

# Medications Offshore

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**“Might vary over the worldwide offshore industry, check local protocols and company procedures”**

## Objectives

- Quote the name of the regulations and the associated document in which can be found the lists of medications and equipment required for offshore installations.
- Outline the procedure for the storage control and disposal of drugs offshore.
- Describe, and give the reasons for the use of, the routes of administration of drugs.
- State, with reasons, who and what should be consulted before any form of medication is administered, local protocols apply, some Topside companies micro manage where others give the medic more scope for practice, make sure you know your Topside protocols, company procedures and protocols

## Introduction

As an Offshore Medic you will be expected to work to Company Protocols and Procedures which may vary depending on your Topside cover and the sector you are in. On arrival at a new Installation the Medic should familiarise themselves with such documents as a matter of urgency to ensure they are aware of which drugs they may dispense themselves and which drugs must be discussed with the Topside Doctor.

The aims of this unit is to give you a general guide to the safe methods of practice offshore and in order to do this you will:

- Refresh your knowledge of routes of administration
- Discuss use of Topside medical cover
- Discuss the benefits of the drug formulary
- Re visit relevant offshore regulations
- Discuss use of commonly used drugs offshore

As this is a refresher course it is assumed that you have skills in administration and dispensing and a sound knowledge of pharmacology required for working offshore.

Before you read on, please try this activity below.

**Question A:** Use your medical textbook and a BNF to answer the following questions:

1. What type of Drug is Buscopan?
2. Why would you consider using Buscopan?
3. What types of Gastric upset might you be presented with during your time offshore?
4. What dose regimes would you consider for abdominal cramps?

## 1. Dosage

**Note:** The doses given in this module are standard for use offshore; your topside Dr may advise you to use another.

## 2. Storage of Drugs, Waste Disposal and Control

### Storage and Control

On an Installation or Vessel, you are the delegated person responsible for the safe storage of drugs; however, the OIM, OM, and Ships Master have overall responsibility.

**Question B:** What is the name of the Act that governs the storage and control of certain drugs?

**Question C:** Can you name the three groups of drugs likely to be found offshore?

### Group 1: Controlled Drugs

You should have the correct cabinet in your sickbay and take care to keep the sickbay locked at all times, and always keep the keys on your person.

A typical lockable drugs cabinet should:

- Be fixed to a solid bulkhead, within a locked sickbay or hospital
- Have an outer lockable cabinet, and an internal lockable cabinet for controlled drugs
- Have keys that are held by the Medic or the Captain/OIM

**Question D:** What would you use to keep stock of your controlled drugs?

**Question E:** List six things that you need to record when accounting for controlled drugs.

The Controlled Drugs register should be checked as near to the changeover of medics as is reasonably practical. Two persons should check preferable the oncoming Medic and OIM/Master. Both should sign and date each relevant page.

The register should also be checked by the supervising physician and during the annual Medical Audit.

**Note:** Remember out of date drugs must be accounted for, removed from the installation and disposed of by a pharmacist. Be aware of local protocols and procedures. Missing or stolen drugs must be reported immediately to the OIM or Master for further investigation.

**Note:** SEE OPERATIONS NOTICE 64 ISSUED BY THE HSE AT THE END OF THIS UNIT

## Group 2: Prescription Only & Group 3: Over the Counter

Prescription only medications and over the counter preparations do not normally require record keeping or special storage. All medications however should be risk assessed and it is your duty to keep anything that poses a risk to health are safely stored to prevent the risk occurring. All such medications, preparations and lotions should be kept in the locked sickbay.

Time expired and unwanted drugs should be removed from the Inventory and listed, they can be kept in the sickbay and disposed of at a convenient time according to local or company waste disposal regulations.

## Disposal

Disposal of “sharps “and clinical waste come under the Management of Controlled Waste, Duty of Care, Regulations 1900.

The regulations require that:

- Sharps and clinical waste receive careful packaging
- The contents are well Documented
- The package is handles with due care
- Transportation is suitable and persons qualified to handle and dispose of clinical waste
- Final Disposal (procedure must be carried out by a registered onshore “waste manager”)

Clinical waste must be:

- Safely disposed of by an authorised organisation
- Securely bagged
- Transported safely
- Identified

Remember colour coded bags are available for waste management \*(check local protocols). Sharps must be placed in an impervious bin and well labelled. (Sharps bins – Biohazard type)

## Case Study

NO TEXT??

## 3. Formulary

### Section heading

Remember always use your BNF or act on the instructions of the Topside Dr when issuing medication, you might think you remember everything about the drug but its always best to refresh your knowledge.

Always use the generic name as using trade names may cause confusion.

**Question F:** Give at least five features of drug information you might find in a drug formulary such as a BNF?

## 4. Administration Routes

**Question G:** Before you move on think about what questions you might want to ask or checks you may want to perform prior to prescribing or administering any medications.

### Oral

Common drugs taken orally are as follows:

- Liquids
- Tablets
- Capsules
- Lozenges

Absorption of these drugs normally takes place in the upper part of the small intestine, the drug then passes via the blood stream to the liver.

Note: many drugs are inactivated by the liver due to enzymes produced by the liver and so we need to give drug therapy on a regular basis to get the desired effect.

## Inhalation

Inhalation is used for the treatment of the respiratory tract.

There are still some older treatments that require the use of a bowl of hot water and a towel to be placed over the head so for example medications such as menthol eucalyptus can be inhaled in the steam. There is some doubt as to what benefits these medications have and it's believed that the Inhalation of hot Steam is the most important factor.

Other medications such as Ventolin (which is a bronchial dilator) and others see example below, are administered using a (Pump), Newer versions often have a dose counter to allow patients to keep a record of when they might need a repeat prescription.

There are many benefits when drugs are absorbed through the airways.

Entonox: a type of anaesthetic used to manage pain, this method is fast acting.

Pentrox Inhaler: an alternate method for the emergency treatment of moderate to severe pain administered by inhaler. This will be discussed and demonstrated during your practical training at DDRC.

## Ophthalmic

These are either drops or ointments. Ointments are used when longer duration is required.

### Administration of Ophthalmic Preparations

#### Administration of Eye Drops

- Wash your hands before administration and explain procedure to patient
- Pull down lower eyelid
- Tilt head back
- Hold bottle parallel to the eye
- "Hint" If you are administering a local anaesthetic try applying a slight pressure over medial aspect of the lower eye in the corner so as to prevent any of the drug draining down into the throat
- Administer drop without touching the eye lid with applicator
- Dry any overspill with a piece of gauze
- If both eyes effected use separate labelled bottles
- Discard bottle when treatment is discontinued

#### Administration of Eye Ointment

- Wash your hands and explain what you are going to do.
- Tilt the head back

- Gently pull down lower lid
- Squeeze a fine line of ointment along the conjunctiva of the lower lid taking care to avoid contact with the tube dispenser
- Ask your patient to close their eye for a moment then blink a few times
- Remove excess ointment with a clean piece of gauze
- If both eyes require treatment use two tubes and label RT and LT Eye to avoid cross infection
- Apply an Eye pad if required
- Think about dangers of returning to work
- If no improvement within 24hrs speak to Topside

## Otic

### Administration of Ear Drops

- Wash hands and explain procedure
- Position patient on bed in correct position with affected ear uppermost
- Ensure drops are warmed or are at least at room temperature (some are kept in Sickbay Fridge and to administer these direct to the ear drum could cause pain, nausea, and dizziness)
- Never administer ear drops if you suspect a perforation of the tympanic membrane!
- Retract pinna gently backwards and upwards
- Administer drops prescribed
- Ask patient to remain in this position for three minutes.

## Injection

Injections can be given;

- Intravenous
- Intramuscular
- Intradermal
- Intraosseous
- Subcutaneous

Be aware that Intravenous injections require skill, effects are rapid, side effects are rapid, you must be aware of how to respond to these effects and always be prepared. If you are in doubt give the drug IM and or speak to your Topside cover.



Mark on the diagram below where you might administer IV, SC, IM and IO injections:



## Topical

These drugs can be applied and absorbed from the mucous membrane or skin; they are general local acting and applied to the affected area.

This is not always the case; however, systemically acting drugs can be administered topically to give a general effect.

**Question H:** Try and list as many drugs that would be absorbed through a mucous membrane

**Question I:** Write down the three areas of the body that topical drugs can be administered topically

## 5. Drugs in use Offshore

### Analgesics (Pain-Killers)

It is well documented that the sensation of pain is heightened by worry, sleeplessness, and fear. Analgesics can be administered by any route it is up to you to decide which route and this should be discussed with Topside if you are unsure. As a rule of thumb if you are having to think hard about which route you need to give a pain killer then the patient is obviously ill enough for you to seek Topside advice.

#### **Entonox**

This type of medication is self-administered by the patient under your supervision. Severe pain can be controlled quickly in the offshore environment by utilising the absorbent property of the mucous membrane of the reparatory tract by using 50% nitrous oxide and 50% oxygen. There are certain contraindications for this type of gas:

You must not use Entonox:

- In diving accidents or following diving
- If you suspect mental illness or psychiatric disturbance
- Severe heads injuries
- Impaired consciousness
- Chest injuries as Entonox will increase the size of the Pneumothorax, if present

Remember Entonox is a first line drug and is a very useful tool for the advanced first aider to reduce pain, reduce effects of shock, and allow immobilisation and movement of casualty without too much stress or discomfort. It is not always effective against severe pain and this is when you might be required to use Opiates.

#### **Penthrox Inhaler**

For moderate to severe pain from trauma.

#### **Opiates**

These are the most potent forms of painkillers and so called because they were originally derived from the Opium poppy.

#### **Morphine Sulphate**

Relieves pain sedates and induces a sense of wellbeing in the patient or injured person. Morphine is the major drug of choice and requires IV or IM administration. The preferred route of administration is intravenous because this is fast acting and the morphine can be titrated to the pain, however, for moderate pain relief in the prehospital environment is

sometimes preferable to give a one-off IM injection as this would have a slower effect and there would be a reduced chance of severe reaction (such as respiratory depression).

Dosage- Morphine Sulphate 15mg in 1ml is drawn into a 10ml syringe with 9ml of sterile water for injection. The solution can then be given as a bolus of 2mls per minute whilst constantly monitoring the patient and their pain level. The drug should be injected through a cannula until the desired pain relief is achieved and the cannula should be left in situ in case more medication is required or a reversal agent (antidote) is required. Narcan is the reversal drug of choice and this drug is fast acting. Always have Narcan to hand before administering Morphine

Remember, used correctly Morphine is a safe and effective drug.

However, Morphine:

- Can cause a fall in blood pressure.
- Action can be reversed by an antidote.
- Depresses the activity on the CNS system and is therefore contraindicated in head injury cases.
- Depresses the activity of the respiratory system therefore is contraindicated in asthma cases and chest injuries.

Note – some Drs prefer Diamorphine and some company's protocols only allow you to carry Morphine Sulphate so you will need to know local protocols and discuss with the Topside Doctor.

### **Pethidine Hydrochloride**

This is the alternative opiate type analgesic. Pethidine is less potent than Morphine Sulphate and should only be used in a fit adult if no morphine is available or where morphine is contraindicated in such conditions as renal colic. Pethidine is reputed to cause less respiratory depression than morphine and in some areas offshore Pethidine has been removed because it is not the drug of choice in the pre hospital environment.

### **Dihydrocodeine**

This drug is less than 25% the strength of Morphine but is considerably stronger than Paracetamol.

### **Codeine**

Can sometimes cause disturbing mental stimulation for some patients.

The duration of Morphine sulphate, Pethidine hydrochloride and Dihydrocodeine is 4-6 hrs, after which time a further dose can be administered.

**Question J:** Who would you need to discuss the administration of Morphine/Pethidine and Dihydrocodeine and where would you find guidance notes?

### **Paracetamol**

This is a first line pain-killer for the treatment of mild to moderate pain. Dosage 500mg (1G) stat might be sufficient, patient can be given 500mg (1G) QDS 4 times a day, no more than eight tablets in a 24hr period.

**Question K:** Paracetamol is an ingredient found in many over the counter medications such as cold remedies. Your crew member might have brought some of these items on-board therefore you should be aware of what they are already self-administering; name five such products?

## Over the Counter

There are many over the counter preparations that are freely available for purchase by the general public and often contain one or more active ingredients that are used to treat:

- Diarrhoea
- Coughs
- Colds
- Aches
- Pains
- Fever
- Constipation

If local protocols and company standing orders permit the use of such medications on your Vessel or Installation it might be a good idea to hold just one product for each condition, also be aware that some crewmembers will bring along their own supplies. Be aware of this when administering sickbay stocks.

## Skin Preparations

These can be put under two broader headings, first for the treatment of local skin conditions and secondly applied to treat underlying conditions.

### **Creams**

Are well absorbed and easy to apply, creams are often used as vehicles to carry an active ingredient.

### **Ointments**

These are greasy and more difficult to apply and are less cosmetic than creams. They are useful when the skin is dry Vaseline for example is used in its natural form and has its own healing properties (remember if you are on a Dive vessel, Vaseline must not be allowed in to Sat with the Divers).

### **Barrier Creams**

These are thick and water repellent they can often protect the skin against external irritation and are used extensively offshore.

### **Lotions**

These are very thin and watery and are useful for hairy areas or when a thin layer has to be applied to a large area.

### **Emollients**

These are thin creams that are used to soothe the skin. Emollients will be covered later in the programme.

Simple over the counter remedies are used to soothe the skin and do no more than warm the area and provide some relief for a few hours.

Topically applied non-steroidal, anti-inflammatory agents have been developed over the recent years and have been proven effective against soft tissue injuries and joint pains. Remember they must not be used alongside oral NSAID's as the combination might result in unacceptable high plasma levels. They do not alter the natural course of the disorder.

## **Antiseptics**

These kill bacteria and are used for skin cleansing, there is a wide range of such products so refer to local protocols and company information, also read information regarding storage and use which can be located on the package or container.

Remember Antibiotics have no effect on pus but the topical solution Magnesium Sulphate is listed and an old remedy that may be applied to an area and is useful for drawing out a boil or foreign body.

## Antacids

Antacids are a class of drug that are used to reduce the acidity of the stomach – patients often attend the Sickbay complaining of Indigestion which is rather a vague term to describe a condition often effecting the GI tract and upper abdomen. There are many other more serious conditions that could have similar symptoms you might like to take some time to look these up.

Dose – depends on what you have on board and what is available but the treatment is best delivered in liquid form.

## Bronchodilators

This is a class of drug that is used to counteract the narrowing of the airways in such conditions as Asthma or an acute allergy. We will discuss these in greater detail later in the Asthma module.

Dosage – Metered dose by Inhalation using a device often referred to as (a “puffer” or inhaler).

Commonly used drugs of this type found offshore are Salbutamol and Terbutaline these are available in puffer, tablet and as an injection – be aware that some crew will have their own inhalers with them on board.

## Diuretics

NO TEXT????????????????

**Question L:** What is the function of diuretics? How would you administer the drug and how much could you give? Why might you have to give a diuretic to a patient offshore?

## Hydrocortisone

This is a naturally occurring hormone, produced and secreted by the adrenal gland- it has an anti- inflammatory effect and also plays a part in human metabolism. Naturally occurring or synthetic forms have a wide application in the treatment of many serious medical conditions. The cortisone class of drugs are often referred to as ‘steroids’ which in turn is an abbreviation of corticosteroids.

Remember there are Anabolic steroids which are pharmaceutical products that are associated with athletics and body building and have a bad reputation. They are never utilised in routine medical practice and you should be aware that they might find their way on board your platform or vessel.

Treatment with steroids can be administered by any route however you must first of all have an accurate diagnosis as steroids should not be used indiscriminately.

Skin conditions respond well to steroids giving:

- Cosmetic improvement.
- Suppression of active disease.
- Relief from irritation.

Long term effects can cause reddening of the skin and thinning so they should only be used for short periods.

Asthma is relieved by the suppression of mucous production and swelling of the mucous membrane.

Be aware that long term treatment can cause suppression of the secretion of the hormone from the adrenal gland which in turn might atrophy. Sudden withdrawal could also lead to sudden Adrenal insufficiency. This tends to occur more when steroids are administered systemically and therefore topical application is preferred. It has been noted however that one week's application of 100g topically has been sufficient to cause adrenal suppression.

## Local Anaesthetics

NO TEXT????????????????????

## Ophthalmic Preparations

### **Oxybuprocaine BP 0.4% (Benoxinate)**

These are eye drops used to provide surface anaesthesia to the eye.

Dose – Instil 2 drops, which give local pain relief with seconds. Effects last variable but normally up to one hour. Used to relieve pain and allow examination and removal of dust and other debris from the eye. Remember in the offshore and work environment crew member should be advised to stay indoors until the effect wears off thus preventing further injury.

**Note:** only use once for pain relief then seek alternative measures.

### **Fluorescein Eye Drops**

A stain used to colour the front of the eye to show a corneal ulcer.

Dosage – one drop of stain followed by one drop of saline – discard the remainder and examine the eye under a blue light.

### **Saline 0.9% Eye Drops**

Used as above.

### **Chloramphenicol eye ointment 1%**

Used for treatment of suspected bacterial eye infection or in association with an eye injury. For the treatment of bacterial conjunctivitis after a suspected eye injury Chloramphenicol should be used TDS for three days.

## Sedatives

**Note:** These drugs are CNS depressants and so must be used with caution. Never Administer these drugs without first discussing with your Topside cover and never send anyone back out to work once they have been given such medications.

### **Diazepam**

Short term treatment for anxiety and also used for the treatment of seizures.

Dosage – for acute anxiety 2-5mgs stat (patient will be made temporality unfit for work)

Dosage – for status epilepticus – 10mg in 2.5ml rectal suppository, do not attempt IV if patient is fitting.

**Note:** Be aware that IV Diazepam can cause sudden respiratory arrest.

### **Zolpidem**

Transient sleep disturbance due to change of shift patterns is common offshore and can usually be solved by advice and reassurance. Night sedation is generally unacceptable offshore due to the effects on the individual's ability to react to an alarm or concentrate in a dangerous environment. However, there are occasions when you might have to administer one 10mg dose due to constant sleep disturbance. Read local protocols. Some Topside allow you to give 2 days of treatment before contacting a Dr others want Topside to be informed prior to treatment.

## Anti-Allergy

Anti-allergy drugs or mostly used for conditions such as Hay fever, Rhinitis as well as some skin disorders.



### **Citerizine**

This is the drug of choice offshore because it has less of a sedative effect than Piriton (chlorpheniramine). Dose is one 10mg tablet and patient should be advised that there should be very little sedative effect but if they do feel more tired than usual they must report this. You must also advise them not to exceed the recommended dose.

## **Anaphylaxis**

For the treatment of sever allergy or anaphylaxis you should refer to local protocols see below for drugs that are commonly used both onshore and offshore.

### **Epinephrine (Adrenaline 1:1000/1ml) 0.5mg given IM**

This should never be given IV and you should always have this drug ready to hand when giving other drugs that may cause an allergic reaction for example IV Benzylepenicillin 600mg.

### **Chlorpheniramine**

10mg/10mls – given slowly by IV injection over one minute, diluted with saline if time permits.

### **Hydrocortisone**

See specific section for this.  
100-500mg by slow IV injection.

## **Antipsychotic**

### **Chlorpromazine**

This drug is a major tranquilizer and should be reserved the mentally disturbed especially when associated with

- Aggression
- Agitation
- Paranoia
- Restlessness

Dose – Standard ampoule 25mg per ml. Immediate dose 50mg IM may be repeated 4-6hrly up to a total of 400mg total dose, unless otherwise instructed by Topside.

## Antibiotics

### Penicillin and Penicillin V

This is a first line antibiotic for the treatment of throat infections and tonsillitis, check for any history of sensitivity to penicillin?

Dosage – Tablets or capsules, one 250mg, QDS (four times a day) before food usually for 7days but dose and length of treatment may vary upon advice from Topsiside.

Side Effects – Diarrhoea, sensitivity reactions – urticaria, anaphylaxis.

### Benzylepenicillin

Used in severe tonsillitis, meningitis and abscess of the tonsil (quinsy) – dose 600mg IM repeated QDS (6hrly) up to a maximum of 2.4g per day. Please note this is contraindicated in cases of know sensitivity but might still be given in cases of Meningitis by the recommendation of the topside Dr. Always have precautionary drugs ready in case of anaphylaxis.

### Amoxicillin

Is a broad spectrum Antibiotic and is related to Penicillin common indications for use are:

- Respiratory tract infections
- Middle ear Infections
- Soft Tissue infections

Dose – One 250mg capsule TDS (three times per day), usually 5-7 days. Could be advised to give 500mg by the topside Dr depending on the patient's condition, temperature etc.

**Note:** that Amoxicillin is contraindicated in glandular fever, where it might cause extensive body rash. Also be aware that patients who have reported sensitivity to Penicillin should not be given Amoxicillin.

### Erythromycin

To be used as indicated for Penicillin and Amoxicillin where someone declares sensitivity to Penicillin, this also a drug of choice when treating divers in saturation (local protocols apply). Dose 250mg QDS – side effects heartburn, indigestion and abdominal discomfort. Advise to be taken with a large glass of water.

Also used for the treatment of Legionnaires disease and Campylobacter Enteritis.

**Note:** Reacts seriously with Triludan which can be bought over the counter for hay fever etc, patient must be warned.

### **Trimethoprim**

First line treatment for simple urinary tract infections usually given Treatment usually for three days only – dose 1 tab B.D

Side effects – GI disturbance, nausea, vomiting, pruritis, rashes

### **Co-Amoxiclav (be aware of Penicillin sensitivity)**

A second line antibiotic particularly useful for chest infections and soft tissue infections including cellulitis. This is a broad-spectrum Antibiotic – Dose One tablet 250mg/125mg TDS.

### **Ciproflaxin (Ciproxin)**

A second line antibiotic for sever systemic infections caution might cause dizziness and convulsions.

## **6.Key Points to Remember**

- There are three groups of drugs: Controlled, Prescription and Over the Counter.
- In all cases where medication is required to manage a condition Topside should be involved. Liaison with the Topside Dr should go ahead prior to commencement of treatment unless otherwise indicated.
- You should always regularly review treatments when medication is involved and never over prescribe.
- There should be an up to date formulary and recently updated management protocols available set out by the Supervising Physician for the guidance of every offshore medic.
- There is a strong possibility that there are many more drugs on the installation than recommended by the Supervising Physician or mentioned in your company procedures.

# 7. The Misuse of Drugs Regulations 2001: Supply and Possession of Controlled Drugs Offshore

## Introduction

1. This notice clarifies the duties and roles of the Offshore Installation Manager (OIM) and the offshore medic in respect of the Misuse of Drugs Regulations 2001 (MDR).

## Background

2. Some controlled drugs, as defined by MDR and earlier legislation, are included for offshore use in UK Offshore Operators Association's (UKOOA) publication First-aid and medical equipment on offshore installations. Specific examples are: Diamorphine, morphine sulphate, Pethidine and Diazepam.
3. MDR uses the power set out in the Misuse of Drugs Act 1971, section 7, to provide exemptions from the Act, making it lawful for certain people to produce, supply and possess certain controlled drugs. MDR also contains requirements relating to record keeping and documentation for controlled drugs. Interpretation of these provisions of MDR offshore has been the source of some confusion, particularly in respect of matters such as whether or not an offshore medic can keep the key to the drugs cabinet.

## Supply of controlled drugs

4. Only an OIM is allowed to supply controlled drugs. An offshore medic who is not a fully qualified doctor is not entitled to supply controlled drugs. MDR regulations 8(5) and 9(5) allow the OIM to supply the controlled drugs specified in the accompanying Schedules to comply with the Health and Safety at Work etc Act 1974, or regulations made thereunder. In the context of supply of controlled drugs offshore the OIM supplies controlled drugs to comply with the Offshore Installations and Pipeline Works (First-Aid) Regulations 1989 (OFAR), regulation 5

## Administration of controlled drugs

5. Offshore medics can, in carrying out their duties, administer the controlled drugs listed in the Schedules but only under the direction of a doctor or dentist. MDR regulation 7(3) states that: 'Any person other than a doctor or dentist may

administer to a patient, in accordance with the directions of a doctor or dentist, any drug specified in Schedule 2, 3 or 4.’ The controlled drugs listed in these Schedules include those noted at paragraph 2 above.

### **Possession of controlled drugs**

6. Regulation 10(5) of MDR allows any person to possess the controlled drugs specified in Schedules 2, 3 and Part I of Schedule 4 to comply with the Health and Safety at Work etc Act 1974 or regulations made thereunder. Holding a key to the medicine store amounts to ‘possession’ of any controlled drugs it may contain. The effect of regulation 10(5) is therefore to enable any person offshore to hold a key to the medicine store if they are doing so to comply with regulation 5 of OFAR.

### **Destruction of controlled drugs**

7. Witnessed destruction of controlled drugs is sometimes thought to be acceptable offshore, but this is not the case. MDR regulation 27(4) requires that where an OIM is in the possession of Schedule 2 controlled drugs that are no longer required ‘... he shall not destroy the drug or cause it to be destroyed but shall dispose of it to a constable, or to a person who may lawfully supply that drug to him.’ Where an OIM is in possession of Schedule 2 controlled drugs for destruction they should be suitably packaged and hand-carried from the installation to a police station (or to someone who can legally supply them, eg a doctor) by a responsible person. A system needs to be in place to demonstrate the chain of custody and provide evidence that the drugs were destroyed, eg a covering memo from the OIM accompanying the drugs, which is signed by the police and returned offshore for record keeping purposes

**This guidance is issued by the Health and Safety Executive. Following the guidance is not compulsory and you are free to take other action. But if you do follow the guidance you will normally be doing enough to comply with the law. Health and safety inspectors seek to secure compliance with the law and may refer to this guidance as illustrating good practice.**

## Questions:

**Question 1:** State the five main constituents of a drug formulary

**Question 2a:** Try and put these drugs or drug routes in order of their rapidity of onset, quickest first. We have completed one as an example.

A Intramuscular Injection	
B Oral Lozenge	
C Inhaled analgesic	
D Sublingual	
E Eye Drops	
F Suppository	
G Tablet	
H Intravenous injection	4

**Question 2b:** Which of the above routes could you use if your patient was vomiting?

**Question 3a:** Using an appropriate formulary, state what antibiotics would you use to treat:

- Tonsillitis
- An upper respiratory tract infection

**Question 3b:** What antibiotic might trigger a rash in a patient with Glandular fever?

**Question 4:** State two reasons for consulting your topside doctor prior to using any medication.







## Answers:

### Question A:

1. Antispasmodic
2. Symptomatic relief of gastrointestinal or genitor-urinary disorders characterised by smooth muscle spasm
3. Gastritis, Food poisoning, Salmonella, Diarrhoea and Vomiting
4. 10mgs TDS for 2/7 then discuss with a Topside doctor who can change to 20mgs QDS.

**Question B:** The misuse of Drugs Act 1971

### Question C:

- Controlled Drugs as specified in the Act mentioned above (CD)
- Prescription only Medications (POM)
- Over the counter preparations (OTC)

**Question D:** Controlled Drugs Register

### Question E:

- The date and quantity of drugs received
- Amount held in stock
- Name of person drug is administered to
- Dose given
- Name of person administering the drug
- The name of the person checking the drug
- A signed and dated receipt for any disposed drugs

### Question F:

- Drug Interactions
- When they may not be used “Contraindications”
- Desired effects
- Unwanted side effects

- How the medications should be dispensed
- Dose
- Adverse events

**Question G:** Check past medical history, check with topside Dr (POMs), check for drug allergies, ask if they are taking other medication, check contraindications, check drug name, is the drug in date, do you have the correct drug dose and regimen, do you have consent.

**Question H:** Sublingual tablets, Mouthwashes, Sprays, Oral Lozenges, Suppositories, Nasal Insufflations, Local Anaesthetics, Local pain relief and anti-inflammatory

**Question I:** Eyes, Skin, Mucous membrane

**Question J:** Topside Doctor. Standing orders or formularies issued by the supervising medical practitioner.

**Question 1:** What drugs are used, How they are to be used, When they may be used, The desired effects, Any unwanted effects

**Question 2a:**

A Intramuscular Injection	5
B Oral Lozenge	6
C Inhaled analgesic	2
D Sublingual	3
E Eye Drops	1
F Suppository	8
G Tablet	7
H Intravenous injection	4

**Question 2b:** A, F, H

**Question 3a:** Penicillin V, Amoxicillin

**Question 3b:** Amoxicillin is contraindicated in glandular fever therefore it should not be used in unidentified sore throats

**Question 4:** Use of prescription medications, use of controlled drugs