Alaska TB Program: Timeline for the Case Management of Tuberculosis Treatment Rev. 11/16

Activity	Weeks									Months					End of treatment evaluation
	0	1	2	3	4	5	6	7	8	3	4	5	6	9 ❺	
	Initial Treatment Phase									Continuation Treatment Phase					
Clinical & lab evaluation History & Physical CBC, platelets, creatinine, AST, bilirubin, alk. phosph. Visual acuity, color vision HIV test	X X X X X				❶ →										Not recommended
Drugs	Isoniazid (INH) → Rifampin (RIF) → Pyrazinamide (PZA) → Ethambutol (EMB) →									❷ ❸					
Treatment options	**All doses should be taken using directly observed therapy (DOT)** Regimens listed in order of effectivness, with 1 being the MOST effective and preferred regimen														
1.) INH, RIF, PZA, EMB ❹	Dose daily (7 days/wk) for 56 doses (8 wks) or 5 days/wk for 40 doses (8 wks). Preferred regimen for patients with newly diagnosed pulmonary TB.									7 days/wk for 126 doses (18 wks) 5 days/wk for 90 doses or twice wkly for 36 doses (18 wks)				❺	Count doses delivered by DOT to assure treatment completion ❻
2.) INH, RIF, PZA, EMB ❹	Dose daily (7 days/wk) for 56 doses (8 wks) or 5 days/wk for 40 doses (8 wks). Preferred regimen when more frequest DOT during continuation phase is difficult to acheive.									3 days/week for 54 doses (18 wks)				❺	
3.) INH RIF, PZA, EMB ❹	Dose three times wkly for 24 doses (8 wks.); use regimen with caution in patients with HIV and/or cavitary disease. Missed doses can lead to treatment failure, relapse and acquired drug resistance.									Three times wkly for 54 doses (18 wks)				❺	
4.) INH, RIF,PZA, EMB ❹	7 days/wk for 14 doses then twice weekly for 12 doses. Do not use twice-weekly regimens in HIV-infected patients or patients with smear-positive and/or cavitary disease. If does are missed, then therapy can be equivalent to once weekly, which is inferior.									Twice weekly for 36 doses (18 wks)					
Sputum collection ❼	X				X				X	Collect sputa at least monthly until culture conversion occurs					Optional
Chest x-ray	X									(X)	❽				Optional
Clinical assessment during treatment ❾	X				X				X	X	X	X	X	X	
DOT & compliance evaluation ❿	X				X				X	X	X	X	X	X	
Contact investigation	Screen priority contacts (TST/IGRA or SX & sputa)								Repeat TSTs/IGRA if initially negative						Confirm completion of contact investigation

❶ Repeat liver enzyme tests if signs of drug toxicity appear during treatment. Perform monthly liver enzyme tests if high risk for hepatic toxicity (e.g. pre-existing liver disease or with abnormal liver function that does not require discontinuation).
❷ Discontinue pyrazinamide after 8 weeks
❸ Discontinue ethambutol if *M. tuberculosis* is sensitive to all first line anti-tuberculosis agents.
❹ Refer to OMTS/CDC/IDSA Treatment of Drug-Susceptible Tuberculosis 2016 Guidance which can be found at http://cid.oxfordjournals.org/content/63/7/e147.full.pdf+html
❺ Patients with cavitation on initial CXR and (+) culture at completion of 2 months treatment should receive a 7-month continuation phase.
❻ Consult the Alaska TB program to verify count of DOT doses and determine end of treatment date.
❼ Collect 3 sputa monthly until all 3 are culture negative. Consider more frequent collection if clinically indicated. Repeat susceptibility testing if cultures positive after 3 mos of treatment.
❽ If the patient is culture-negative, a repeat CXR is indicated during treatment to demonstrate improvement. A repeat CXR may also be useful if sputum specimens remains culture positive > 3 mo.
❾ Perform monthly clinical assessments throughout treatment. Ask about nausea, vomiting, abdominal pain or swelling, jaundice, joint pain, vision changes, tingling extremities, or flu-like symptoms. When EMB is part of the regimen, test visual acuity and color vision.
❿ Assess adherence to DOT & treatment plan. Use incentives & enablers. Report ≥ 2 missed DOT doses to the Alaska TB Program.