

REQUEST FOR TUBERCULOSIS MEDICATIONS PROCEDURE MANUAL

North Dakota Department of Health

2017

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Background of TB Program and Goals

The North Dakota TB and Prevention Program is structured to eliminate TB in North Dakota.

Current strategies are effective in controlling TB, but not sufficient to promote progress toward the goal of eliminating TB in the United States. Current TB control priorities remain important to prevent a resurgence of TB, but expanded measures and new strategies are needed to achieve TB elimination. Targeted testing and treatment of latent TB infection in populations at high risk for TB are key strategies for lowering incidence and moving toward elimination.

Program Objectives and Performance Targets to eliminate TB in North Dakota include:

Goals for Reducing TB Incidence

- Reduce the incidence of TB disease
- Decrease the incidence of TB disease among US-born persons
- Decrease the incidence of TB disease among foreign-born persons
- Decrease incidence of TB disease among US-born non-Hispanic blacks or African Americans
- Decrease the incidence of TB disease among children younger than 5 years of age

Objectives on Case Management and Treatment

- Increase the proportion of TB patients who have a positive or negative HIV test result reported
- For TB Patients with positive acid-fast bacillus (AFB) sputum-smear results, increase the proportion who initiate treatment within 7 days of specimen collection
- For patients whose diagnosis is likely to be disease, increase the proportion who are started on the recommended initial 4-drug regimen
- For TB patients ages 12 years of age or older with a pleural or respiratory site of disease, increase the proportion who have a sputum culture result reported
- For TB patients with positive sputum culture results, increase the proportion who have documented conversion to negative results within 60 days of treatment initiation
- For patients with newly diagnosed TB disease for whom 12 months or less of treatment is indicated, increase the proportion who complete treatment within 12 months

Objectives on Contact Investigations

- For TB patients with positive AFB sputum-smear results, increase the proportion who have contacts elicited
- For contacts to sputum AFB smear-positive TB cases, increase the proportion who are examined for infection and disease
- For contacts to sputum AFB smear-positive cases diagnosed with latent TB infection, increase the proportion who start treatment
- For contacts to sputum AFB smear-positive TB cases who have started treatment for latent TB infection, increase the proportion who complete treatment

Who is eligible to receive TB medications?

The North Dakota TB Prevention and Control Program provides medication for all LTBI cases as well as all suspected/confirmed cases of TB disease for all individuals residing in North Dakota. Century Code 23-07.1-02 states medications for latent TB infection (LTBI) and active TB disease will be provided at no cost to the infected individual.

NDDoH contracts with public health to provide case management for all infected individuals during their treatment regimen.

Treatment of Latent TB Infection (LTBI)

Treatment should be initiated after the possibility of TB disease has been excluded. Treatment regimens use isoniazid (INH), rifampin (RIF) or isoniazid/rifapentine (3HP).

To receive medication(s) for LTBI the following items are needed:

1. Completed Request for Latent TB Infection Medications form
2. Radiology report of chest x-ray
3. e-Script sent to UND Center for Family Medicine – Bismarck

If the patient has no risk factors for TB, the chest x-ray must be dated within 6 months of the medication request.

If the patient has any of the following risk factors for TB, the chest x-ray must be dated within 3 months of the request for medications.

- Persons who have immigrated (within the last 5 years) from areas of the world with high rates of TB
- Children less than 5 years of age who have a positive TB test
- Groups with high rates of TB transmission, such as homeless persons, injection drug users, and persons with HIV infection
- Persons who work or reside with people who are at high risk for TB in facilities or institutions such as hospitals, homeless shelters, correctional facilities, nursing homes, and residential homes for those with HIV
- Substance abuse
- Silicosis
- Diabetes mellitus
- Severe kidney disease
- Low body weight (less than 10% of Ideal)
- Head and neck cancer
- Medical treatments such as corticosteroids or organ transplant
- HIV infection (the virus that causes AIDS)
- Close contacts of a person with infectious TB disease
- Person with changes to CXR consistent with prior TB
- Organ transplants or other immunosuppressed people
- Specialized treatment (i.e. meds that depress immune system) for rheumatoid arthritis or Crohn's disease

Baseline Laboratory Testing

Baseline laboratory testing (measurements of serum AST, ALT, and bilirubin) are not routinely necessary

Laboratory testing at the start of LTBI therapy is recommended for patients with any of the following factors:

- Liver disorders
- History of liver disease (e.g., hepatitis B or C, alcoholic hepatitis, or cirrhosis)
- Regular use of alcohol
- Risks for chronic liver disease
- HIV infection
- Pregnancy or the immediate postpartum period (i.e., within 3 months of delivery)

Baseline testing can be considered on an individual basis, especially for patients taking other medications for chronic medical conditions.

After baseline testing, routine periodic retesting is recommended for persons who had abnormal initial results and other persons at risk for hepatic disease.

At any time during treatment, whether or not baseline tests were done, laboratory testing is recommended for patients who have symptoms suggestive of hepatitis (e.g., fatigue, weakness, malaise, anorexia, nausea, vomiting, abdominal pain, pale stools, dark urine, chills) or who have jaundice. Patients should be instructed, at the start of treatment and at each monthly visit, to stop taking treatment and to seek medical attention immediately if symptoms of hepatitis develop and not to wait until a clinic visit to stop treatment.

AST or ALT elevations up to 5 times normal can be accepted if the patient is free of hepatitis symptoms, and up to 3 times normal if there are signs or symptoms of liver toxicity.

Fax all information local public health or state health department based on residence of infected person.

- Burleigh County (Bismarck-Burleigh Public Health) **701.221.6883**
- Cass County (Fargo-Cass Public Health) **701.298.6926**
- Grand Forks County (Grand Forks Public Health) **701.787.8145**
- Ward County (First District Health Unit) **701.852.2103**
- All other counties (NDDoH-TB Prevention and Control Program) **701.328.2499**

Treatment of TB Disease

Treatment options for TB disease vary depending on many factors (HIV, drug resistance, pregnancy and in the treatment of children).

Please contact the TB Prevention and Control Program to discuss ordering medication for the treatment of suspected/confirmed TB disease. Phone: 701.328.2377 or 701.328.2499.

Complete either:

- Adult Patient Information Sheet for Treatment of Active Disease
- Child Patient Information Sheet for Treatment of Active Disease

How to Treat Tuberculosis

Latent TB Infection (LTBI)

People with latent TB infection do not have symptoms, and they cannot spread TB bacteria to others. However, if TB bacteria become active in the body and multiply, the person will go from having latent TB infection to being sick with TB disease. For this reason, people with latent TB infection are often prescribed treatment to prevent them from developing TB disease. Treatment of latent TB infection is essential for controlling and eliminating TB in the United States.

Treatment of latent TB infection should be initiated after the possibility of TB disease has been excluded.

Groups Who Should Be Given High Priority for Latent TB Infection Treatment

People with a positive IGRA result or a TST reaction of 5 or more millimeters

- HIV-infected persons
- Recent contacts of a TB case
- Persons with fibrotic changes on chest radiograph consistent with old TB
- Organ transplant recipients
- Persons who are immunosuppressed for other reasons (e.g., taking the equivalent of >15 mg/day of prednisone for 1 month or longer, taking TNF- α antagonists)

People with a positive IGRA result or a TST reaction of 10 or more millimeters

- Recent immigrants (< 5 years) from high-prevalence countries
- Injection drug users
- Residents and employees of high-risk congregate settings (e.g., correctional facilities, nursing homes, homeless shelters, hospitals, and other health care facilities)
- Mycobacteriology laboratory personnel
- Children under 4 years of age, or children and adolescents exposed to adults in high-risk categories

Persons with no known risk factors for TB may be considered for treatment of LTBI if they have either a positive IGRA result or if their reaction to the TST is 15 mm or larger. However, targeted TB testing programs should only be conducted among high-risk groups. All testing activities should be accompanied by a plan for follow-up care for persons with TB infection or disease.

Treatment Regimens

The four treatment regimens for latent TB infection (LTBI) use isoniazid (INH), rifapentine (RPT), or rifampin (RIF). Treatment must be modified if the patient is a contact of an individual with drug-resistant TB disease. Consultation with a TB expert is advised if the known source of TB infection has drug-resistant TB.

Table 2: Choosing the Most Effective LTBI Treatment Regimen

Drug(s)	Duration	Dose	Frequency	Total Doses
Isoniazid (INH)	9 months	Adult: 5 mg/kg Children: 10-20 mg/kg** Maximum dose: 300 mg	Daily	270
		Adult: 15 mg/kg Children: 20-40 mg/kg** Maximum dose: 900 mg	Twice weekly†	76
	6 months	Adult: 5 mg/kg Children: Not recommended Maximum dose: 300 mg	Daily	180
		Adult: 15 mg/kg Children: Not recommended Maximum dose: 900 mg	Twice weekly†	52
Isoniazid (INH) and Rifapentine (RPT)	3 months	Adults and Children 12 years of age and over: INH* : 15 mg/kg rounded up to the nearest 50 or 100 mg; 900 mg maximum RPT* : 10.0–14.0 kg 300 mg 14.1–25.0 kg 450 mg 25.1–32.0 kg 600 mg 32.1–49.9 kg 750 mg ≥ 50.0 kg 900 mg maximum	Once weekly†	12
Rifampin (RIF)	4 months	Adult: 10 mg/kg*** Maximum dose: 600 mg	Daily	120

Source: <https://www.cdc.gov/tb/publications/LTBI/treatment.htm>

†Intermittent regimens must be provided via directly observed therapy (DOT), i.e., health care worker observes the ingestion of medication.

*Isoniazid (INH) is formulated as 100 mg and 300 mg tablets. Rifapentine (RPT) is formulated as 150 mg tablets in blister packs that should be kept sealed until usage.

** The American Academy of Pediatrics recommends an INH dosage of 10-15 mg/kg for the daily regimen and 20-30 mg/kg for the twice weekly regimen.

***In the United States, the recommended regimen for treatment of LTBI in children is a 9-month course of INH. For the treatment of LTBI in infants, children, and adolescents when INH could not be tolerated or the child has had contact with a case patient infected with an isoniazid-resistant but rifamycin-susceptible organism the American Academy of Pediatrics recommends 6 months of daily rifampin (RIF) (180 doses) at a dosage of 10-20 mg/kg.

Active TB Disease

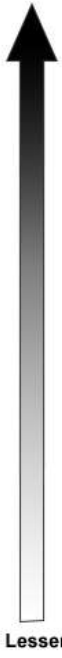
When TB bacteria become active (multiplying in the body) and the immune system can't stop the bacteria from growing, this is called TB disease. TB disease will make a person sick. People with TB disease may spread the bacteria to people with whom they spend many hours.

It is very important that people who have TB disease are treated, finish the medicine, and take the drugs exactly as prescribed. If they stop taking the drugs too soon, they can become sick again; if they do not take the drugs correctly, the TB bacteria that are still alive may become resistant to those drugs. TB that is resistant to drugs is harder and more expensive to treat.

TB disease can be treated by taking several drugs for 6 to 9 months. There are 10 drugs currently approved by the U.S. Food and Drug Administration (FDA) for treating TB. Of the approved drugs, the first-line anti-TB agents that form the core of treatment regimens are:

- Isoniazid (INH)
- Rifampin (RIF)
- Ethambutol (EMB)
- Pyrazinamide (PZA)

Drug Susceptible TB Disease Treatment Regimens

Regimen	INTENSIVE PHASE		CONTINUATION PHASE			Comments ^{c,d}	Regimen Effectiveness
	Drugs ^a	Interval and Dose ^b (minimum duration)	Drugs	Interval and Dose ^{b,c} (minimum duration)	Range of Total Doses		
1	INH RIF PZA EMB	7 days/week for 56 doses (8 weeks) <i>or</i> 5 days/week for 40 doses (8 weeks)	INH RIF	7 days/week for 126 doses (18 weeks) <i>or</i> 5 days/week for 90 doses (18 weeks)	182 to 130	This is the preferred regimen for patients with newly diagnosed pulmonary TB.	
2	INH RIF PZA EMB	7 days/week for 56 doses (8 weeks) <i>or</i> 5 days/week for 40 doses (8 weeks)	INH RIF	3 times weekly for 54 doses (18 weeks)	110 to 94	Preferred alternative regimen in situations in which more frequent DOT during continuation phase is difficult to achieve.	
3	INH RIF PZA EMB	3 times weekly for 24 doses (8 weeks)	INH RIF	3 times weekly for 54 doses (18 weeks)	78	Use regimen with caution in patients with HIV and/or cavitary disease. Missed doses can lead to treatment failure, relapse, and acquired drug resistance.	
4	INH RIF PZA EMB	7 days/week for 14 doses then twice weekly for 12 doses ^e	INH RIF	Twice weekly for 36 doses (18 weeks)	62	Do not use twice-weekly regimens in HIV-infected patients or patients with smear positive and/or cavitary disease. If doses are missed then therapy is equivalent to once weekly, which is inferior.	

Abbreviations: DOT = directly observed therapy; EMB = ethambutol; HIV = human immunodeficiency virus; INH = isoniazid; PZA = pyrazinamide; RIF = rifampin.

^a Other combinations may be appropriate in certain circumstances; additional details are provided in the [Official American Thoracic Society/Centers for Disease Control and Prevention/Infectious Diseases Society of America Clinical Practice Guidelines: Treatment of Drug-Susceptible Tuberculosis](#).

^b When DOT is used, drugs may be given 5 days per week and the necessary number of doses adjusted accordingly. Although there are no studies that compare 5 with 7 daily doses, extensive experience indicates this would be an effective practice. DOT should be used when drugs are administered less than 7 days per week.

^c Based on expert opinion, patients with cavitation on initial chest radiograph and positive cultures at completion of 2 months of therapy should receive a 7-month (31-week) continuation phase.

^d Pyridoxine (vitamin B6), 25–50 mg/day, is given with INH to all persons at risk of neuropathy (e.g., pregnant women; breastfeeding infants; persons with HIV; patients with diabetes, alcoholism, malnutrition, or chronic renal failure; or patients with advanced age). For patients with peripheral neuropathy, experts recommend increasing pyridoxine dose to 100 mg/day.

^e Alternatively, some U.S. TB control programs have administered intensive-phase regimens 5 days per week for 15 doses (3 weeks), then twice weekly for 12 doses.

Continuation Phase of Treatment

The continuation phase of treatment is given for either 4 or 7 months. The 4-month continuation phase should be used in most patients. The 7-month continuation phase is recommended only for the following groups:

- Patients with cavitory pulmonary TB caused by drug-susceptible organisms and whose sputum culture obtained at the time of completion of 2 months of treatment is positive;
- Patients whose intensive phase of treatment did not include PZA;
- Patients with HIV who are not receiving antiretroviral treatment (ART) during TB treatment; and
- Patients being treated with once weekly INH and rifampine and whose sputum culture obtained at the time of completion of the intensive phase is positive.

Treatment Completion

Treatment completion is determined by the number of doses ingested over a given period of time.

TABLE 2. Drug regimens for culture-positive pulmonary tuberculosis caused by drug-susceptible organisms

Initial phase			Continuation phase			Rating* (evidence)†		
Regimen	Drugs	Interval and doses‡ (minimal duration)	Regimen	Drugs	Interval and doses‡ (minimal duration)	Range of total doses (minimal duration)	HIV-‡	HIV+‡
1	INH RIF PZA EMB	Seven days per week for 50 doses (8 wk) or 5 d/wk for 40 doses (8 wk)†	1a	INH-RIF	Seven days per week for 120 doses (18 wk) or 5 d/wk for 90 doses (18 wk)†	182-190 (20 wk)	A (I)	A (I)
			1b	INH-RIF	Twice weekly for 30 doses (18 wk)	92-76 (20 wk)	A (I)	A (I)†
			1c**	INH-RPT	Once weekly for 18 doses (18 wk)	74-58 (20 wk)	B (I)	E (I)
2	INH RIF PZA EMB	Seven days per week for 14 doses (2 wk), then twice weekly for 12 doses (2 wk) or 5 d/wk for 10 doses (2 wk),† then twice weekly for 12 doses (8 wk)	2a	INH-RIF	Twice weekly for 30 doses (18 wk)	62-58 (20 wk)	A (I)	B (I)†
			2b**	INH-RPT	Once weekly for 18 doses (18 wk)	44-40 (20 wk)	B (I)	E (I)
3	INH RIF PZA EMB	Three times weekly for 24 doses (8 wk)	3a	INH-RIF	Three times weekly for 54 doses (18 wk)	78 (20 wk)	B (I)	B (I)
4	INH RIF EMB	Seven days per week for 50 doses (8 wk) or 5 d/wk for 40 doses (8 wk)†	4a	INH-RIF	Seven days per week for 217 doses (31 wk) or 5 d/wk for 155 doses (31 wk)†	273-195 (30 wk)	C (I)	C (II)
			4b	INH-RIF	Twice weekly for 62 doses (31 wk)	116-102 (30 wk)	C (I)	C (II)

Definition of abbreviations: EMB = Ethambutol; INH = Isoniazid; PZA = Pyrazinamide; RIF = rifampin; RPT = rifapentine.
 * Definitions of evidence ratings: A = preferred; B = acceptable alternative; C = offer when A and B cannot be given; E = should never be given.
 † Definition of evidence ratings: I = randomized clinical trial; II = data from clinical trials that were not randomized or were conducted in other populations; III = expert opinion.
 ‡ When DOT is used, drugs may be given 5 days/week and the necessary number of doses adjusted accordingly. Although there are no studies that compare five with seven daily doses, extensive experience indicates this would be an effective practice.
 § Patients with cavitation on initial chest radiograph and positive cultures at completion of 2 months of therapy should receive a 7-month (31 week) either 217 doses (daily) or 62 doses (twice weekly) continuation phase.
 ¶ Five-day-a-week administration is always given by DOT. Rating for 5 day/week regimens is A(III).
 †† Not recommended for HIV-infected patients with CD4+ cell counts <100 cells/µl.
 ††† Options 1c and 2b should be used only in HIV-negative patients who have negative sputum smears at the time of completion of 2 months of therapy and who do not have cavitation on initial chest radiograph (see text). For patients started on this regimen and found to have a positive culture from the 2-month specimen, treatment should be extended an extra 3 months.

TABLE 3. Doses* of antituberculosis drugs for adults and children†

Drug	First-line drugs Preparation	Adults/children	Doses			
			Daily	1x/wk	2x/wk	3x/wk
Isoniazid	Tablet (50 mg, 100 mg, 300 mg); elixir (50 mg/5 mL); aqueous solution (100 mg/mL) for intravenous or IM injection	Adults (max.) Children (max.)	5 mg/kg (300 mg) 10-15 mg/kg (300 mg)	15 mg/kg (300 mg) —	15 mg/kg (300 mg) 20-30 mg/kg (300 mg)	15 mg/kg (300 mg) —
Rifampin	Capsule (150 mg, 300 mg); powder may be suspended for oral administration; aqueous solution for IM injection	Adults† (max.) Children (max.)	10 mg/kg (300 mg) 10-20 mg/kg (300 mg)	— —	10 mg/kg (300 mg) 10-20 mg/kg (300 mg)	10 mg/kg (300 mg) —
Rifabutin	Capsule (150 mg)	Adults† (max.) Children	5 mg/kg (300 mg) Appropriate dosing for children is unknown	— Appropriate dosing for children is unknown	5 mg/kg (300 mg) Appropriate dosing for children is unknown	5 mg/kg (300 mg) Appropriate dosing for children is unknown
Rifapentine	Tablet (150 mg, film coated)	Adults Children	— The drug is not approved for use in children	10 mg/kg (continuation phase) (300 mg) The drug is not approved for use in children	— The drug is not approved for use in children	— The drug is not approved for use in children
Pyrazinamide	Tablet (500 mg, scored)	Adults Children (max.)	See Table 4 15-30 mg/kg (2.0 g)	— —	See Table 4 50 mg/kg (2 g)	See Table 4 —
Ethambutol	Tablet (100 mg, 400 mg)	Adults Children† (max.)	See Table 5 15-20 mg/kg daily (1.0 g)	— —	See Table 5 50 mg/kg (2.5 g)	See Table 5 —

* Dose per weight is based on ideal body weight. Children weighing more than 40 kg should be dosed as adults.
 † For purposes of this document adult dosing begins at age 15 years.
 ‡ Dose may need to be adjusted when there is concomitant use of protease inhibitors or nonnucleoside reverse transcriptase inhibitors.
 § The drug can likely be used safely in older children but should be used with caution in children less than 5 years of age, in whom visual acuity cannot be monitored. In younger children EMB at the dose of 15 mg/kg per day can be used if there is suspected or proven resistance to INH or RIF.

TABLE 4 and 5: Suggested Pyrazinamide and Ethambutol doses, using whole tablets, for adults weighing 40-90 kilograms

Weight in kg*	40-55 kg		56-75 kg		76-90 kg	
	Pyrazinamide	Ethambutol	Pyrazinamide	Ethambutol	Pyrazinamide	Ethambutol
Daily, mg (mg/kg)	1,000 (18.2-25.0)	800 (14.5-20.0)	1,500 (20.0-26.8)	1,200 (16.0-21.4)	2,000† (22.2-26.3)	1,600† (17.8-21.1)
Thrice weekly, mg (mg/kg)	1,500 (27.3-37.5)	1,200 (21.8-30.0)	2,500 (33.3-44.6)	2,000 (26.7-35.7)	3,000† (33.3-39.5)	2,400† (26.7-31.6)
Twice weekly, mg (mg/kg)	2,000 (36.4-50.0)	2,000 (36.4-50.0)	3,000 (40.0-53.6)	2,800 (37.3-50.0)	4,000† (44.4-52.6)	4,000† (44.4-52.6)

* Based on estimated lean body weight. †Maximum dose regardless of weight.

Source: MMWR: Treatment of TB – CDC, ATS, IDSA, June 20.2003 / Volume 52/ No. RR-11

<https://www.cdc.gov/mmwr/PDF/rr/rr5211.pdf>

Process to request TB medication(s)

Requesting TB Medications

Medication request may be requested by:

- Faxing the Request for LTBI TB Medications or Request for Active TB Medications to the appropriate public health unit or NDDoH as specified on form
- Mailing Request for LTBI TB Medications or Request for Active TB Medications to the appropriate public health unit or NDDoH as specified on form, acceptable but will delay shipment.

After receiving the request for medications, local public health will contact the patient to set up an appointment to start medications.

Information documented on the request for medications will be entered into MAVEN by local public health or state health department designee. Case will then be assigned to the TB Prevention and Control Coordinator to review all information is documented and patient meets the criteria to receive medication(s) through the TB Pharmacy Program. Approval to dispense medication(s) will be sent to pharmacy to fill prescription through MAVEN. Prescription will be mailed to local public health unit within 3 days.

e-Prescribing

E-Prescribing is a prescriber's ability to electronically send an accurate, error-free and understandable prescription directly to a pharmacy from the point-of-care - is an important element in improving the quality of patient care. It is recommended that all providers submit the request for LTBI medication electronically to:

UND Center for Family Medicine Pharmacy – Bismarck.

If unable to submit an electronic request, a legible printed copy of the prescription may be used.

If unable to locate UND Center for Family Medicine Pharmacy – Bismarck as a choice, try searching by city. If still unable to locate pharmacy, contact your local information technology staff as they may need to add it as a choice.

Maven Procedure

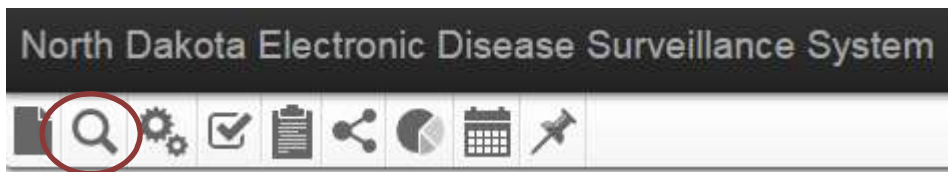
Medications to treat tuberculosis infection (LTBI) or tuberculosis disease (TB) are requested using MAVEN; North Dakota Department of Health's web-based disease surveillance and case management system.

Searching and Creating Events

Before entering a new event it is important to ALWAYS search for that event first to reduce duplicate cases. Searching is also used to retrieve existing events.

How to Perform an Event Search

1. Click on the Search Event icon on the MAVEN toolbar



The Search Event screen will appear:

A screenshot of the "Search Case" screen in the MAVEN system. The browser address bar shows "State of North Dakota [US] | https://apps.nd.gov/maven/searchCase.do?topPage=main.do". The page title is "Search Case". The form is divided into several sections: "Search Criteria" with fields for Type (Normal), Event ID, Last Name, First Name, Birth Date (MM/DD/YYYY), Gender, Street, City, State, Zip Code, and Disease; "Sort Options" with fields for Sort By (Create Date) and Sort Order (Descending); and "Search Options" with checkboxes for Search History and Search Soundex. At the bottom are buttons for Search, Clear, and Create New. The "Search Results" section shows a table with columns: Event ID, Name, Birth Date, Disease, Status, Create Date, and External ID. Below the table, it says "No search done" and "Showing 0 to 0 of 0 entries". Navigation buttons (First, Previous, Next, Last) and action buttons (Select, Create Record for Person, Cancel, Help) are also present.

2. Enter search parameters into at least 1 field; it is preferable to use two or more parameters to narrow your search down, the more search criteria provided, the fewer results will display.

Search Case

Search Criteria		Search Results	
Type:	Normal	Search Results	
Event ID:		Event ID	Name
Last Name:	or*	Birth Date	Disease
First Name:	t*	Status	Create Date
Birth Date:	MM/DD/YYYY	External ID	
Gender:		No search done	
Street:		Showing 0 to 0 of 0 entries	
City:		First Previous Next Last	
State:		Select Create Record for Person Cancel Help	
Zip Code:			
Disease:			
Sort Options			
Sort By:	Create Date		
Sort Order:	Descending		
Search Options			
Search History:	<input checked="" type="checkbox"/>		
Search Soudex:	<input type="checkbox"/>		
Search Clear Create New			

To perform a search “wildcards” may be used. Examples of wildcards are:

- T* in the first name field will bring up people whose name begins with a “T”
- *not in the last name field will bring up people whose name ends with “not”
- *mit* will bring up any name that includes that string of letters such as Emmitt or Smith

Adding the date of birth will narrow down the search too.

3. Click Search

Search Criteria		Search Results	
Type:	Normal	Search Results	
Event ID:		Event ID	Name
Last Name:	or*	Birth Date	Disease
First Name:	t*	Status	Create Date
Birth Date:	MM/DD/YYYY	External ID	
Gender:		No search done	
Street:		Showing 0 to 0 of 0 entries	
City:		First Previous Next Last	
State:		Select Create Record for Person Cancel Help	
Zip Code:			
Disease:			
Sort Options			
Sort By:	Create Date		
Sort Order:	Descending		
Search Options			
Search History:	<input checked="" type="checkbox"/>		
Search Soudex:	<input type="checkbox"/>		
Search Clear Create New			

Search Case

Search Criteria

Type: Normal

Event ID:

Last Name: or*

First Name: t*

Birth Date: (Inexact) MM/DD/YYYY

Gender:

Street:

City:

State:

Zip Code:

Disease:

Sort Options

Sort By: Create Date

Sort Order: Descending

Search Options

Search History:

Search Soundex:

Search Results

Event ID	Name	Birth Date	Disease	Status	Create Date	External ID
100005984	Tiberius Byron Ornot	01/01/1980	TB-LTBI	Open	05/01/2017	PGCEVSPPKBWT

Showing 1 to 1 of 1 entries

First Previous 1 Next Last

4. To open the case, double-click on the line containing the correct event or highlight the line and click on select

Search Case

Search Criteria

Type: Normal

Event ID:

Last Name: or*

First Name: t*

Birth Date: (Inexact) MM/DD/YYYY

Gender:

Street:

City:

State:

Zip Code:

Disease:

Sort Options

Sort By: Create Date

Sort Order: Descending

Search Options

Search History:

Search Soundex:

Search Results

Event ID	Name	Birth Date	Disease	Status	Create Date	External ID
100005984	Tiberius Byron Ornot	01/01/1980	TB-LTBI	Open	05/01/2017	PGCEVSPPKBWT

Showing 1 to 1 of 1 entries

First Previous 1 Next Last

Another way to open a case is to highlight the line and click select.

If this is not the correct person; to clear search, click on clear and enter new parameters in applicable boxes and search again.

Search Case

Search Criteria

Type:

Event ID:

Last Name:

First Name:

Birth Date:

Gender:

Street:

City:

State:

Zip Code:

Disease:

Sort Options

Sort By:

Sort Order:

Search Options

Search History:

Search Suggest:

Search Results

Event ID	Name	Birth Date	Disease	Status	Create Date	External ID
100005984	Tiberius Byron Ornot	01/01/1980	TB-LTBI	Open	05/01/2017	PGCEVSPPKBWT

Showing 1 to 1 of 1 entries

If there are no matches a new case needs to be made.

Creating a New Event

To create a new event in MAVEN, complete the following steps:

Step 1: Click on Create Event Icon in the MAVEN tool bar



Or use the Create New button

Search Case

Search Criteria

Type:

Event ID:

Last Name:

First Name:

Birth Date:

Gender:

Street:

City:

State:

Zip Code:

Disease:

Sort Options

Sort By:

Sort Order:

Search Options

Search History:

Search Soundex:

Search Results


Event ID	Name	Birth Date	Disease	Status	Create Date	External ID
No results found						

Showing 0 to 0 of 0 entries

The following screen will appear:


Create Event - Person Information

Event Information

Event Date: 

Disease:

Add Person

First Name: <input type="text" value="Tatenda"/>	Middle Name: <input type="text"/>	Last Name: <input type="text" value="Dzvokom"/>
Suffix: <input type="text"/>	Maiden/Other Name: <input type="text"/>	Alias: <input type="text"/>
Birth Date: <input type="text" value="MM/DD/YYYY"/> 	Gender: <input type="text"/>	Social Security Number: <input type="text"/>
Race: <input type="text"/> Add New		
Is the case Hispanic or Latino?: <input type="text"/>		


Contact Information


Address Type: <input type="text" value="Home"/>	Street: <input type="text"/>	
	<input type="text"/>	
City: <input type="text"/>	State: <input type="text" value="ND"/>	Zip Code: <input type="text"/>
County: <input type="text"/>	Country: <input type="text" value="USA"/>	
Home Phone: <input type="text"/>	Mobile Phone: <input type="text"/>	Work Phone: <input type="text"/>
Email: <input type="text"/>	Fax: <input type="text"/>	
Contact Method: <input type="text"/>		

2. Use the drop down box to select the disease TB LTBI by either clicking on the down arrow or scrolling until you see TB LTBI or type the letter “T” until TB LTBI appears.

Create Event - Person Information

Event Information

Event Date: 05/02/2017 

Disease: TB-LTBI 

3. Enter the demographic information.

Create Event - Person Information

Event Information

Event Date: 

Disease: ▼

Add Person

First Name: <input type="text" value="Tiberius"/>	Middle Name: <input type="text" value="Byron"/>	Last Name: <input type="text" value="Ornot"/>
Suffix: <input type="text"/>	Maiden/Other Name: <input type="text"/>	Alias: <input type="text"/>
Birth Date: <input type="text" value="01/01/1980"/> 	Gender: <input type="text" value="Male"/> ▼	Social Security Number: <input type="text"/>
Race: <input type="text" value="White / Caucasian"/> ▼ Add New		
Is the case Hispanic or Latino?: <input type="text" value="No"/> ▼	Place of Birth (Country): <input type="text" value="United States"/> ▼	

Contact Information

Address Type: <input type="text" value="Home"/> ▼	Street: <input type="text" value="123 Main Street"/> <input type="text"/>	
City: <input type="text" value="Bismarck"/>	State: <input type="text" value="ND"/> ▼	Zip Code: <input type="text" value="58501"/>
County: <input type="text" value="Burleigh County"/> ▼	Country: <input type="text" value="USA"/> ▼	
Home Phone: <input type="text" value="(111) 111-1111"/>	Mobile Phone: <input type="text" value="(222) 222-2222"/>	Work Phone: <input type="text" value="(333) 333-3333"/>
Email: <input type="text"/>	Fax: <input type="text"/>	
Contact Method: <input type="text"/>		

4. Save to create a new event (person) in MAVEN.

At a minimum enter:

- Name
- Date of Birth
- Gender

Updating Patient Information

If you obtain additional information after creating the person in MAVEN you can update the information using the Person's Tab.

The screenshot displays the MAVEN Event Summary interface. At the top, there is a toolbar with various icons. Below it, the 'Event Summary' window is open, showing a 'Basic Information' tab with fields for Event ID (100005984), Disease (TB-LTBI), Person (Tiberius Byron Ornot), Birth Date (01/01/1980), Gender (Male), Phone (701) 111-1111, Create Date (05/01/2017), and Event Date (05/01/2017). Below this, there are sections for 'Linked Events/Contacts', 'Attachments', and 'Notifications'. A 'Notes' section is also visible on the right. Below the event summary, there is a navigation bar with tabs for 'Event Data', 'Lab Results', 'Concerns', 'Persons', 'Tasks', 'Calendar', 'Event Properties', and 'Event History'. The 'Persons' tab is selected and circled in red. Below the navigation bar, there is a table with the following data:

Name	Gender	Birth Date	Address	Status
Tiberius Byron Ornot	Male	01/01/1980	123 Main Avenue, Bismarck, ND 58501	Active

Below the table, there is an 'Edit Person' button, which is also circled in red.

Click on Edit Person

The following screen will appear:

Edit Person - Tiberius Byron Ornot - TB-LTBI

Edit Person

First Name:

Middle Name:

Last Name:

Suffix:

Maiden/Other Name:

Alias:

Birth Date:

Death Date:

Gender:

Social Security Number:

Mother's Maiden Name:

Deduplication Status:

Race: [Add New](#)

Is the case Hispanic or Latino?:

Place of Birth (Country):

Addresses

Type	Address	Phone
Home	123 Main Avenue, Bismarck, ND 58501	(H) (701) 111-1111 (W) (701) 333-3333 (C) (701) 222-2222

Edit Address

Address Type:

Start Date:

End Date:

Street:

City:

State:

Zip Code:

County:

Country:

Home Phone:

Mobile Phone:

Work Phone:

Email:

Fax:

Contact Method:



Add or correct any information and again click on save to accept the changes.

After clicking save, you will return to the dashboard (home screen).


Use of Calendar Function


MM/DD/YYYY 

Dates can be entered by free texting the date; using a two-digit month, two-digit day and four-digit year. The “/” will automatically be added where appropriate.

01/31/2017 |  

Or click on the calendar icon to open the calendar

MM/DD/YYYY 





Jan 2017

Su	Mo	Tu	We	Th	Fr	Sa
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

Today Close

Use the drop down boxes to select the appropriate month and year. Click on the date and the date will be added.

01/31/2017 |  

Adding scanned documents

A chest x-ray (CXR) report performed within the past three months must be added to the patient's case. NDDoH TB Controller will review all CXR reports to determine eligibility to receive LTBI medications. If any abnormal findings are present, documentation must be provided to rule out active infection.

Scan the CXR report and save it as a .pdf file.

Save the file either to your desktop or to a file you have created to save CXR reports.

To upload the report, in Maven go to the home page for the event created.

Event Summary	
Basic Information	
Event ID:	100005984
Disease:	TB-LTBI
Person:	Tiberius Byron Ornot Birth Date: 01/01/1980 (Male) Phone: (701) 111-1111
Dates:	Create Date: 05/01/2017 Event Date: 05/01/2017
Linked Events/Contacts:	0 linked event(s)/contact(s) (View)
Attachments:	0 attachment(s) (Add)
Notifications:	Disease Status: Suspect Event Type: N/A Investigation Status: New Pregnancy Status: N/A Age: 37 Years Event is in workflows (View List) TSA Team: N/A

Click on add and the following screen will open:

Add Attachment - Tiberius Byron Ornot - TB-LTBI

Attachment Information	
File:	<input type="text"/> <input type="button" value="Browse..."/>
Description:	<input type="text"/>
Status:	Requires Review <input type="button" value="v"/>
Type:	General <input type="button" value="v"/>
Security Level:	None <input type="button" value="v"/>
Notes:	<input type="text"/>

Click on the Browse button, add the file from the saved location of the CXR.

In the description box, document CXR.

Add Attachment - Tiberius Byron Ornot - TB-LTBI

Attachment Information
File: C:\Users\djpritschet\Desktop\TBO.pdf **Browse...**
Description: CXR
Status: Requires Review
Type: General
Security Level: None
Notes:

Click save.

The following screen will appear:

Manage Attachments - Tiberius Byron Ornot - TB-LTBI

Attachments								
Create Date	Person	File	Description	Status	Type	Updated By	Security Level	Action
05/09/2017	Tiberius Byron Ornot	TBO.pdf	CXR	Requires Review	General	Delora Pritschet [dpritschet]	None	View Edit Delete

Filter: Showing 1 to 1 of 1 entries

Click on dashboard to return to the home screen.

NDDoH TB Controller will review the CXR report.

Status will change from Requires Review to:

- Acceptable – eligible to LTBI medication
- Rejected – additional documentation will be requested prior to approval for LTBI medication

Pharmacy Medication Request

Requesting LTBI Medication using the Wizard

All of the information required to request LTBI medication can be found using the Pharmacy Medication Request Wizard. Locate the Pharmacy Medication Request using the Wizard drop down.

The screenshot displays a software interface with a top toolbar containing icons for search, print, settings, checkmarks, clipboard, share, pie chart, building, calendar, speech bubble, and a pencil. Below the toolbar is a blue header for "Event Summary".

Basic Information

Event ID:	100005984
Disease:	TB-LTBI
Person:	Tiberius Byron Ormot Birth Date: 01/01/1980 (Male) Phone: (701) 111-1111
Dates:	Create Date: 05/01/2017 Event Date: 05/01/2017
Linked Events/Contacts:	0 linked event(s)/contact(s) (View)
Attachments:	0 attachment(s) (Add)
Notifications:	Disease Status: Suspect Event Type: N/A Investigation Status: New Pregnancy Status: N/A Age: 37 Years Event is in workflows [View List] TSA Team: N/A

Buttons: [Edit Event Properties](#) [Copy Event](#)

Navigation tabs: [Event Data](#) [Lab Results](#) [Concerns](#) [Persons](#) [Tasks](#) [Calendar](#) [Event Properties](#) [Event History](#)

Question Packages

Question Package	Person
01. Administrative	Event
02. Demographic	Tiberius Byron Ormot
04. Medical/Risk History	Tiberius Byron Ormot
05. Testing Information	Tiberius Byron Ormot
▶ 06. Medications	Tiberius Byron Ormot
07. Provider / Clinic Information	Tiberius Byron Ormot
08. Care Plan / Followup	Tiberius Byron Ormot
09. Exposure/Control & Prevention	Tiberius Byron Ormot
10. Hospitalization	Tiberius Byron Ormot
Contact Investigation	Tiberius Byron Ormot

Buttons: [View Question Package](#) [Wizards](#) [Pharmacy Medication Request](#) [View Wizard](#)

Click on View Wizard to open the page to request medication.

Event Data	Lab Results	Concerns	Persons	Tasks	Calendar	Event Properties	Event History
------------	-------------	----------	---------	-------	----------	------------------	---------------

Question Packages	
Question Package	Person
01. Administrative	Event
02. Demographic	Tiberius Byron Ormot
04. Medical/Risk History	Tiberius Byron Ormot
05. Testing Information	Tiberius Byron Ormot
06. Medications	Tiberius Byron Ormot
07. Provider / Clinic Information	Tiberius Byron Ormot
08. Care Plan / Followup	Tiberius Byron Ormot
09. Exposure/Control & Prevention	Tiberius Byron Ormot
10. Hospitalization	Tiberius Byron Ormot
Contact Investigation	Tiberius Byron Ormot

View Question Package Wizards **Pharmacy Medication Request** **View Wizard**

The page should look like this:

Pharmacy Medication Request - Tiberius Byron Ormot - TB-LTBI		[Jump To...]	Save	Save & Stay	Cancel
Zip code	58501	Country	Expand Details		
Patient telephone (home)	(701) 111-1111	Patient telephone (work)	(701) 333-3333		
Email Address:					
Screen Name:					
Internet Site:					
Patient Evaluation					
Reason for evaluation	Employment				
TST Done?					
Was an IGRA done?					
Refused X-ray	No				
Initial chest X-ray results					
Date of chest x-ray?	01/11/2017	Add New			
Has clinician ruled out active TB disease?	Yes				
Does the patient have any drug allergies?					
Does the patient have any medical conditions?					
Is the patient currently taking any other prescription or non-prescription drugs?					
Medication(s) Requested					
Request date:	06/06/2017				
Did patient start treatment?					
Did patient complete treatment?	Yes				
Date treatment completed	MM/DD/YYYY				
Closure code					
Directly Observed Preventive Therapy					
Is medication being delivered DOPT?	Yes				
How often?	Daily				
Total number of doses:	3				
Dates:	06/07/2017	Add New			
Dates:	06/07/2017				
Dates:	06/07/2017				
Prescribing Provider					
First name:	Peter				
Last name:	Potts				
Degree:					
Phone:	(701) 123-1234				
Fax:					
Address 1:	123 Capitol Street				
Address 2:					

Person Identifiers and Address Information

Enter information into the wizard. Based on information added when creating the case, some information will pre-populate.

Pharmacy Medication Request - Tiberius Byron Ornot - TB-LTBI [Jump To...] Save Sa Expand Details

Person Identifiers	
Birth date	01/01/1980
Gender	Male
Country of birth	
Primary language	
English proficiency	
Race	White
Extended Race White Detail	

Address Information	
Street address	123 Main Avenue
City	Bismarck
County	Burleigh County
State	ND
Zip code	58501
Patient telephone (home)	(701) 111-1111
Country	USA
Patient telephone (work)	(701) 333-3333
Email Address:	
Screen Name:	
Internet Site:	

Patient Evaluation

Patient Evaluation	
Reason for evaluation	
TST Done?	
Was an IGRA done?	
Refused X-ray	
Initial chest X-ray results	
Date of chest x-ray?	MM/DD/YYYY
Has clinician ruled out active TB disease?	
Does the patient have any drug allergies?	
Does the patient have any medical conditions?	
Is the patient currently taking any other prescription or non-prescription drugs?	

A completed form will look similar to this.

Either a positive TST or positive IGRA must be documented. It is acceptable to document both a TST and IGRA result. All other fields are mandatory and must be completed.

Patient Evaluation	
Reason for evaluation	Employment <input type="button" value="v"/>
TST Done? <input type="checkbox"/>	Yes <input type="button" value="v"/> Add New
TST Plant Date	01/01/2017 <input type="button" value="calendar"/>
TST read date	01/03/2017 <input type="button" value="calendar"/>
Induration in mm	15
Tuberculin skin test result	Positive <input type="button" value="v"/>
TST done overseas?	No <input type="button" value="v"/>
Post exposure test	Yes <input type="button" value="v"/>
Diagnostic TST test	Yes <input type="button" value="v"/>
Was an IGRA done? <input type="checkbox"/>	Yes <input type="button" value="v"/> Add New
Which test was used?	QFT <input type="button" value="v"/>
Results of test:	Positive <input type="button" value="v"/>
Date collected	01/04/2017 <input type="button" value="calendar"/>
Refused X-ray	No <input type="button" value="v"/>
Initial chest X-ray results	Normal <input type="button" value="v"/>
Date of chest x-ray?	01/11/2017 <input type="button" value="calendar"/> Add New
Has clinician ruled out active TB disease?	Yes <input type="button" value="v"/>
Does the patient have any drug allergies?	Yes <input type="button" value="v"/>
Specify:	free text in drug allergies
Does the patient have any medical conditions?	Yes <input type="button" value="v"/>
Specify:	rheumatoid arthritis
Is the patient currently taking any other prescription or non-prescription drugs?	Yes <input type="button" value="v"/>
Specify:	Enbrel

If you enter yes to TST done, the following questions will appear:

- TST Plant Date – enter date test performed
- TST Read Date – enter date test read (48-72 hours after test performed)
- Induration in mm – measure only induration, no redness
- Tuberculin skin test result – based on reason for testing will determine if test is
 - Positive
 - Negative
- TST done overseas – enter no
- Post-Exposure test
 - Yes, if a contact to an active case
 - No, if not a contact to an active case
- Diagnostic test – should be yes, medications will not be dispensed if no entered.

If you enter yes to was an IGRA done, the following questions will appear.

- Which test was used
 - QFT
 - T-Spot
 - Unknown
- Results of test
 - Positive
 - Negative
 - Indeterminate
 - Borderline
- Date collected – enter date specimen was collected.

Chest X-Ray results

- Refused x-ray
 - No – this is the appropriate response
 - Yes – no CXR performed
- Initial chest x-ray results
 - Normal
 - Abnormal (consistent with TB)
 - Abnormal (not consistent with TB)
 - Not Done
 - Unknown
- Date of chest x-ray – date CXR was performed

Has clinician ruled out active disease

- Yes – if abnormal CXR consistent with TB, AFB smear and culture should be done prior to starting on LTBI medications.
- No – if a CXR is not done or unknown

Does the patient have any drug allergies?

- Enter all allergies in free text box

Does the patient have any medical conditions?

- Enter all medical conditions in free text box

Is the patient currently taking any other prescription or non-prescription medications?

- Enter all prescription and non-prescription medications in free text box

Medication(s) Requested

Medication(s) Requested	
Request date:	02/01/2017
Did patient start treatment?	<input type="checkbox"/> <input type="checkbox"/>
Did patient complete treatment?	<input type="checkbox"/> <input type="checkbox"/>
Closure code	<input type="checkbox"/> <input type="checkbox"/>

Request date – enter date you are requesting LTBI medication

Did patient start treatment? Select yes to open the following questions. Patient weight must be documented for the pharmacist to fill the prescription.

Select medication – LTBI medications approved are isoniazid, rifampin and rifapentine.

Medication(s) Requested	
Request date:	02/01/2017
Did patient start treatment?	Yes
Patient weight:	
Medication	
Treatment Regimen Start Date	MM/DD/YYYY
Treatment Regimen Stop Date	MM/DD/YYYY
Comments	
Did patient complete treatment?	<input type="checkbox"/> <input type="checkbox"/>
Closure code	<input type="checkbox"/> <input type="checkbox"/>

Treatment start date is the date the first dose is taken.

Treatment stop date is the date the last dose is taken. Reassign case to NDDoH TB Controller.

Did Patient complete treatment? – will be completed by NDDoH TB Controller

Closure code - will be completed by NDDoH TB Controller

Directly Observed Preventive Therapy	
Is medication being delivered DOPT?	<input type="checkbox"/> <input type="checkbox"/>

If medication is being given DOPT, responding yes will open additional questions.

Directly Observed Preventive Therapy	
Is medication being delivered DOPT?	Yes
How often?	Two times a week
Total number of doses:	
Dates:	02/19/2017 x Add New
Dates:	02/15/2017

Indicate how often DOPT is being done

- Daily
- Three times a week
- Twice a week
- Once a week
- Other

Document the date medication was given, click on add new for each additional date medication was given. When treatment is completed document the number of doses given and reassign case to NDDoH TB Controller.

Prescribing Provider

Prescribing Provider	
First name:	<input type="text"/>
Last name:	<input type="text"/>
Degree:	<input type="text"/>
Phone:	<input type="text"/>
Fax:	<input type="text"/>
Address 1:	<input type="text"/>
Address 2:	<input type="text"/>
City:	<input type="text"/>
State:	<input type="text" value="v"/>
Zip code:	<input type="text"/>
Phone (facility main):	<input type="text"/>
Fax (facility main):	<input type="text"/>

Enter available information. At a minimum the ordering provider must be documented.

Prescribing Provider	
First name:	<input type="text" value="Peter"/>
Last name:	<input type="text" value="Potts"/>
Degree:	<input type="text"/>
Phone:	<input type="text" value="(701) 123-1234"/>
Fax:	<input type="text"/>
Address 1:	<input type="text" value="123 Capitol Street"/>
Address 2:	<input type="text"/>
City:	<input type="text" value="Bismarck"/>
State:	<input type="text" value="ND"/> <input type="text" value="v"/>
Zip code:	<input type="text" value="58501"/>
Phone (facility main):	<input type="text" value="(701) 123-1234"/>
Fax (facility main):	<input type="text"/>

Insurance Information

Insurance Information	
Patient's insurance status	<input type="text" value=""/> ▼

Patient's insurance status – from drop down select

- Insured
- Uninsured
- Unknown

If insured is selected the following field will appear:

Insurance Information	
Patient's insurance status	Insured ▼
Carrier	<input type="text"/>

Enter the appropriate insurance carrier.

TAB – the additional insurance information will appear.

Insurance Information	
Patient's insurance status	Insured ▼
Carrier <input type="text"/>	Blue Cross Add New
Carrier's phone # on card	<input type="text"/>
Policy/ID/member #	<input type="text"/>
Rx group #	<input type="text"/>
Rx bin #	<input type="text"/>
Relation to card holder	<input type="text"/>
Policy start date	MM/DD/YYYY <input type="text"/>
Policy end date	MM/DD/YYYY <input type="text"/>

Information can be added one of two ways by either placing the cursor in the appropriate box or by **tabbing** to the next field.

Insurance Information	
Patient's insurance status	Insured ▼
Carrier <input type="text"/>	Blue Cross Add New
Carrier's phone # on card	(701) 701-4444
Policy/ID/member #	xyz123
Rx group #	11111
Rx bin #	2222
Relation to card holder	self
Policy start date	01/01/2017 <input type="text"/>
Policy end date	12/31/2017 <input type="text"/>

All fields must be answered. The policy start date can be added by free texting or by clicking on the calendar to open it up.

Shipment Information

Shipment Information	
How is prescription being submitted to NDDoH?	Electronic attachment <input type="button" value="v"/>
Medications must be shipped to a licensed health care provider or administrator.	
Facility	<input type="text"/>
Name	<input type="text"/>
Address 1	<input type="text"/>
Address 2	<input type="text"/>
City	<input type="text"/>
State	<input type="button" value="v"/>
Zip code	<input type="text"/>
Phone (TB contact)	<input type="text"/>
Phone (facility main)	<input type="text"/>
Fax (facility main)	<input type="text"/>

All prescription must be sent electronically to the UND Center for Family Medicine Pharmacy – Bismarck.

If unable to electronically send the prescription, include a legible copy of the prescription with the request for LTBI medication form.

Complete remaining information for your facility. This is the information the pharmacy will use to mail you the medication requested.

Shipment Information	
How is prescription being submitted to NDDoH?	Electronic attachment <input type="button" value="v"/>
Medications must be shipped to a licensed health care provider or administrator.	
Facility	Local Public Health
Name	Nancy Nurse
Address 1	111 Koch Way
Address 2	<input type="text"/>
City	Bismarck
State	ND <input type="button" value="v"/>
Zip code	58501
Phone (TB contact)	(701) 223-1112
Phone (facility main)	(701) 223-1111
Fax (facility main)	(701) 223-1113

Sharing an Event

To allow the contract pharmacy to document monthly shipments permission must be granted by sharing an event.

Event sharing allows a user to grant temporary permissions to another user (or another group) to view an event that ordinarily wouldn't be accessible by that user (or group). share an event, the user must be viewing the event within the Maven dashboard. Follow the steps below to share an event:

- 1) From Maven Dashboard (while viewing the event to be shared), click the Share Event button.



- 2) A screen displays all of the information about existing shares with the event. If there are no existing shares, the screen will display a blank table at the top of the window.

Share Event - Toby Ornot - TB-Active

Currently Shared										
Event	Person	Status	Disease	Type	Shared Date	Shared By	User	User Group	Allow Delegation	Action

Add Event Share
Event ID: 100006101
Person: Toby Ornot
Disease: TB-Active
Type: View Only Limited
User:
User Group:
Allow Delegation:

- 3) Select the type of permissions being allocated to the new user.

Share Event Fields

- **Event ID** The Event ID of the event.
- **Person** The name of the participant in the specific event being shared.
- **Disease** The disease or product specified in the event being shared.
- **Type** The type of permissions give to the user
 - **View Only Limited** – User may view a limited amount of question data in the shared event, but may not make any updates to that event.
 - **View Only Full** – User may view all question data in the shared event, but may not make any updates to it.
 - **View and Update Limited** – User sees a limited amount of question data in the shared event, and may make updates to those questions.
 - **View and Update Full** – User may view and edit all questions in the shared event.
- **User** A dropdown list of users within Maven System
- **User Group** A dropdown list of user groups within Maven System
- **Allow Delegation** Specifies if the user or group with whom this event is being shared will have the ability to share it with another user or group.

- 4) Using the dropdown, choose the User or User Group with whom the event will be shared. Note that when creating a share, it is only possible to select either a user or a group, but not both at once. To share with an additional user or group, follow the steps to create another share.
- 5) Check the Allow Delegation box to allow the user or group with whom the event is being shared to also be able to share the event with other users or groups (if desired).
- 6) Click Save. The Shared Events table is now populated with the information from this share.

Share Event - Toby Ornot - TB-Active

Currently Shared										
Event	Person	Status	Disease	Type	Shared Date	Shared By	User	User Group	Allow Delegation	Action
100006101	Toby Ornot	Open	TB-Active	View & Update Full	09/08/2017	Alicia Lepp [alepp]	TB Pharm [TB_PharmTest]		No	Unshare

Add Event Share

Event ID: 100006101

Person: Toby Ornot

Disease: TB-Active

Type: View Only Limited


User:

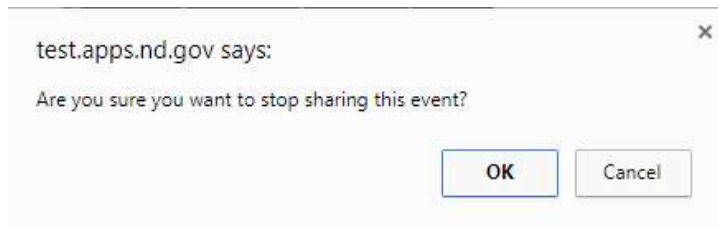
User Group: ▼

Allow Delegation:

Unshare an Event

There will be occasions where it is only necessary to share an event with another group for a limited period of time. When the required amount of time has passed, it is advisable to unshare the event.


- 1) Open the event to be Unshared in the Maven Dashboard.
- 2) Click the Share Event  button.
- 3) In the Action column, click the link that says **Unshare** next to the share that needs to be removed. A warning will pop up on your screen verifying that you want to stop sharing the event.



- 4) Click OK to confirm that the event should no longer be shared.

Reassign Case to NDDoH TB Controller

On the home page, click on the Event Data tab and select the Administrative Question Package to reassign the case to the NDDoH TB Controller.



Event Summary

Basic Information	
Event ID:	100005984
Disease:	TB-LTBI
Person:	Tiberius Byron Ornot Birth Date: 01/01/1980 (Male) Phone: (701) 111-1111
Dates:	Create Date: 05/01/2017 Event Date: 05/01/2017
Linked Events/Contacts:	0 linked event(s)/contact(s) (View)
Attachments:	1 attachment(s) (Add) (View)
Notifications:	Disease Status: Suspect Event Type: N/A Investigation Status: New Pregnancy Status: N/A Age: 37 Years Event is in workflows (View List) TSA Team: N/A

Event Data
Lab Results
Concerns
Persons
Tasks
Calendar
Event Properties
Event History

Question Packages	
Question Package	Person
▶ 01. Administrative	Event
02. Demographic	Tiberius Byron Ornot
04. Medical/Risk History	Tiberius Byron Ornot
05. Testing Information	Tiberius Byron Ornot
06. Medications	Tiberius Byron Ornot
07. Provider / Clinic Information	Tiberius Byron Ornot
08. Care Plan / Followup	Tiberius Byron Ornot
09. Exposure/Control & Prevention	Tiberius Byron Ornot
10. Hospitalization	Tiberius Byron Ornot
Contact Investigation	Tiberius Byron Ornot

Wizards

The following screen will appear:

01. Administrative - Tiberius Byron Ornot - TB-LTBI [Jump To.] Save Save & Stay Cancel Expand Details

Disease Status Information

Event date	05/01/2017	Event type	
Event date (Manual Override)	MM/DD/YYYY	Event type (Manual Override)	
* Disease classification status	Suspect		
Investigation status:	New		
Is the case counted towards morbidity? (for central staff only)			
Case owner:			
Reporting Source			
TB Suspect status date	MM/DD/YYYY	LTBI Suspect status date	MM/DD/YYYY
TB Date case confirmed	MM/DD/YYYY	LTBI Date case confirmed	MM/DD/YYYY
TB Revoked status date	MM/DD/YYYY		
LTBI Revoked status date	MM/DD/YYYY		
Patient identified as a contact date	MM/DD/YYYY		
Case close date			
What is the count status of this case?			

State TB Program

RVCT Number (Comprised of Year Reported (YYYY) Alpha State Code (XX) Locally Assigned ID Number (999999999))

Local Board of Health

Case Manager Name

LPHU notified

LPHU final review

Other Information

Reassign To

CRF submit date

Class A/B TB Condition

High profile report sent date

First date reported to CDC

Report Case to CDC

Owning Jurisdiction

MMWR Week

MMWR Year

Indicates required field

Save Cancel Help

Use the drop-down box to reassign the case to the NDDoH TB Controller.

Click save.

The request for medications will go into the NDDoH TB Controllers workflow for review.

Approval

The TB Controller will review all information.

- Approved – Pharmacy is notified to fill prescription
- Rejected – Additional information will be requested and assigned by to the case owner.

Approval

Medication request approved to be filled? []

Medication approval will be done by the NDDoH TB Controller after final review.

Approval

Medication request approved to be filled? [Yes]

Approved by who:

Date approved: MM/DD/YYYY

By clicking on yes, the request for medications will be placed in the pharmacy workflow This alerts the pharmacist there is a prescription that needs to be filled.

Pharmacy Fulfillment

The pharmacist will review the TB Medication Request Workflow daily for any new prescriptions.

Workflow Details - TB Medication Request Approval

TB Medication Request Approval (Last Update: 07/24/2017 09:02 AM)						
Event	Name	Status	Create Date	Disease	Event Date	
<input type="checkbox"/> 100006101	Ornot, Toby	Open	07/11/2017	TB-Active	07/11/2017	
<input type="checkbox"/> 100005984	Ornot, Tiberius Byron	Open	05/01/2017	TB-LTBI	05/01/2017	

Filter: Contains Apply Clear Displaying 1...2 of 2 (Export All)

Assign to user: [Assign to me] Assign to group: Assign Reassign

Workflows Dashboard Help

After filling the prescriptions and shipping the medications the pharmacist will document the date the medication(s) were shipped.

Shipment Information	
How is prescription being submitted to NDDoH?	E-Prescription
Medications must be shipped to a licensed health care provider or administrator.	
Facility	<input type="text"/>
Name	<input type="text"/>
Address 1	<input type="text"/>
Address 2	<input type="text"/>
City	<input type="text"/>
State	<input type="text"/>
Zip code	<input type="text"/>
Phone (TB contact)	<input type="text"/>
Phone (facility main)	<input type="text"/>
Fax (facility main)	<input type="text"/>
Date shipped:	07/03/2017 <input type="text"/>
Date shipped:	08/04/2017 <input type="text"/>
Date shipped:	09/04/2017 <input type="text"/>
Date shipped:	10/04/2017 <input type="text"/> Add New
Total number of shipments:	4

Click on Add New to indicate date refills were shipped.

Prescriptions will be filled and mailed within 3 days of notification.

During winter months, medication will be shipped Monday through Wednesday.

The Pharmacist will document the date medications are shipped and reassign the case back to the TB Controller.

To Reassign the case:
Go to the home page; double-click on Administrative Package.

Question Packages	
Question Package	Person
01. Administrative	Event
02. Demographic	Tiberius Byron Ornot
04. Medical/Risk History	Tiberius Byron Ornot
05. Testing Information	Tiberius Byron Ornot
06. Medications	Tiberius Byron Ornot
07. Provider / Clinic Information	Tiberius Byron Ornot
08. Care Plan / Followup	Tiberius Byron Ornot
09. Exposure/Control & Prevention	Tiberius Byron Ornot
10. Hospitalization	Tiberius Byron Ornot
Contact Investigation	Tiberius Byron Ornot

The following screen will appear:

Reassign To:	TB Pharmacy
CRF submit date	MM/DD/YYYY
Class A/B TB Condition	
High profile report sent date	MM/DD/YYYY
First date reported to CDC	
Report Case to CDC	
Owning Jurisdiction	Burleigh County
MMWR Week	18
MMWR Year	2017

* Indicates required field

Save Cancel Help

Reassign the case to the TB Controller and click Save.

Reassign To:	Delora Pritschet
CRF submit date	MM/DD/YYYY
Class A/B TB Condition	
High profile report sent date	MM/DD/YYYY
First date reported to CDC	
Report Case to CDC	
Owning Jurisdiction	Burleigh County
MMWR Week	18
MMWR Year	2017

* Indicates required field

Save Cancel Help

Prescription that are not e-prescribed will be scanned in to the case in Maven for the Pharmacists review.

To view the prescription, go to the home page.

Event Summary

Basic Information	
Event ID:	100005984
Disease:	TB-LTBI
Person:	Tiberius Byron Ornot Birth Date: 01/01/1980 (Male) Phone: (701) 111-1111
Dates:	Create Date: 05/01/2017 Event Date: 05/01/2017
Linked Events/Contacts:	0 linked event(s)/contact(s) (View)
Attachments:	1 attachment(s) (Add) (View)
Notifications:	Disease Status: Suspect Event Type: N/A Investigation Status: New Pregnancy Status: N/A Age: 37 Years Event is in workflows [View List] TSA Team: N/A

[Edit Event Properties](#) [Copy Event](#)

Under attachment, click on View

The following screen will open.

There may be multiple selections for review; prescription, CXR, physician notes – click on View to open the document for review.

Attachments								Action		
Create Date	Person	File	Description	Status	Type	Updated By	Security Level	View	Edit	Delete
05/09/2017	Tiberius Byron Ornot	TBO.pdf	CXR	Requires Review	General	Delora Pritschel [dpritsche]	None	View	Edit	Delete

Receiving Medication(s)

When medications are received enter the date the medication, the medication prescribed, dose, route and frequency. Place a check mark to indicate how many months of medication has been dispensed.

Medication(s) Requested	
Request date:	07/04/2017
Did patient start treatment?	Yes
Patient weight:	120
Unit:	Pounds
Medication:	Rifampin - Active Ingredient: Rifampin Add New
Dosage:	600
Route:	PO
Frequency:	1x per day
Date medication dispensed:	07/04/2017
Months medication was dispensed:	<input checked="" type="checkbox"/> 1 <input type="checkbox"/> 5 <input type="checkbox"/> 9 <input checked="" type="checkbox"/> 2 <input type="checkbox"/> 6 <input type="checkbox"/> 10 <input checked="" type="checkbox"/> 3 <input type="checkbox"/> 7 <input type="checkbox"/> 11 <input checked="" type="checkbox"/> 4 <input type="checkbox"/> 8 <input type="checkbox"/> 12
Length of regimen (mos)	9
Med Start Date	07/04/2017
Treatment Regimen Start Date	07/04/2017
Treatment Regimen Stop Date	11/04/2017
Comments	
Did patient complete treatment?	Yes
Date treatment completed	11/04/2017

Document Med Stop Date with the date treatment is completed.

Medication(s) Requested	
Request date:	07/04/2017
Did patient start treatment?	Yes
Patient weight:	120
Unit:	Pounds
Medication:	Rifampin - Active Ingredient: Rifampin Add New
Dosage:	600
Route:	PO
Frequency:	1x per day
Date medication dispensed:	07/04/2017
Months medication was dispensed:	<input checked="" type="checkbox"/> 1 <input type="checkbox"/> 5 <input type="checkbox"/> 9 <input checked="" type="checkbox"/> 2 <input type="checkbox"/> 6 <input type="checkbox"/> 10 <input checked="" type="checkbox"/> 3 <input type="checkbox"/> 7 <input type="checkbox"/> 11 <input checked="" type="checkbox"/> 4 <input type="checkbox"/> 8 <input type="checkbox"/> 12
Length of regimen (mos)	9
Med Start Date	07/04/2017
Treatment Regimen Start Date	07/04/2017
Treatment Regimen Stop Date	11/04/2017
Comments	
Did patient complete treatment?	Yes
Date treatment completed	11/04/2017
	Med Stop Date 11/04/2017

Assign case to NDDoH for Review

Reassign case to NDDoH TB Controller for final review.

The screenshot displays a software interface with a top toolbar containing icons for search, print, settings, checkmarks, clipboard, share, pie chart, building, calendar, speech bubble, and pin. Below the toolbar is a blue header for "Event Summary".

Event Summary

Basic Information

Event ID:	100005984
Disease:	TB-LTBI
Person:	Tiberius Byron Ornot Birth Date: 01/01/1980 (Male) Phone: (701) 111-1111
Dates:	Create Date: 05/01/2017 Event Date: 05/01/2017
Linked Events/Contacts:	0 linked event(s)/contact(s) View
Attachments:	1 attachment(s) Add View
Notifications:	Disease Status: Suspect Event Type: N/A Investigation Status: New Pregnancy Status: N/A Age: 37 Years Event is in workflows View List TSA Team: N/A

[Edit Event Properties](#) [Copy Event](#)

Navigation tabs: **Event Data** (circled in red), Lab Results, Concerns, Persons, Tasks, Calendar, Event Properties, Event History

Question Packages

Question Package	Person
01. Administrative	Event
02. Demographic	Tiberius Byron Ornot
04. Medical/Risk History	Tiberius Byron Ornot
05. Testing Information	Tiberius Byron Ornot
06. Medications	Tiberius Byron Ornot
07. Provider / Clinic Information	Tiberius Byron Ornot
08. Care Plan / Followup	Tiberius Byron Ornot
09. Exposure/Control & Prevention	Tiberius Byron Ornot
10. Hospitalization	Tiberius Byron Ornot
Contact Investigation	Tiberius Byron Ornot

[View Question Package](#) Wizards

In the Event Data tab, double click on the Administrative question.

The following screen will appear:

01. Administrative - Tiberius Byron Ornot - TB-LTBI [Jump To.] Save Save & Stay Cancel Expand Details

Disease Status Information		
Event date	05/01/2017	Event type
Event date (Manual Override)	MM/DD/YYYY	Event type (Manual Override)
* Disease classification status	Suspect	
Investigation status	New	
Is the case counted towards morbidity? (for central staff only)		
Case owner		
Reporting Source		
TB Suspect status date	MM/DD/YYYY	LTBI Suspect status date
TB Date case confirmed	MM/DD/YYYY	LTBI Date case confirmed
TB Revoked status date	MM/DD/YYYY	
LTBI Revoked status date	MM/DD/YYYY	
Patient identified as a contact date	MM/DD/YYYY	
Case close date		
What is the count status of this case?		

RVCT Number (Comprised of Year Reported (YYYY) Alpha State Code (XX) Locally Assigned ID Number (999999999))

Local Board of Health	
Case Manager Name	
LPHU notified	
LPHU final review	

Other Information	
Reassign To:	
CRF submit date	MM/DD/YYYY
Class A/B TB Condition	
High profile report sent date	MM/DD/YYYY
First date reported to CDC	
Report Case to CDC	
Owning Jurisdiction	Burleigh County
MMWR Week	18
MMWR Year	2017

* Indicates required field

Save Cancel Help

To assign the case to the TB Controller, select from drop down box the name of the TB Controller and save the entry.

Other Information	
Reassign To:	Delora Pritschet
CRF submit date	MM/DD/YYYY
Class A/B TB Condition	
High profile report sent date	MM/DD/YYYY
First date reported to CDC	
Report Case to CDC	
Owning Jurisdiction	Burleigh County
MMWR Week	18
MMWR Year	2017

* Indicates required field

Save Cancel Help

Closure of Case

The TB Controller will review for treatment disposition, assign a closure code and close the case.

Workflows

Workflow Queues are the mechanism within Maven to identify events and tasks that require user attention. Maven internally monitors new and updated events and tasks to determine what actions are required. Events satisfying monitored conditions are placed in queues, which are then made available to users with permissions to carry out those actions.

To see cases assigned to you, on the home screen click on the gear icon.

Maven Disease Surveillance Suite - TEST

Alerts and Notifications

- [HIV Reference Guide](#)
- [Pertussis Reference Guide](#)
- [Salmonella Reference Guide](#)
- [Hepatitis B Reference Guide](#)
- [HIV FAQ](#)

Workflows

Workflow Queue	Events
Alicia Lepp	189 (0)
Arup - No Facility	23 (0)
Brenton Nesemeier	4 (0)
CTR Reports QC	91 (0)
CTR_Burleigh County Detention Center	2 (0)

[More ...](#)

Tasks

Type	Priority	Name	Disease
No tasks to display			

[More ...](#)

Recent Cases

Event ID	Name	Disease
100005984	Ornot, Tiberius Byron	TB-LTBI
100002940	Lewis, Lou	TB-LTBI
100005922	Cocoa, Hot	TB-LTBI
100005734	Duck, Donald F	TB-Active
100005698	Chlamydia Cluster	Chlamydia

[More ...](#)

The screen will display all workflows, scroll to locate the TB workflow and click on the workflow assigned to you.

HIV/TB/HEP			
CTR_InvestigationStatus_NEW		92 (0)	Medium 06/30/2017 08:16 AM
Completed STDS missing required fields		8 (0)	Medium 06/30/2017 08:21 AM
Delora Pritschet		37 (0)	Medium 06/30/2017 08:21 AM
Delora Pritschet NEW		37 (0)	Medium 06/30/2017 08:21 AM

All cases that require attention will be displayed. Click on the case to open and complete assignment.

Workflow Details - Delora Pritschet NEW

Delora Pritschet NEW (Last Update: 06/30/2017 09:21 AM)										
Event	Name	Status	Create Date	Disease	Event Date	Last Update	Assigned To	Assigned To Group	InvestigationStatus	
<input type="checkbox"/> 100005984- 01. Administrative	Ornot, Tiberius Byron	Open	05/01/2017	TB-LTBI	05/01/2017	05/09/2017			NEW	
<input type="checkbox"/> 100005922- 01. Administrative	Cocoa, Hot	Open	01/19/2017	TB-LTBI	01/19/2017	05/25/2017			NEW	
<input type="checkbox"/> 100005734- 01. Administrative	Duck, Donald F	Open	07/01/2016	TB-Active	05/16/2005	06/27/2017			NEW	
<input type="checkbox"/> 100005466- 01. Administrative	VAQSLEW, OKIPXNR	Open	12/11/2015	TB-Active	12/11/2015	12/11/2015			NEW	