

# Outpatient Parenteral Antimicrobial Therapy (OPAT)

## Introduction

### What is Outpatient Parenteral Antibiotic Therapy (OPAT)

Antibiotics are used to fight against infections caused by bacteria. They can be given orally or injected into a vein. When antibiotics are injected, it is called intravenous (IV) or parenteral therapy. IV antibiotics can be given safely in an outpatient clinic or at home. This is called OPAT. If you are receiving OPAT at home then a nurse will ensure you have received the appropriate training and follow up prior to your discharge from hospital.

The antibiotic is given into your vein through a small narrow flexible tube called an IV line. The IV line is inserted into your vein with a needle. The needle is then removed and the IV line is left in place by a dressing. There are different types of IV lines available and the one chosen for your treatment will depend on your veins and how long you need to receive antibiotics.

The following guidelines have been prepared for carers and patients who wish to give intravenous (IV) antibiotics at home.

You will be told and shown all you need to know while you are in hospital, so that you will feel safe and confident before going home.

Each regime of treatment is individually tailored to treat the particular infection. Your regime will be clearly explained to you and written in the back of this booklet.

The guidelines will help you to have a good understanding of:

- The basic principles of giving intravenous antibiotics

- Carrying out the procedures
- Dealing correctly with any problem

**We want you to feel happy, confident and relaxed about home intravenous therapy.**

### Hand hygiene

1. Keep nails short and avoid using nail varnish. Put plasters over cuts.
2. Remove rings with stones and your watch.
3. Use a separate clean towel to dry your hands when you are giving IV drugs. Or use paper towels or kitchen roll.
4. Use liquid soap or alcohol gel.

### Instructions

#### Collect equipment:

- Alcohol hand rub
- Sharps bin
- Detergent surface wipes
- Platform tray or clean hard surface
- The medication to be given

#### Prepare the area:

Try to establish a routine. Use the same area each time, somewhere you can keep as clean as possible, such as a tray which should be cleaned with water and detergent, or a hard surface, which should be cleaned with a detergent wipe before use. **Wash and dry your hands thoroughly before starting. Use alcohol hand rub.**

## Before administering any medication please check:

- Signs and symptoms of infection
- Redness/inflammation or pain around the area
- Dressing is intact and clean
- Area is dry, no signs of leakage around the site

## Intravenous Medications, please check before use:

- Check fridge temperature and make sure fridge door has not been left open
- Patients full name is on IV antibiotics and is correct
- Correct date of birth
- Right medication
- Right diluting solution
- Right dose/amount
- It is the right time to take the medication
- Expiry dates of Infusions including the saline flushes
- Ensure all medication in packaging is intact, no seals are split or broken
- Ensure balloon is not damaged
- No signs of leakage
- No kinks in tube
- Winged luer cap in situ
- The fill port protector cap is in situ

## Things to check before connecting infusion:

- Is everything you need in one place i.e. Tray
- Before starting ensure hands have been washed correctly and ensure dry
- Alcohol gel

- Clamp on line extension
- Remove packaging from IV antibiotics and 2 x saline flushes
- Prime saline flushes so there is no air in the line
- Unclamp IV antibiotic, prime the line, replace winged luer lock, re-clamp the line
- Open Chlorhexidine 2% wipe

## Dos and Don'ts

### Do BE CLEAN:

- Hands
- Preparing tray surfaces
- Dressings
- IV insertion site

**Do** Allow yourself time and space to carry out the procedure.

**Do** Try to space the drugs out evenly over a 24 hour period.

**Do** Always give Sodium Chloride before and after drugs. Sodium Chloride is used before and between all intravenous drugs to flush the line and to prevent any adverse mixing of drugs.

**Do** Give drugs slowly and maintain positive pressure at all times, using a push/pause technique.

**Do** Remember we are here to help you **(contacts on page 16)**

**Don't Inject air into the tubing.**

**Don't Give anything if you are in doubt about:**

- a) The amount of drug
- b) Type of drug
- c) The site

**Don't Use the same needle or syringe twice.**

# How to dispose of equipment and drugs

## 'Sharps' box

These must be put into a 'sharps' box:

- Syringes
- Antibiotic bottles
- Drug delivery devices

The 'sharps' boxes must not be more than ¾ full. They should then be sealed and arrangements made with the Home Care Company for collection.

## Dressings, etc.

These can be disposed of along with other household waste.

## Problems and contacts page

If at any time any of the following occur, please contact Wynard Ward:

- Any difficulty injecting drugs
- Blocked IV line
- Inflammation (redness) of the site area
- Faintness or dizziness
- Pains in the back or chest
- Skin rashes/itching
- Unexpected swellings, anywhere
- High temperature (Fever)
- Nausea, vomiting or diarrhoea
- Anything else out of the ordinary

**If a severe reaction occurs call an ambulance**

## Check list for going home on intravenous antibiotics

1. Medical and nursing team are aware and happy that treatment is to be given at home.
2. Patient/carer has been assessed preparing and administering the drugs and stated to be confident and competent (written in

the patient's notes by the assessor). The document '*Teaching Patient/Parents/Carers Home Intravenous Antibiotic Therapy - Guidelines for Nurses*' should be referred to.

3. Information booklet and prescription regime have been given to the patient/carer.
4. All drugs have been prescribed and supplied.
5. All equipment has been supplied.
6. Patient/carer is aware of when they need blood tests (e.g. levels) and how to check the results.
7. Patient/carer is aware of when they need to be reviewed.
8. Patient/carer is aware of who they should contact if they encounter any problem.
9. The patient's GP should be informed of discharge on treatment by whoever discharges the patient, a discharge summary will be provided
10. Patients details should be recorded in the Acute Hospital at Home list and notes available on the ward

## Glossary of terms used in this booklet

<b>PICC MID line</b>	Peripherally Inserted Central Catheter. A long thin flexible tube, inserted into a vein, to be used to give intravenous antibiotics into the blood stream.
<b>TIVAD/Port</b>	Totally Implanted Venous Access Device. A device fixed under the skin for intravenous antibiotic therapy.
<b>Intravenous cannula</b>	A short, thin tube inserted into a vein, used to give antibiotics into the bloodstream.
<b>Antibiotic</b>	A drug used to kill bacteria (bugs) that cause infection.
<b>Intravenous (IV)</b>	In to the vein.
<b>Sodium chloride</b>	Salt and water solution.

# Drug reaction and anaphylaxis

Anaphylaxis is the name given to a severe reaction to a drug therapy. Fortunately this type of reaction is uncommon, but carers must be capable of recognising and dealing with such a crisis.

Reactions can be mild, moderate or severe.

## Mild

- Skin irritations and minor rashes
- Nausea
- Loose stools
- Headaches
- Generally 'off colour'

## Moderate

- Vomiting
- Aches and pains

- Wheeze
- Weakness or giddiness
- High temperature
- Severe diarrhoea
- Swelling and facial puffiness

## Severe

- Sudden collapse or illness
- Swelling around neck
- Severe difficulty breathing

Mild to moderate reactions may not mean stopping the treatment. However, medical advice must be sought before continuing treatment.

**Severe reactions** (Anaphylactic shock) is rare but must be treated as an emergency. **CALL AN AMBULANCE (dial 999)**. Lie the patient flat with feet slightly raised. This will help if there is a sudden fall in blood pressure.

## HAND CLEANING TECHNIQUES

**NHS**  
National Patient  
Safety Agency

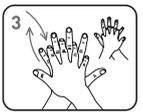
### How to handrub? WITH ALCOHOL HANDRUB



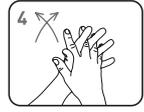

Apply a small amount (about 3ml) of the product in a cupped hand, covering all surfaces



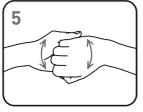
2 Rub hands palm to palm



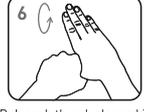
3 Rub back of each hand with the palm of other hand with fingers interlaced



4 Rub palm to palm with fingers interlaced



5 Rub with backs of fingers to opposing palms with fingers interlaced



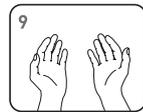
6 Rub each thumb clasped in opposite hand using rotational movement



7 Rub tips of fingers in opposite palm in a circular motion



8 Rub each wrist with opposite hand



9 Once dry, your hands are safe 20-30 sec

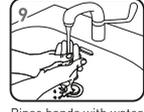
### How to handwash? WITH SOAP AND WATER



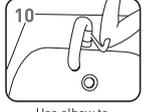
0 Wet hands with water



1 Apply enough soap to cover all hand surfaces



9 Rinse hands with water



10 Use elbow to turn off tap



11 Dry thoroughly with a single-use towel



12 Your hands are now safe 40-60 sec







## Contact Us

If you have any concerns please contact the OPAT service on

**01392 406554** Mon-Fri 9am to 5pm

**01392 406512** Out of Hours, Wynard Ward

## Step by Step guidelines:

**Remember to use hand gel between inside and outside space using**

- STEP 1:** Make sure your surface space/tray is clean and clear
- STEP 2:** Place everything you need in the tray for one infusion
- STEP 3:** Wash hands with soap, allow to dry
- STEP 4:** Unclamp extension on YOUR line
- STEP 5:** **Gel hands as you are moving into the inside space:**
- STEP 6:** Open all packaging
- STEP 7:** Prime saline flush and Prime IV antibiotics (re-attach winged luer lock)
- STEP 8:** Ensure no air in Saline flushes or IV antibiotics line
- STEP 9:** Replace saline flush back into packaging
- STEP 10:** **Re-gel hands as moving from inside space to outside space:**
- STEP 11:** **IMPORTANT: Clean extension line with chlorhexidine for 30 SECONDS and allow drying for 30 SECONDS**

## USING NON TOUCH TECHNIQUE:

**STEP 12:** Connect 10mls Saline flush to YOUR extension line using push /pause technique use all 10mls.

**AT THIS STAGE: If for any reason the saline will not inject DO NOT FORCE it. STOP. Consult your nurse or Doctor via Acute hospital at Home or Wynyard (out of hours)**

**STEP 13:** Remove saline syringe and connect IV Antibiotics

**STEP 14:** Make sure the Antibiotics are attached securely and there is no leakage

**STEP 15:** Height of bottle whilst infusion is running (To low will infuse slowly, to high will infuse too quickly)

## DISCONNECTING:

- Wash or re gel hands
- Still using non-touch technique, remove empty IV Antibiotics and re flush with 10mls of Saline using push/pause technique use all 10mls.
- Dispose empty syringes and Baxter/BBraun products in sharps bin provided.
- Clean tray ready for next use

The Trust cannot accept any responsibility for the accuracy of the information given if the leaflet is not used by RD&E staff undertaking procedures at the RD&E hospitals.

© Royal Devon and Exeter NHS Foundation Trust

Designed by Graphics (Print & Design), RD&E