



Lancashire Teaching  
Hospitals  
NHS Foundation Trust

# PHARMACY 'FAST TRACK' TRAINING PROGRAMME FOR THE PREPARATION OF INJECTABLE MEDICATION

Pharmacy Staff Member Name \_\_\_\_\_

Date \_\_\_\_\_

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## Introduction


During the emergency period relating to Covid-19, it is essential that pharmacy staff are able to support with the preparation of critical injectable medicines. This guidance provides advice to pharmacy staff on how to safely prepare injectable medicines to meet the increased demand whilst minimising wastage.

## Scope

- The guidance contained in these documents applies to the preparation of injectable medication
- The guidance applies only to the preparation of intravenous, subcutaneous, intramuscular, bolus and infused medicines. It does **not** apply to medicines prepared for epidural or spinal injection.
- Assessments and competency observations will be completed by Pharmacy Manufacturing Unit Head of Production or Head of Quality or their designated deputy.
- The guidance is valid only for the duration of the current COVID-19 emergency situation.
- This training is designed to be undertaken by Accuracy Checking Pharmacy Technicians and or Pharmacist in the first instance. Consideration may be given to suitably trained and experienced Pharmacy Technicians/Assistant should workforce resource dictate
- A joint letter from the Department for Health and Social Care, NHS Resolution, and NHS England and NHS Improvement: 'clinical negligence indemnity in response to Coronavirus' outlines indemnity arrangements for HCP whilst working differently during the pandemic.

[https://resolution.nhs.uk/wp-content/uploads/2020/03/20200402-Tripartite Indemnity letter.pdf](https://resolution.nhs.uk/wp-content/uploads/2020/03/20200402-Tripartite%20Indemnity%20letter.pdf)

## Training and Competency Time Table

Task	Duration	Date Completed
Blended Learning Aseptic Non Touch Technique training <a href="https://elearning.lthtr.nhs.uk/course/search.php?search=ANTI">https://elearning.lthtr.nhs.uk/course/search.php?search=ANTI</a>	30 minutes	
Read NPSA Promoting safer use of injectable medicines  2007-NRLS-0434F-Promoting-safeSOP-ten	30 minutes	
Watch Drug Preparation with Ecoflac Connect video <a href="https://www.youtube.com/watch?v=ib2hIb-gZ88">https://www.youtube.com/watch?v=ib2hIb-gZ88</a>	5 minutes	
Aseptic Practical Training	45min 60mins	
Skills Practice	30 mins – 45mins	
Observed Competency for preparation of <b>Performance Criteria should be observed maximum 3 times by the assessor</b> <ul style="list-style-type: none"> <li>• Reconstitution of powdered injection</li> <li>• Preparation of an Ecoflac Plus 100mL</li> </ul>	30 minutes hour	

<ul style="list-style-type: none"> <li>• Withdrawing solution into a syringe and injecting into an intravenous fluid bag</li> </ul>		
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## Observed Competency Assessment for the Preparation of Injectable Medication

### Reconstitution of Powdered Vial

Performance Criteria should be observed maximum 3 times by the assessor

Performance Criteria	Competency Level	Assessor signature	Trainee Signature
Cleaning techniques are performed correctly			
Labels are produced and completed correctly			
Appropriate needles, syringes, etc selected			
Raw materials are selected correctly			
Able to manipulate syringes, needles correctly			
Able to manipulate syringes, needles aseptically			
Reconstitutes powdered vial correctly			
Withdraws reconstituted solution into syringe			
Attaches label to syringe			
Reconciles reconstituted product			
Ensures accuracy check is completed			
Safely disposes of all waste			

Overall Assessment

Competent/Not Competent

A = Proficient
B = Satisfactory
C = Requires further training
D = Unsatisfactory

Comments

Assessor Signature: \_\_\_\_\_ Date: \_\_\_\_\_

### Preparation of Injectable Medication using Ecoflac Device

Performance Criteria should be observed maximum 3 times by the assessor

Performance Criteria	Competency Level	Assessor signature	Trainee Signature
Cleaning techniques are performed correctly			
Work sheet and labels are produced and completed correctly			
Appropriate Ecoflac devices selected			
Raw materials are selected correctly			
ANTT technique is performed			
Reconstitutes powdered vial correctly using Ecoflac device			
Attaches label to bottle			
Reconciles reconstituted product			
Ensures accuracy check is completed			
Safely disposes of all waste			

Overall Assessment

Competent/Not Competent

A = Proficient
B = Satisfactory
C = Requires further training
D = Unsatisfactory

Comments

Assessor Signature: \_\_\_\_\_ Date: \_\_\_\_\_

### Withdrawing Solution into Syringe and injecting into intravenous bag

Performance Criteria should be observed maximum 3 times by the assessor

Performance Criteria	Competency Level	Assessor signature	Trainee Signature
Cleaning techniques are performed correctly			
Work sheet and labels are produced and completed correctly			
Appropriate needles, syringe, etc selected			
Raw materials are selected correctly			
Able to manipulate syringe, needles correctly			
Able to manipulate syringe, needles aseptically			
Draws up solution correctly and injects into IV bag			
Attaches label to bag			
Reconciles reconstituted product			
Ensures accuracy check is completed			
Safely disposes of all waste			

Overall Assessment

Competent/Not Competent

A = Proficient
B = Satisfactory
C = Requires further training

D = Unsatisfactory

Comments

Assessor Signature: \_\_\_\_\_ Date: \_\_\_\_\_

**Checklist for the Reconstitution a Powdered Vial**

## Checklist for the Reconstitution of Medication using an Ecoflac device

Process	Completed
<p>Selects the required medication and checks</p> <ul style="list-style-type: none"> <li>• Drug name</li> <li>• Drug strength</li> <li>• Expiry date</li> </ul>	
<p>Washes hands with bactericidal soap and water or bactericidal alcohol hand rub, and assembles necessary equipment.</p>	
<p>ESSENTIAL EQUIPMENT</p> <p>Washes hands with bactericidal soap and water or bactericidal alcohol hand rub, and assembles necessary equipment.</p> <ul style="list-style-type: none"> <li>• Diluent</li> <li>• Needle</li> </ul>	
<p>ESSENTIAL EQUIPMENT</p> <ul style="list-style-type: none"> <li>• Syringe/filter straw/cap</li> <li>• Ecoflac connect</li> <li>• Sharps Container</li> <li>• Alcohol wipes</li> </ul>	
<p>Applies gloves and apron/ ensures cleaning techniques are performed correctly</p>	
<p>Removes one protective tab on Sodium Chloride 0.9% Ecoflac Plus 100mL bottle and Wipes with alcohol wipe</p>	
<p>Taps the neck of the ampoule gently to release diluent into the ampoule</p>	
<p>Removes protective cap on vial and wipes vial top with alcohol wipe</p>	
<p>Opens Ecoflac connect</p>	
<p>Attaches Ecoflac connect to Sodium Chloride 0.9% Ecoflac Plus 100mL bottle</p>	
<p>Swabs the neck of the ampoule with an alcohol wipe, covers the neck of the ampoule with alcohol wipe and snaps it open. If there is any difficulty, an ampoule opening device may be required</p>	
<p>Attaches other end of Ecoflac connect to vial</p>	
<p>Slowly squeezes Ecoflac Plus 100mL sodium chloride 0.9% into the powder within the vial</p>	
<p>Draws up required diluent volume.</p>	
<p>Removes protective cap from vial and wipes vial with alcohol wipe</p>	
<p>Injects the diluent slowly into the powder within the vial, equalising pressure</p>	
<p>Agitates the vial</p>	
<p>Inspect the contents</p>	
<p>Agitates the vial</p>	
<p>When the solution is clear, elevates vial and squeezes bottle to allow contents of vial to transfer into the Ecoflac Plus 100mL sodium chloride 0.9% bottle</p>	
<p>Inspect the contents for particulates?</p>	
<p>When the solution is clear, withdraws the prescribed amount, tilting the vial if necessary</p>	
<p>Ensures all contents of the vial has transferred into the Ecoflac Plus 100mL sodium chloride 0.9% bottle</p>	
<p>Taps the syringe to dislodge any air bubbles. Expels air.</p>	
<p>Leaves vial in device and attaches a label to the bottle</p>	
<p>Discards used needle into appropriate sharps container and washes hands thoroughly</p>	
<p>Attaches a plastic end cap or new needle</p>	
<p>Attaches a label to the syringe.</p>	
<p>Places syringes in a clinically clean tray</p>	
<p>Washes hands thoroughly</p>	



<b>Process</b>	<b>Completed</b>
Selects the required medication and checks <ul style="list-style-type: none"> <li>• Drug name</li> <li>• Drug strength</li> <li>• Expiry date</li> </ul>	
Washes hands with bactericidal soap and water or bactericidal alcohol hand rub, and assembles necessary equipment.	
ESSENTIAL EQUIPMENT <ul style="list-style-type: none"> <li>• Needle</li> <li>• Syringe/filter straw/cap</li> <li>• Sharps container</li> <li>• Alcohol wipes</li> </ul>	
Applies gloves and apron/ ensures cleaning techniques are performed correctly	
Opens packaging and attaches needle or filter straw to the syringe.	
Taps the neck of the ampoule gently to release diluent into the ampoule.	
Swabs ampoule neck with alcohol wipe, covers the neck of the ampoule with an alcohol wipe and snaps it open. If there is any difficulty, an ampoule opening device may be required	
Draws up required volume of medication	
Inspect the contents	
Taps the syringe to dislodge any air bubbles. Expels air.	
Discards used needle or filter straw into appropriate sharps container and attaches a plastic end cap or new needle	
Attaches a label to the syringe.	
Places syringes in a clinically clean tray	
Washes hands thoroughly	

**Checklist for the withdrawing of medication from an ampoule into a syringe**

**Checklist for the withdrawing of medication from an ampoule into a syringe and injecting into an intravenous fluid bag**

Process	Completed
Selects the required medication and checks <ul style="list-style-type: none"> <li>• Drug name</li> <li>• Drug strength</li> <li>• Expiry date</li> </ul>	
Washes hands with bactericidal soap and water or bactericidal alcohol hand rub, and assembles necessary equipment.	
<b>ESSENTIAL EQUIPMENT</b> <ul style="list-style-type: none"> <li>• Needle</li> <li>• Syringe/filter straw/cap</li> <li>• Sharps container</li> <li>• Alcohol wipes</li> </ul>	
Applies gloves and apron/ ensures cleaning techniques are performed correctly	
Opens packaging and attaches needle or filter straw to the syringe.	
Taps the neck of the ampoule gently to release diluent into the ampoule.	
Swabs ampoule neck with alcohol wipe, covers the neck of the ampoule with an alcohol wipe and snaps it open. If there is any difficulty, an ampoule opening device may be required	
Draws up required volume of medication	
Inspect the contents for particles	
Taps the syringe to dislodge any air bubbles. Expels air.	
Discards used needle or filter straw into appropriate sharps container and attaches a green needle	
Removes outer packaging from IV bag	
Wipes IV bag port with alcohol wipe	
Injects contents of syringe into IV bag taking care not to puncture the IV bag.	
Removes syringe from IV bag and wipes IV bag port with alcohol wipe Attaches suitable cap to port	

<b>Process</b>	<b>Completed</b>
Selects the required medication and checks <ul style="list-style-type: none"> <li>• Drug name</li> <li>• Drug strength</li> <li>• Expiry date</li> </ul>	
Washes hands with bactericidal soap and water or bactericidal alcohol hand rub, and assembles necessary equipment.	
ESSENTIAL EQUIPMENT <ul style="list-style-type: none"> <li>• Needle</li> <li>• Syringe/needle /cap</li> <li>• Sharps Container</li> <li>• Alcohol wipes</li> </ul>	
Applies gloves and apron/ ensures cleaning techniques are performed correctly	
Opens packaging and attaches needle to the syringe.	
Removes protective cap from vial and wipes vial with alcohol wipe	
Withdraws the prescribed amount, equalising pressure /tilting the vial if necessary.	
Taps the syringe to dislodge any air bubbles. Expels air.	
Inspect the contents for particulates	
Discards used needle into appropriate sharps container and attaches a plastic end cap or new needle	
Attaches a label to the syringe.	
Places syringes in a clinically clean tray	
Washes hands thoroughly	
Labels IV bag	
Disposes of syringe in sharps container	
Washes hands thoroughly	

**Checklist for the withdrawing of medication from a liquid vial into a syringe**

