This sheet is useful if your doctor has recommended injections of methotrexate as a treatment for your arthritis. It gives information about how you, or a friend or family member, can safely inject methotrexate, the steps to follow and the equipment you will need.

Why might my doctor suggest I inject methotrexate?
Methotrexate is available as tablets and injections. Giving methotrexate by injection may have the following benefits over tablets:
1. Tablets may not be completely absorbed by the body so injections may be more effective in providing control of your arthritis symptoms.
2. Injections may reduce side effects (such as nausea) caused by tablets so may be useful if you have been unable to continue taking the tablets because of side effects.

Can I inject methotrexate by myself?
Yes, methotrexate is most conveniently injected by yourself, a friend or family member. If necessary your GP (or their nurse) may do it for you. You can arrange for them to help you with your first injection/s if you like.

How often will I need an injection?
Injections of methotrexate are given once a week.

Is the injection painful?
The injection is relatively painless as it uses a fine needle that is inserted just under the skin (subcutaneous). It is often described as the feeling of a slight pinprick and only lasts for a few seconds.

How is methotrexate supplied?
Injectable methotrexate is a clear yellow liquid. It is supplied as 50mg in a 2ml vial. Usually 5 vials are provided on each prescription.

How should I store the methotrexate?
It does not need to be kept in the fridge but should be stored away from heat or light (in a cool pantry or cupboard, not on a windowsill). Ensure it is stored out of the reach of children.

What other equipment do I need?
Insulin syringes (1ml) which have a fine needle are recommended for methotrexate injections. These syringes have numbers written along their side to help you draw up the correct amount of liquid for the dose of methotrexate you are taking.
They can be bought in bags of 10 at the pharmacy. You should have a sharps container for disposing of the syringe after the injection; this can be obtained from pharmacies. You may also need alcohol swabs or cotton wool balls to clean the skin before injecting.

How much of the liquid should I draw up and inject?
The following table tells you how much liquid to draw up for different doses and what number this is on an insulin syringe. Your doctor will usually prescribe a dose between 10 and 25mg. So, for example if your dose is 25mg of methotrexate you will need to draw up 1.0ml. 1.0ml is the number 100 on an insulin syringe.

<table>
<thead>
<tr>
<th>Methotrexate dose</th>
<th>Amount of liquid to draw up</th>
<th>Number on insulin syringe</th>
</tr>
</thead>
<tbody>
<tr>
<td>10mg</td>
<td>0.4ml</td>
<td>40</td>
</tr>
<tr>
<td>15mg</td>
<td>0.6ml</td>
<td>60</td>
</tr>
<tr>
<td>20mg</td>
<td>0.8ml</td>
<td>80</td>
</tr>
<tr>
<td>25mg</td>
<td>1.0ml</td>
<td>100</td>
</tr>
</tbody>
</table>

If you are unsure about your dose or how much liquid you need to inject, check with your GP, pharmacist or rheumatologist before injecting.

How do I do the injection?
1. Wash your hands with soap and water.
2. The area of your skin that you are injecting should be clean (for example after a shower) or wash with soap and water. If you prefer you can wipe it with an alcohol swab but it is not required.
3. Remove the protective cover from the methotrexate vial. If it has been used before rub the rubber top with an alcohol swab.
4. Insert the needle through the rubber stopper of the vial. Push the plunger down to the end to push out any air from the syringe. Pull the plunger back and draw up the required quantity of methotrexate liquid (note, it is not harmful if there is a small air pocket in the syringe and you accidentally inject a little air with the solution under the skin).
5. Pinch about an inch of your cleaned skin and push the needle into the skin, like a dart, at an angle of approximately 90° (right angle). If you are injecting yourself the lower abdomen or the thighs are probably easiest.
6. Release the skin and push the plunger on the syringe all the way down to inject the methotrexate. Pull the needle straight out and apply some pressure to the skin with a cotton wool ball for a few seconds. Do not worry if there is a small amount of leakage or you get methotrexate on your skin as it is not absorbed—just wash your hands. Slight bleeding or bruising at the injection site is normal and the bleeding should ease quickly if you apply pressure with a cotton wool ball or tissue.

7. Put the syringe and any old methotrexate vials, swabs or cotton wool ball into your sharps container. Wash your hands.

**General notes**
The needle and syringe should only be used once and then thrown away in the sharps container. Since the methotrexate solution does not contain preservative it is recommended that it is used once only. However as vials have been safely used more than once you should discuss this with your doctor.

When your sharps container is three quarters full, seal and return to the pharmacy where you buy your methotrexate.

If you are uncertain about anything—particularly the dose—make sure you check with your doctor first.

**For more information**
For further information on methotrexate ask your rheumatologist or go to https://rheumatology.org.au/patients/documents/MethotrexateApril2017_000.pdf

This video also shows how to inject methotrexate safely https://www.youtube.com/watch?v=rDCj8VLBcrk