

Nebulised Colistin (Colomycin or Colistimethate Sodium)

What is Colistin

Colistin is an antibiotic given via a nebuliser so you can inhale it into your lungs.

It is used to treat lung infections caused by certain types of germs (bacteria). The bacteria can also damage the lungs if left uncontrolled.

Colistin works by killing the bacteria causing the infection. It is not well-absorbed by the body if it is taken by mouth, so instead it is given by injection or breathed into the lungs (inhaled).

Colistin, if prescribed, should be taken twice a day every day for months. After a period, your doctor will review if the Colistin needs to be continued. Further saliva samples are usually needed to decide how long to continue treatment for.

Do NOT stop Colistin without your doctor's instruction.

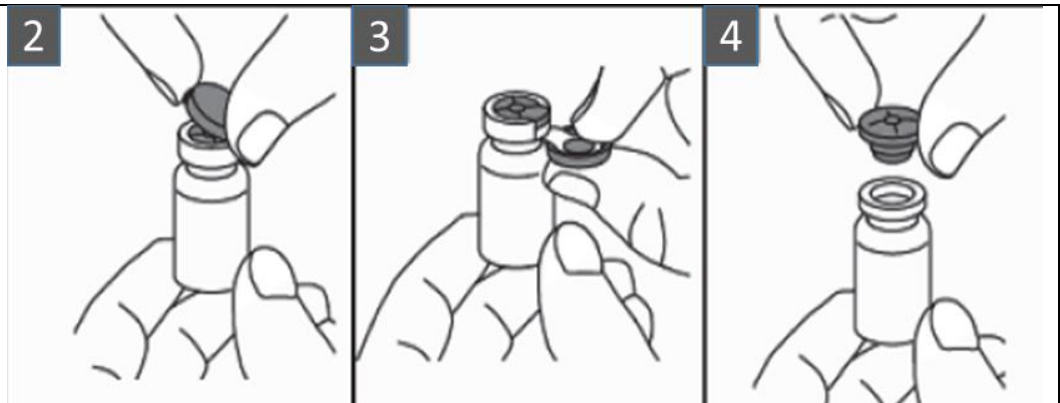
Preparing Colistin vial (Colomycin 1 million units/ vial) for Nebulisation

Equipment needed

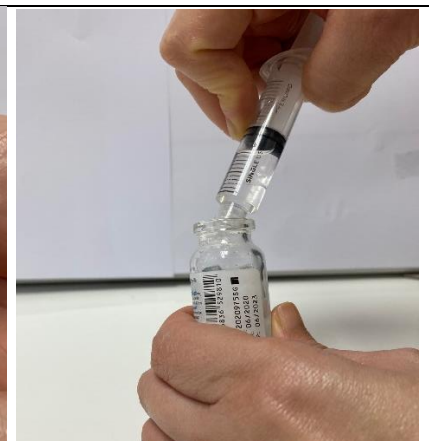
1. Colomycin vial (1 million units per vial)
2. Sodium chloride 0.9% (saline) 20mL for injection (plastic ampoule)
3. 5 mL plastic syringe
4. Nebulizing equipment

Steps on preparing the Colistin Nebulisation

1. Wash your hands with soap and water and dry thoroughly.
2. Flip up the plastic cap of the Colomycin vial.
3. Remove the foil seal around the top of the vial completely.
4. Take out the rubber bung carefully. Keep the rubber bung aside.



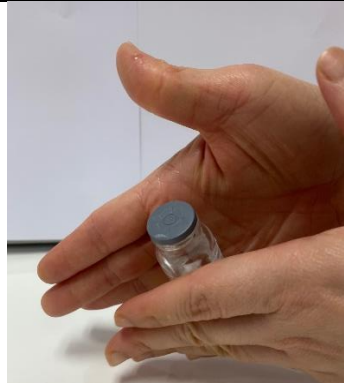
5. Using the 5mL plastic syringe, carefully draw out 4mL of Sodium chloride 0.9% (saline) from the Sodium chloride 0.9% (saline) plastic ampoule.
6. Add 4mL of Sodium chloride 0.9% (saline) into the Colomycin vial to dissolve the powder.



7. Replace rubber bung into the Colomycin vial.

Slowly roll the closed vial upright between your palms until the powder is completely dissolved.

9. Do not shake the vial as the solution may foam and you will not be able to use it.



10. If a lot of foam forms, put the vial down and let it settle for several minutes. After the foam has dispersed, roll the vial gently between your palms to dissolve the rest of the powder.

11. Remove the bung and draw out the prescribed dose from the vial into the nebulizing cup.

12. Attach the nebulizing cup to the nebulizer and switch on the nebulizer.



Cleaning of the nebulizing cup

1. Immediately after use, rinse the cup with remaining Sodium chloride 0.9% (saline) and pour away.
2. Add a few drops of Sodium chloride 0.9% (saline) into the cup and switch on the nebulizer to let it run to dry the cup.
3. Refer to the nebulizer manual or "General Information On Nebuliser Cleaning" for instructions on the cleaning and sterilization of nebuliser parts.

Side effects

Like all medications, nebulised Colistin can cause side effects - these are rare because very little of the drug is absorbed into the bloodstream.

Occasionally, nebulised colistin can cause your chest to feel tight/wheezy or you may become breathless and cough. If this occurs, you may use Salbutamol via nebuliser/inhaler 15 minutes prior to using your Colistin. If it continues, you may have to stop using Colistin and inform your doctor.

You may experience a sore mouth/ throat after using your nebuliser - rinsing your mouth and gargling after use may help.

If you experience an allergic reaction, such as a skin rash or severe bronchospasm, stop taking your Colistin and inform your doctor. Rarely, your kidneys or hearing could be affected.

Note that Colistin does cross the placental barrier and there may be a risk of foetal toxicity if pregnant caregivers are exposed. Exposure to pregnant caregivers during nebulisation should be minimized.

References:

- Colistimethate sodium Injection 1 million unit (Colomycin) patient information leaflet
- NHS Trust Nebulised Colomycin Therapy: Information for Patients reviewed Nov 2022