themselves; cleaning up any urine or blood spills or any vomit or mucus; any first aid procedures which involves blood or any other body fluid. Infected razors can also be a problem when shared. Special care should be taken when disposing of needles and syringes as the Hepatitis viruses live for quite a while out of the body.

Unlike the case with HIV, there is a safe and effective vaccine against Hepatitis B. All candidates who work with body fluids should be advised to go and get this vaccine. Unfortunately the Hepatitis C virus mutates frequently and it is proving difficult to develop a vaccine against it.

### Outcome 3

#### PC (a)

Candidates should evaluate the effects of discrimination in relation to its consequences for those with HIV infection or Hepatitis B and C. They should be encouraged to address the general issues around the concepts of sexuality and death and to explore their reactions and feelings in relation to them. This may be difficult for some students as it will require them to examine their own prejudices, intolerance and propensity for labelling people. If these issues are addressed early on, candidates will understand themselves well enough to give unconditional, compassionate, non-judgemental care to all clients, regardless of the disease, sexual orientation, ethnic origins or drug-taking behaviour. Candidates should also be aware that the friends, family and colleagues of infected individuals will also face challenges because of the diseases, although they are not themselves infected.

Importance should be given to the need to emphasise **high risk behaviours** rather than **high risk groups**. Historically there has been a tendency to 'blame the victim', especially if infected individuals come from groups already stigmatised by society, e.g. gay men, people of African origin, injecting drug addicts, prostitutes, and asylum seekers. Other factors that can be discussed since they often result in discrimination also include: age, social class, colour, culture, gender, health status, mental health and sexuality.

#### PC (b)

Candidates should have an understanding of how discriminatory care can place restrictions upon choices. The rights of all individuals within society should be promoted and supported so that equality and quality of life is available to each person. Each person should be treated as a person with a variety of individual needs. Anti-discriminatory practice should be promoted so that each person is guaranteed the same quality of service. Confidentiality of information should be respected and disclosed only to those who necessarily require it and only after agreement with the individual concerned. This can cause conflicts of loyalty. Students should be aware of the need for good communication skills when providing education about HIV and Hepatitis B and C.

### Outcome 4

#### PC (a)

Candidates should research local and national support agencies. Statutory organisations could include the NHS (GP, hospital consultant, health visitor, dietician, physiotherapist, local and national health

## National Unit Specification: support notes (cont)

### UNIT HIV, Hepatitis B and Hepatitis C Infections (Higher)

education services and mental health services), social services, and national AIDS helpline and needle exchanges. Voluntary organisations could include the Terence Higgins Trust, the Waverley Trust, PHACE, and AVERT. Students should be aware of those within our society who may have difficulties accessing information. This could include those with poor English language skills, ethnic minority women, and those with mental or physical impairments or mistrust of statutory services. The Terence Higgins Trust provides culturally sensitive information for African Men and Women. Counselling and self help groups are an invaluable source of support.

Candidates could focus on agencies relevant to their vocational area. For example, Childcare students could concentrate on support for infected children, Health Care students could make a detailed study of NHS provision.

#### PC (b)

Candidates should understand how a sense of loss of control is often experienced by people living with HIV or chronic Hepatitis B and C. Taking steps to improve their own health may help to restore a measure of control, while also improving health, raising their resistance to illnesses and enhancing the quality of life. A high protein and calorie diet is required to maintain body weight and fight infection. Keeping fit and reducing stress both boost the immune system. Massage can also reduce stress and provide the reassurance of physical contact. This is especially valuable for people whose body image has been altered. Buddies can provide support for the infected individual. Alternative therapies may be helpful. Combination drug therapy is successfully prolonging life for people with AIDS in the developed nations. Unfortunately many millions infected in poorer countries cannot afford this medication.

#### PC (c)

Significant others could include family, friends, partners, insurance companies, care staff and work colleagues.

### GUIDANCE ON LEARNING AND TEACHING APPROACHES FOR THIS UNIT

Lecturers/teachers should feel comfortable with, and able to discuss, general issues around concepts of sexuality and sexual health. In delivering this Unit there should be a balance between teacher/lecturer led presentation and candidate centred learning. All outcomes can be explored using a variety of methods:

- ◆ Small group exercises
- ◆ Case studies
- ◆ Worksheets
- ◆ Individual research including the use of relevant web-sites, some are mentioned below
- ◆ Video/audio material
- ◆ Practical workshops
- ◆ Use of text books, periodicals and journals
- ◆ The use of crosswords and quizzes can help candidates learn the difficult vocabulary.

Lecturers should try to keep abreast of current data and information about HIV and Hepatitis B and C since knowledge rapidly changes in these areas. The Scottish Centre for Infection and Environmental Health (SCIEH) produces regular reports which often include current data on HIV and Hepatitis B and C. Their web site currently is at [www.show.scot.nhs.uk/scieh/](http://www.show.scot.nhs.uk/scieh/), telephone 0141 300 1100.

## National Unit Specification: support notes (cont)

### UNIT HIV, Hepatitis B and Hepatitis C Infections (Higher)

Consulting the internet is one good strategy as web sites may be more up to date than books.

Useful HIV sites currently include:

[www.tht.org.uk](http://www.tht.org.uk) (Terence Higgins Trust)

[www.cwac.org.uk](http://www.cwac.org.uk) (Children with AIDS Charity)

[www.positivelywomen.org.uk](http://www.positivelywomen.org.uk) (Positively Women)

[www.bodypositive.org.uk](http://www.bodypositive.org.uk)

Useful Hepatitis web sites currently include:

[www.britishlivertrust.org.uk](http://www.britishlivertrust.org.uk)

[www.hepatitis.org.uk](http://www.hepatitis.org.uk)

Teaching resources could also include videos, newspaper articles, policy documents from the local Council or Primary Health Care Trust, visiting speakers, and case studies. Outcome 3 in particular lends itself to class discussion and role play. Students should be encouraged to carry out their own research for Outcome 4 and should have access to the internet if possible.

### GUIDANCE ON APPROACHES TO ASSESSMENT FOR THIS UNIT

The assessment for this Unit is laid out clearly in the Evidence Requirements section of the Statement of Standards of this specification. The standard to be applied is exemplified in the National Assessment Bank item for this Unit. If a centre wishes to design its own assessments for this Unit, they should be of a comparable standard. As indicated, question paper based assessment should be carried out under supervision. A holistic approach to assessment across outcomes and other Units, where appropriate, should be taken.

### CANDIDATES WITH ADDITIONAL SUPPORT NEEDS

This Unit Specification is intended to ensure that there are no artificial barriers to learning or assessment. The additional support needs of individual candidates should be taken into account when planning learning experiences, selecting assessment instruments or considering alternative Outcomes for Units. For information on these, please refer to the document *Guidance on Assessment Arrangements for Candidates with Disabilities and/or Additional Support Needs* (SQA, 2004).