

MEDICAL CHEST HANDBOOK



Royal Flying Doctor Service
SOUTH EASTERN SECTION

In a medical
emergency call
1800 DRS FLY
(1800 377 359)



HELP
AVAILABLE
24/7



We are ready to help 24 hours a day, 7 days a week

Medical Chest Team contact details:

*Medical Chest Coordinator
RFDS South Eastern Section
PO Box 463
Broken Hill NSW 2880*

*Tel: 02 5820 0811
Email: medicalchest@rfdsse.org.au*

IMPORTANT NOTICE

Medical Chests are supplied at the risk of the Chest Custodian/User.

Misuse of the contents could have serious consequences – even death.

No responsibility for misuse will be accepted by a Director, Officer or employee of the Royal Flying Doctor Service of Australia, or any of the separate Sections of the Service.

It is the responsibility of the Chest Holder/User to ensure the safekeeping of the chest and that the contents are properly used and are kept up to date.

The Royal Flying Doctor Service of Australia reserves the right to withdraw Medical Chests if they are misused or not correctly managed.

Handbook must be kept with chest at ALL times.

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DEFINITIONS:

Ampoule	A small, sealed glass capsule containing a liquid
Antibiotic	Medication ordered by a doctor for bacterial infections
Custodian	A person who has responsibility for taking care of the Medical Chest
Deteriorate	To become worse
Expiry date record	RFDSSE Document for writing expiry date of Medical Chest contents - See Picture next page
Intramuscular Injection	An injection into the muscle, usually either the thigh or upper arm
Medical Chest Drug Usage Register	RFDSSE Document used to record the details of medication used - See picture next page
Ministry of Health	Government department who RFDSSE needs to report to regarding the Medical Chest Program
Monitored Medications	Medications which can be highly addictive. They require increased documentation when being used or replaced. RFDSSE MUST report missing or stolen Monitored Medication to the Ministry of Health
Narcotics	An addictive drug that can result in drowsiness or loss of consciousness. It is a Monitored Medication
Non-consumables	Items that can be re-used if still in good working order
Observations	Measuring of a person's Heart Rate, Breathing, Temperature and/or Blood Pressure
Order Form	RFDSSE Document used to re-order used or expired stock for Medical Chest – See picture next page
Perished	To lose its normal qualities or become damaged
Perpendicular	At an angle of 90° to the skin (for intramuscular injections)
Pharmaceutical	Medications
Pharmacist	A person who is professionally qualified to prepare medications
Plunger	The part of the syringe that is pressed to or pulled back when preparing or giving an injection
Poisons Act	A government document relating to the regulation, control, supply and use of medications.
Prescription (script)	Written by a doctor that authorises a patient to be given medication, including how much and how often to take
Respiratory Rate	The number of times a person takes a breath in 1 minute
Schedule 4 (S4)	Medication that is only available by prescription and requires additional monitoring
Schedule 8 (S8)	Medication which can be highly addictive and require additional monitoring and reporting
Severity	How bad the pain is and how long has it been this bad
Vial	A small container made of glass, generally containing powder or liquid

Introduction to the Medical Chest

The Royal Flying Doctor Service Medical Chest has evolved over many years to cover a number of medical conditions, not just emergencies, which would be difficult for people living and working in remote areas to treat. As such it contains a large number of **"prescription only"** medication items, it is a condition of the provision of the Chest that these drugs be used only on the advice of a registered RFDSSSE Medical Practitioner. The drugs provided are coded using a simple numbering system since the chemical names and brand names may vary from time to time. These item numbers are known by RFDSSSE Medical Officers, who are familiar with the contents of the Chest and its use. The following notes outline administration and usage of the Medical Chest.

Instructions for new Medical Chest Custodian

a) Initial Checking of Contents

Each Medical Chest is accompanied by a list of contents which is designed to fit inside the lid. On receipt of the new chest, you should check that all the items listed on the chest list are present in the quantities indicated. You should notify the RFDSSSE of any items that are missing or different.

b) Regular Checking

The Medical Chest can only be relied on if it is fully stocked with all items in date. It is therefore essential that the chest be checked on a regular basis to ensure that all the contents are present (in accordance with the lid list) and no items have expired. We suggest this is done three (3) monthly. Expiry dates can be found on all drugs and some other items, such as bandages, sterile eye pads and gauze sponges. Expiry dates are not applicable to "non-consumables" such as kidney dishes, scissors, medicine measures and the like. However, these can be replaced if they deteriorate.

c) Registration Label

Every Chest in Australia is identified by a unique code number which will be given to you with the chest. If this is a label, you should ensure that it is affixed to the front of the Chest. Alternatively, you should paint or mark your chest number clearly on the Chest. When properties change hands or, when approved, chests are moved to different locations, the chest registration number is the means by which we can identify the Medical Chest. You should use the chest number on all orders and any correspondence and inquiries relating to the Medical Chest.

d) Lid List

The Medical Chest contents list should be secured to the inside of the lid of the Medical Chest. Every few years a new list will be issued, and the old list should be replaced. The contents of the Medical Chest are changed on a national basis in accordance with currently accepted methods of medical treatment. You should ensure that you have an up-to-date lid list. We welcome any suggestions on the chest contents. (As of 2025, the Current Contents List is Pink and dated 2019).

e) Security

The chest should be kept locked at all times. The registered chest holder is responsible for ensuring the safe storage and proper usage of all chest items. Where any theft occurs or misuse is suspected, the RFDSSSE and local police should be informed immediately. Items that are stolen, lost or damaged are to be replaced at chest holder's expense and a claim submitted to your insurers for the loss. The theft or loss of Monitored Medications (currently items 188 / 413 / 173 / 191) requires RFDSSSE to make a notification to the Ministry of Health.

Use of the Chest Contents

a) First Aid

St John Ambulance Australian First Aid Manuals are included in the Medical Chest. You are strongly recommended to read these and also to complete a formal First Aid course. This will assist you in providing basic first aid as well as giving you training in bandaging and splinting. Contents of the chest are continually upgraded. Some older chests may contain older versions of the First Aid text. The most current edition of the First Aid manuals can be ordered on the chest order forms along with other items. Whilst you are welcome to seek advice from our medical staff on managing minor injuries, it is not essential to seek such advice just to use the bandages and dressings in the Medical Chest.

b) Seeking Medical Advice by Telephone

Medical advice can be provided 24 Hours a day by using our 24-Hour Medical Line on **1800 DRS FLY (1800 377 359)** OR if on a Satellite Phone and no 1800 calling enabled - 08 8088 1188. This number is not just for Emergencies and can be used for general medical advice.

c) Authorisation of Drug Use

Those items marked on the Medical Chest list as **"* DOCTOR'S ORDERS ONLY"**, must be authorised by a registered RFDSSE doctor who is most familiar with your regional circumstances and the drugs available in the Medical Chest. They will provide you with a consultation number if drugs are prescribed. The consultation number needs to be recorded on the Medical Chest Drug Usage Register and also documented on the order form when re-ordering any prescription medication that requires replacement after use. If the Doctor is unable to provide a consultation number when asked, please write the Doctors name and the date of order. Nurses are not permitted to prescribe those drugs from the Chest which require a doctor's authorisation.

d) Recording of Patient Details in a Register

You are required to maintain the Drug Usage Register to record any drugs which have been used. This should include the:

- Date
- Name of the patient
- Number/s of the drug used
- Name of the authorising RFDSSE Doctor
- Your signature or signature of person dispensing medication

It is important that this is completed for all drugs requiring a doctor's authorisation. For Items **188, 173, 191 & 413**, it is essential that this information be recorded and countersigned by a witness. A page of the Dangerous Drug Authorisation Record Book (**Green book**) must be completed and returned to the RFDSSE for item 188.

e) Controlled / Monitored Medications

The Medical Chest contains Scheduled 8 (S8) substances under the Poisons Act. It is essential that a doctor's authorisation is received prior to using these items (188). Medical Chests also contain medications that fall under Schedule 4 (S4) under the NSW Poisons Act. These medications are subject to both State and National legislation.

Controlled Medications that expire must be returned to RFDSSE Broken Hill Base: Attention Medical Chest Coordinator for disposal prior to being re-ordered.

f) Medications not requiring a Doctor's Authorisation

The Medical Chest list indicates which medications in the Chest may only be used on an RFDSSSE doctor's orders. The remaining agents may be used at your discretion without authorisation. Although the Medical Chest contains items to cover most situations, it cannot be a complete supply of all household remedies. You may therefore find it necessary to purchase additional household remedies from a pharmacy.

Chest Maintenance

a) Expired Items – Medications

It is important that these items be reordered and replaced once the expiry dates have passed.

In the event that a patient requires treatment, but the drug required has expired, it will be up to the prescribing doctor to decide whether it is possible to still use the expired medication.

In many cases this will probably be safe; however, the drug may be less effective than it should be.

b) Expired Items – Other

Some items such as dressings have expiry dates, after which sterility cannot be guaranteed. Depending on the condition of the packaging it may still be possible to use these items for treatment. Rubber items should be replaced when they expire as they may have perished.

c) Disposal of Expired Monitored Medication – Item 188 / 413 / 173 / 191

These items **MUST** be returned for correct disposal. They can be returned via **registered** post to:

**ATTN: MEDICAL CHEST TEAM
RFDSSSE SOUTH EASTERN SECTION
PO BOX 463
BROKEN HILL
NSW, 2880**

(Please also label parcel with **Chest name, Chest number & Sender's name**. We would also really appreciate it if you could let us know when returned or send the tracking number so we can follow up if necessary).

These items are highlighted in blue on your order form.

d) Disposal of Expired Non-Monitored Medications

Non-Dangerous Drugs may be disposed of by incineration or taken to your nearest pharmacy for disposal in a "RUM" -Return of Unwanted Medication – bin, located at most community pharmacies.

e) Re-ordering Procedure

Drugs should be re-ordered using the order forms provided with the chest. It is important to note on the form the reason items are being ordered. The consult number should be supplied if it is available. It is particularly important to note the name of the RFDSSSE Doctor prescribing the S8 items (item *188 can be found at the bottom of the order form).

Order forms should be forwarded to the email or postal address listed on the cover of this handbook. Your order will be entered, approved and then forwarded to our pharmacy supplier.

The drugs will then be delivered direct from the supplier in accordance with the delivery instructions you have provided.

f) **Delivery Instructions**

Medical Chest items are delivered directly from the supplier. Please advise us of any special delivery instructions relating to dispatching of orders.

There are certain items within the chest classed as Dangerous Drugs that cannot be transported by air.

If you are a private organisation or have air mail delivery you will need to provide a road address for the delivery of these items.

g) **Expiry Date Record**

A useful method for keeping track of expiry dates is to use the Expiry Date Record. This table lists all the chest item numbers with columns in which to write their expiry dates. When items are used their expiry dates are crossed off the list. When new items are received their expiry dates are added to the card. Items should still be checked individually at regular intervals, but a stock card makes the job easier.

Obtaining Medical Advice

a) **Basic Details**

Before calling for medical advice, it is helpful to the doctor if you have checked and recorded the following details for each patient. Wherever possible have the patient nearby to answer further questions. Also have the Medical Chest nearby if possible.

- Patient Name
- Patient Date of Birth or Age
- Gender
- Approximate weight
- Patients' location

b) **Observations**

The Doctor may ask you to tell him the following, if you are able:

- Pulse rate
- Respiration rate
- Temperature
- Blood pressure (if possible)
- Conscious State – using the AVPU scale
 - **Alert:** Talking and moving normally
 - **Voice:** Only moving or answering when spoken to
 - **Pain:** Only responding to shaking, prodding or pain
 - **Unresponsive:** Unresponsive, no movement or speech
 - Orientated: knows where they are and what has happened / is happening

c) **Main Problem**

Some of the questions the Doctor may ask during the call include:

- What does patient complain of?
- How long have they had it?
- What has been done for it?
- Is it getting better or worse?
- Have they had similar problems before?
- What previous serious illnesses or operations have they had?
- What medications are they taking?

If there is pain, you may be asked to determine:

- Where is it the worst? Refer to body chart if required
- What is it like? (sharp or dull, constant or fluctuating)
- What makes it better?
- What makes it worse?

d) Management

If you are calling the Doctor as a follow up, or have been treated by a Non-RFDSSE Doctor or a Pharmacist, it will be handy for the RFDSSE Doctor to know

- What treatment has been tried so far?
- What are your specific concerns?

e) For Motor Vehicle Accidents

If the patient has been involved in a car accident, useful information for the Doctor includes:

- When did it occur?
- How? (Head on collision / rollover / lost control)
- How fast was the vehicle travelling?
- Where was the patient in the car? (driver / passenger / front or back)
- Was the patient ejected from the vehicle?
- Was the patient wearing a seat belt?
- Were the airbags deployed?
- Was the patient known to be drinking?
- Was anyone else injured or killed?

f) For Motorbike Accidents

If the patient has been involved in a motorbike accident, useful information for the Doctor includes:

- When did it occur?
- How? (Speed / Loss of control / Collision / Environment conditions)
- How fast was the rider going?
- Is the passenger the sole rider or pillion passenger?
- Was the rider thrown from bike or trapped underneath?
- Was the rider wearing a helmet or protective wear?
- Was the rider known to be drinking?

g) Injuries

If the patient has been injured look for injuries to all areas:

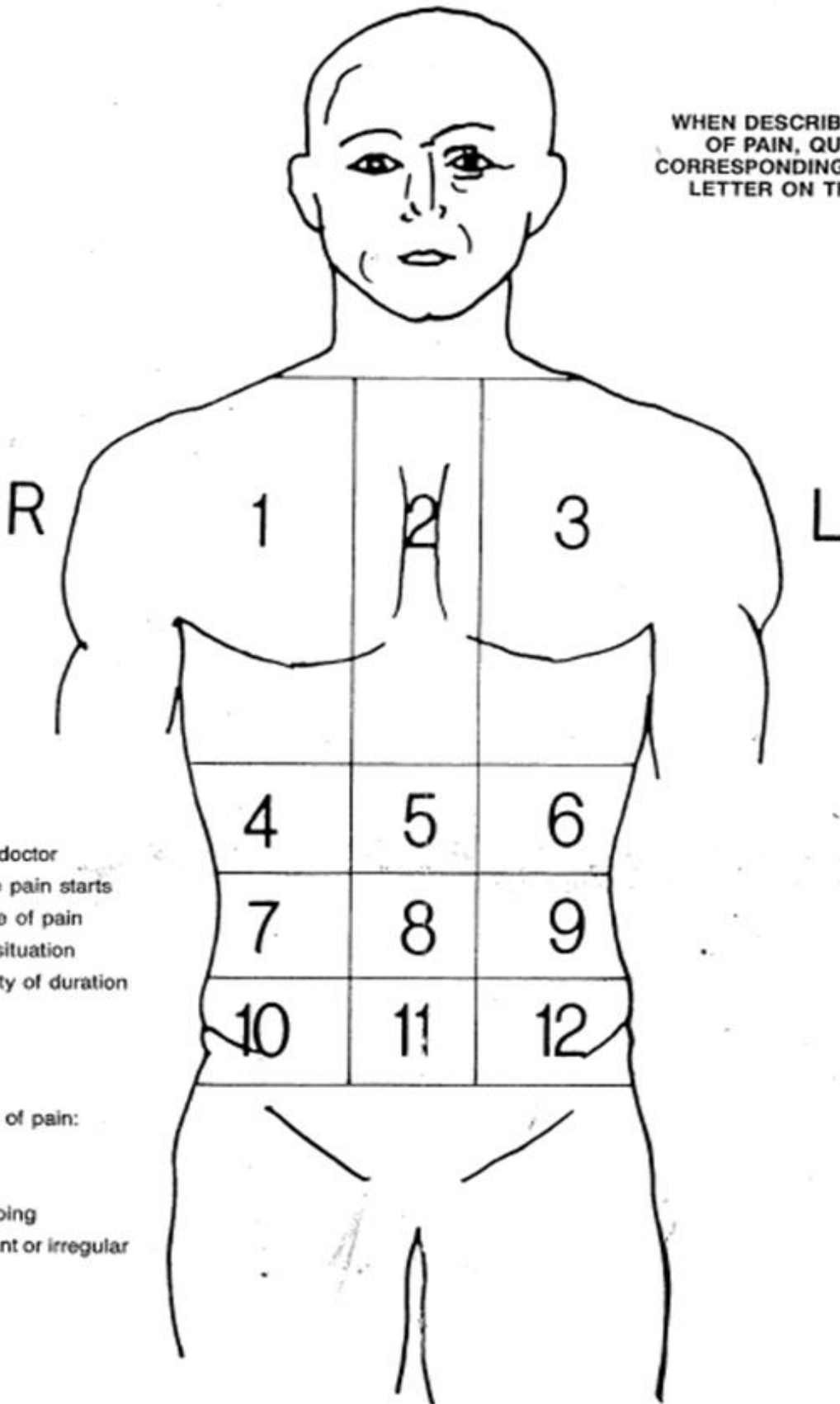
- Head
- Neck
- Chest
- Abdomen
- Pelvis
- Spine
- Arms and Legs

If you suspect fractures or internal injuries, DO NOT ATTEMPT TO MOVE THE PATIENT.

The Doctor will advise on how to keep the patient comfortable in their current position or instruct you on how to move them.

WHERE DOES IT HURT?

WHEN DESCRIBING REGION OF PAIN, QUOTE THE CORRESPONDING NUMBER OR LETTER ON THE CHART.



NOTE: Tell the doctor

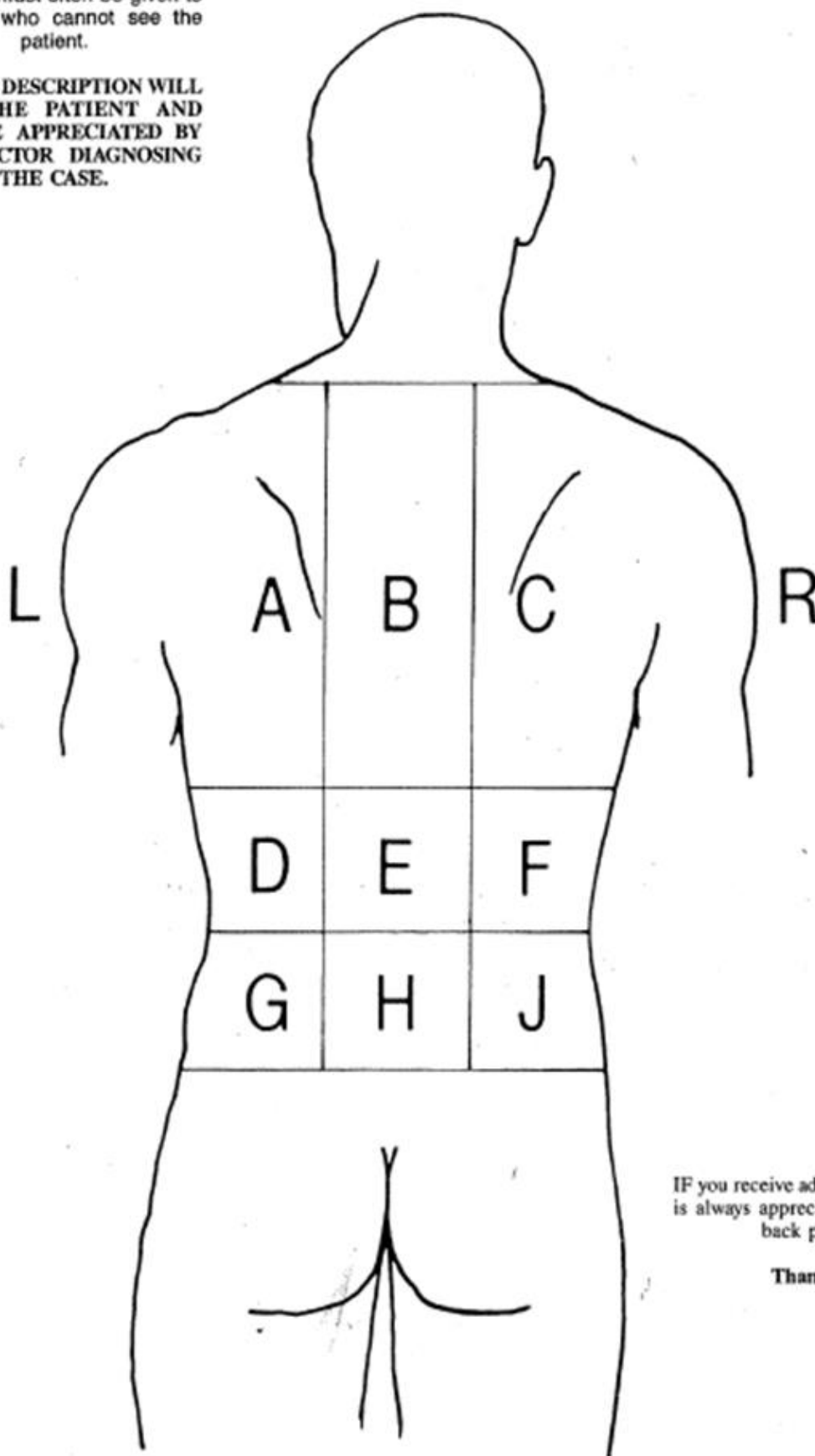
- Where pain starts
- Course of pain
- Final situation
- Severity of duration

STATE the type of pain:

- Sharp
- Dull
- Throbbing
- Constant or irregular

THE nature of the Royal Flying Doctor Service of Australia means that a description of injury or illness must often be given to a doctor who cannot see the patient.

A CLEAR DESCRIPTION WILL HELP THE PATIENT AND WILL BE APPRECIATED BY THE DOCTOR DIAGNOSING THE CASE.



IF you receive advice over the air, it is always appreciated if you report back progress.

Thank you.

Making Up Antibiotic Injections

Hands Should be Cleaned & Washed Before you Start

Antibiotic mixtures (for oral use)

Item numbers **130, 174, 187, 401** and **407** are antibiotics in powder form which need to have water added to become a mixture (suspension).

1. Boil about a cup of drinking water in a clean container. Cool the water.
2. Take No. 201 (medicine measure) from the chest.
3. On the side of the medicine bottle it says in small print how much water needs to be added. This is not the same for each powder.

If 95mls is needed add 3 lots of 30ml and one lot of 5ml cooled boiled water [OR 4 tablespoons (each 20mls) and 2 teaspoons (each 5mls)]

If 63mls is needed add 2 lots of 30ml and one lot of 5ml cool boiled water [OR 3 tablespoons and 1 teaspoon].

If 60mls is needed add 2 lots of 30ml [OR 3 tablespoons]

It does not matter if the amount of water added varies slightly. This will not make much difference when measuring individual doses.

4. Add the required amount of water to the antibiotic bottle.
5. Shake bottle well.
6. Store the mixture as it says on the side of the bottle.

Making Up Antibiotic Injections

Hands Should be Cleaned & Washed Before you Start

Antibiotic powder (for injection)

The ceftriaxone medication (No. **402**) in the Medical Chest requires the addition of water prior to administering.

1. Take the 22-gauge needle (No. **241**) and attach to 3ml syringe (No. **240**).
2. Take the water for injection (No. **168**) and attach to 3ml syringe (No. **240**).
3. Break the top of the ampoule off if it is glass or twist the top off if it is plastic.
4. Connect the needle and syringe and draw up the water into the syringe. **DO NOT** touch any part of the needle at any stage.
5. Wipe the top of the penicillin vial with an alcohol swab (No. **207**).
6. Pierce the ceftriaxone vial and slowly add the water to the penicillin powder. Squeeze a little at a time and be gentle and allow the syringe to fill with the air from the vial.

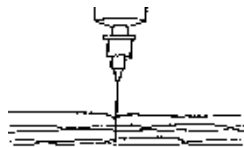
Leave the needle still in the vial and shake the vial well to mix.

7. Draw out the white penicillin solution.
8. Replace with a new gauge 22 needle (No. **241**) and continue with the injection procedures.

The needle and the ampoule should be disposed of in the Sharps Container provided (No. 242) or in a rigid plastic container with a lid (e.g. liquid laundry detergent container)

Giving an Injection

An injection is the introduction of a medication under pressure through the skin. An intramuscular injection is given into muscle tissue which has a lot of blood vessels so that the medication is absorbed quickly.



To ensure that the needle reaches deep into the muscle, the needle is inserted at an angle of 90° to the skin at the injection site.

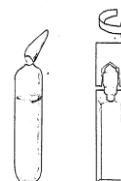
Common sites to give an intramuscular injection are:

- The top side of the upper arm
- The side of the thigh



How to give an intramuscular injection:

1. Collect all equipment needed from the Medical Chest. This will include:
 - 2 x 22-gauge Detachable Needles (No. 241)
 - 3ml syringe (No. 240)
 - Alcohol swabs (No. 207)
 - Medication as ordered by the RFDSSE Doctor
2. Check the drug order. This may be written, but in most cases it will be verbal.
3. Identify the medication and check dosage and expiry date.
4. Assemble the syringe and needle (22 gauge), leaving the needle cap on at this stage. **DO NOT** touch any part of the needle at any stage.
5. The medication will be in an ampoule or may require to be made up. To open the ampoule, swirl gently so that all the liquid medication is in the bottom of the ampoule. With the aid of a clean tissue, break the top off a glass ampoule, by applying gently sideways pressure to the top. Just twist the top off for a plastic ampoule.
6. Once the top is removed, take the assembled 22-gauge needle and syringe and remove the plastic needle cap. Insert needle into the ampoule, pull back on the plunger and draw up the amount of medication ordered.
7. Hold the assembled needle and syringe, with the needle pointing upwards and check the marking on the side of the barrel to ensure you have the **right amount** of medication ordered.
8. Replace the needle with the 22 gauge and remove the plastic cap. Expel any air or excess medication from the syringe.
9. Rub the alcohol swab over the selected injection site. Take the prepared needle and insert quickly into the muscle, perpendicular to the skin for three quarters of its length.
10. The plunger should be pulled back slightly to check for return blood. If this happens, the needle should be immediately **withdrawn** and a new needle attached, and the process repeated.
11. Depress the plunger slowly until the full dose is administered. Withdraw the needle.
12. Press the alcohol swab firmly against the injection area, gloves may be needed if blood is present.



Gently massage the injection area to increase the circulation and absorption of the drug.



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For any questions/concerns/feedback in relation to the Medical Chest Program, please contact the Medical Chest coordinator via:

Medical Chest Team contact details:

*Medical Chest Coordinator
RFDS South Eastern Section
PO Box 463
Broken Hill NSW 2880*

*Tel: 02 5820 0811
Email: medicalchest@rfdsse.org.au*
