

VII. TB Drugs

A. NC TB Program

1. Supplies drugs, including PPD, only to health departments.
2. Contracts with a vendor to ship drugs within 24 hours of the drug order. (Note: Counties that have contracts with Cardinal for weekly drug deliveries will only receive drug orders on Wednesday).
3. Does **not** provide medications for the treatment of nontuberculous mycobacterial infection.
4. Allows rifampin use for contacts to *Hemophilus influenza* and meningococcal disease. Communicable Disease (919) 733-3419 must be consulted if more than two bottles are needed to treat all the contacts.

B. Health Department Pharmacy

1. Maintains contract with the state vendor so TB drugs can be shipped directly to the county.
2. Dispenses medications in compliance with applicable laws and health department policy.
3. Labels medications for dispensing on an as needed basis. The N.C. TB Control Branch cannot return pre-labeled drugs to the pharmaceutical company for credit.
4. Prepares suspension/liquid forms of rifampin, PZA or other drugs.
5. Does not provide medications for the treatment of non-tuberculosis mycobacterium (NTM).
6. Does not provide PPD to other health care providers or other agencies.
7. Maintains a log with patient name, lot number, manufacturer, and expiration date.
8. Follows the Public Health Pharmacy Rule § G.S. 90-85.34A. (Refer to Chapter XI).

C. Drug Information

1. Purified Protein Derivative (PPD)
 - Must be refrigerated during shipping.
 - Should be stored in refrigerator between 35°-46° F.
 - Should never be frozen.
 - Discard 30 days after opening, or if solution becomes cloudy.
 - Protected from light.
 - If you have questions about PPD stability you should call Sanofi Pasteur (Tubersol) at 1-800-822-2463. They will need to know if the vial has been opened, the temperature of the room, the length of time at this temperature,

and, if this was a shipment, length of transit since removal from refrigeration.

- Health departments are not permitted to supply PPD to any other provider.
- State-provided PPD may only be used on those people who are considered high-risk for developing TB. See Chapter II for clarification about who is at high-risk.
- Locally purchased PPD should be used for low risk tuberculin skin testing.

D. Ordering Drugs

1. Complete Tuberculosis Biologicals Requisition and Inventory form (DHHS 3093) which can be found at:
https://epi.publichealth.nc.gov/cd/tb/docs/dhhs_3093.pdf
2. Fax orders to Eric Davis at (919) 733-2054. If you have questions about an order you can reach Eric at 919-755-3151.
3. Contracts with a vendor to ship drugs within 24 hours of the drug order. (Note: Counties that have contracts with Cardinal for weekly drug deliveries will only receive drug orders on Wednesday).
4. Orders shipped from Cardinal Health are delivered by commercial carrier and require a signature upon receipt.
5. The Cardinal invoices shipped with the TB biologicals are to be documented as “received” and initialed by an agency representative. Any missing TB biologicals are to be noted on the invoice. Then call the Field Development Unit at (919) 755-3151 to report the missing TB biologicals.
6. The original Cardinal invoice is required for payment. It should be signed and mailed within three business days to Eric Davis. Invoices can also be scanned and emailed to eric.a.davis@dhhs.nc.gov :

DHHS/Division of Public Health
Epidemiology Section, Communicable Disease Branch
Field Development Unit
1933 Mail Service Center
Raleigh, NC 27699-1933
Attn: Eric Davis
7. All expired drug disposal is the responsibility of the local health department in accordance with state and local drug disposal guidelines.
8. All local health departments must have a separate 340b HRSA account for TB drugs and must re-certify this account annually.
9. If you have questions about TB drugs and cannot reach Eric Davis, please contact Ron Higginbotham at 919-755-3139 and if he is unavailable contact Pete Moore at 919-755-3140.

10. All drugs except Tubersol, Sodium Chloride, Streptomycin, INH, RIF, Rifapentine (RPT), PZA, and EMB must have approval from a TB Nurse Consultant or Medical Director before it can be shipped.

E. Common Drug Interactions with Tuberculosis Medications

TB medications may interact with many other medications, and in some cases the interaction may be two-way (TB drugs affect the other medications and the other medications affect the TB drugs). As information regarding drug interactions is constantly changing, the NC TB Program strongly recommends the use of one or more of the following resources to evaluate drug interactions:

- Medscape Drug Interaction Checker (<https://reference.medscape.com/drug-interactionchecker>).
Online, free resource that permits the user to enter a list of medications and will look for interactions among all medications on the list.
- NIH AIDSinfo website (<https://aidsinfo.nih.gov>).
Online, free resource containing up to date information and guidelines pertaining to HIV/AIDS. The specific guidelines that list drug interactions related to TB/HIV medications are at <https://aidsinfo.nih.gov/guidelines/html/4/adult-and-adolescent-oi-prevention-and-treatment-guidelines/0>
- ATS/CDC/IDSA Treatment of Drug-Susceptible Tuberculosis guideline (<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6590850/>)
Current international guideline for treatment of drug-susceptible tuberculosis. Table 8 summarizes important drug interactions between the rifamycins and other medications.

F. TB Drug Abbreviations

Drug	Abbreviation
Isoniazid	INH
Rifampin	RIF
Rifabutin	RFB
Rifapentine	RPT
Pyrazinamide	PZA
Ethambutol	EMB
Moxifloxacin	MXF
Streptomycin	SM
Cycloserine	CIS
Kanamycin	KM
Ethionamide	THA
Capreomycin	CAP
Ciprofloxacin	CIP
Amikacin	AK
Para-aminosalicylic acid	PAS