This is a step-by-step guide to giving subcutaneous (under the skin) injections of methotrexate for the management of your child’s Juvenile Idiopathic Arthritis (JIA).

This guide goes with an education program you will attend so that you can effectively, safely and confidently give methotrexate by injection at home. At each stage of this education program you will be asked if you are happy with the training you have been given and whether you feel confident to continue.

You can decide not to go ahead with giving the injections at any stage of your training or afterwards. This is OK. Please let your nurses know and they can make other arrangements for the injection to be given. If you wish, your nurses can provide you with on-going education and training until you feel confident.

Prepare the injection

Set up
1. Find a clean, flat surface to work on, like a table. Clean it really well. Or buy a plastic dinner tray that is only used for methotrexate injections and clean it really well each time.
2. Only people who are helping you should be in the room – avoid distractions
3. Collect the things you need for the injection:
   - alcohol swab
   - one cotton ball
   - one needle
   - your special needle bin – the sharps disposal container
4. Wash and dry your hands really well

Choose a place to inject the medication
The place you inject medication is called the injection site. Good places to inject medication are:
- The front of the thighs, half way up
- The stomach (except for the area about 5cm around the belly button)

Places to avoid injecting medication are:
- Places that are sore, red, hard or bruised
- Places that have scars or stretch marks
- Places where you can see a vein under your child’s skin

Choose a new site each time you do an injection. If you give it in one spot too often it can get sore
Get the injection ready

1. Take one pre-filled methotrexate syringe out of the refrigerator.
2. Remove the syringe from its packet. If the packet is ripped or open do not use the syringe. Put it in the sharps container and take another syringe out from the refrigerator.
3. Check the pre-filled syringe for your child’s name, the drug name, ‘methotrexate,’ your child’s dose of methotrexate and the use-by date (expiry date). Don’t use the pre-filled methotrexate syringe if any of these details are incorrect.
4. Check the contents of the pre-filled methotrexate syringe; the solution will be yellow in colour but there should not be any particles in the syringe. If you have any questions about the contents of your child’s pre-filled methotrexate syringe please contact your rheumatology nurse or rheumatologist.
5. Also check that your child’s pre-filled methotrexate syringe has been filled with the right amount of methotrexate, the dose your child’s rheumatologist has prescribed.
6. Remove the plastic cap which has been used to seal your child’s pre-filled methotrexate syringe.
7. Carefully remove the needle from its packaging and connect it to the syringe.
8. Check the syringe for air bubbles. Air bubbles won’t hurt your child, but they can reduce the amount of medicine in the syringe. To remove any air bubbles: gently tap the syringe until the bubbles rise to the top of the liquid.
9. Double check with someone else who will check carefully, that you have the right dose of methotrexate for your child ie. The amount your child’s doctor has prescribed.
10. Carefully remove the cover from the needle. It helps to twist the cover while you pull it. Careful: do not touch the needle or let it touch anything.
11. Do not put the syringe down, or let the needle touch anything.
12. You are now ready to give your child the injection.

Giving the injection

1. Arrange for your child to sit or stand in a comfortable position where you can see the injection site easily.
2. Hold the prepared syringe in the hand you will use to inject the methotrexate.
3. Use the other hand to clean the injection site with a fresh alcohol swab. Let the area dry completely because otherwise it might sting your child when you give the injection.
4. With your free hand, gently pinch a fold of skin at the injection site.
5. Hold the syringe like a pencil. Insert the needle at an angle – about 45 – 90 degrees away from your child’s skin.
6. Insert the needle, and then gently let go of the fold of skin.
7. Before pushing the plunger of the syringe look to see if any blood appears in the syringe
   • If no blood appears in the syringe, slowly push the plunger all the way in until all the methotrexate has been pushed out of the syringe
   • If blood appears in the syringe, this means that the needle has gone into a blood vessel. Do not inject the methotrexate
   • Withdraw the needle and put the syringe and needle – all of it – in your sharps disposal container
   • Prepare a new injection with a new syringe and needle.
8. When the syringe is empty, pull the needle out of the skin. Be careful to pull the needle out at the same angle it went in.
9. Press the injection site with a cotton ball for a few seconds. Do not use an alcohol swab as this may sting. If it bleeds a bit, cover it with a Band-aid.
10. Put the used syringe in your sharps disposal container straightaway.
Important things to remember

*Use different injection sites*
- Change the injection site used each time to avoid soreness at any one site
- Injection sites should be at least 3cm apart, and 5cm from the belly button
- Keep a record of the injection site used each time on the injection site record sheet provided in your starter pack.

*Give the injection at the same time each week*
- You will need to inject methotrexate syringes once every week
- It should be the same day of the week, every week and approximately the same time of day each week.
- Work out which day will be easiest for you to stick to

*Store methotrexate carefully*
- Store your pre-filled methotrexate syringe in its original packet in the refrigerator at 2°C
- **Do not freeze or shake** the syringe
- If you are travelling, carry your child’s methotrexate in a cool bag

*Check the use-by date (expiry date)*
- **Always** check the use-by date of your child’s methotrexate syringe before preparing an injection
- If the use-by-date has passed, **do not use**

*Throw out the needle and syringe carefully*
- **Never** re-cap a needle
- Put used syringes and needles in the sharps container straightaway. It helps if you have the container close by when you are giving the injection
- Do not over-fill the sharps container – it should be replaced when it is two thirds full. Put the lid on securely and take it back to the hospital or local council to replace it
- Needle covers, alcohol swabs and cotton balls can be placed in your normal household rubbish bin
- Keep methotrexate syringes and sharps containers out of reach of children and pets

*If you have a problem when you are at home:*
- During normal working hours, contact your rheumatologist or rheumatology nurse
- If you need urgent help, contact your local doctor or hospital Emergency Department

Notes