

Tuberculosis Specimen Referral System (TSRS)

Guide for DTU Laboratory Technicians

1. Functionality

As a laboratory technician at a participating DTU, you will interact with the specimen referral system through SMS mobile phone text messaging. You will send specifically formatted SMS messages to a pre-defined phone number. Messages sent will be interpreted by a computer and will be immediately available to appropriate District, NTLP, and NTRL staff. You will only access the system using your mobile phone. No computer or internet access is required.

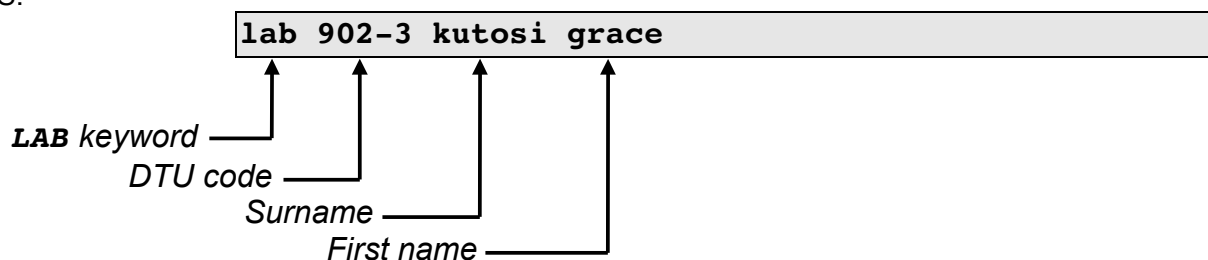
Your interaction with the SMS specimen referral system will consist of:

- Registering all suspected MDR-TB sputum specimens collected at the DTU that are going to be sent to NTRL for testing.
- Reporting when any registered specimen is sent from the DTU to NTRL and the method of transport used to send the specimen.
- Receiving notifications when specimens sent from the DTU are received at NTRL.
- Receiving the results of tests conducted on the specimens at NTRL.
- Receiving requests from NTRL for additional specimens in the event that a specimen is lost in transit or is determined to be invalid.

2. User Registration

Before you can send or receive any SMS messages you must register yourself as a laboratory technician with the system. To register, send an SMS with the keyword **LAB** followed by your DTU code, then your names.

EXAMPLE: A laboratory technician named Kitosi Grace working at a DTU with the code 902-3 would like to register with the system as a DTU laboratory technician. She would send the following SMS:



Important Notes:

- You only need to register once. You do **not** need to register each time you send a message.
- After registering, the system identifies you by your phone number, so you must send messages using the same line with which you registered.

3. Registering a Suspected MDR Specimen

Once you have registered yourself as a laboratory technician, you can begin to register suspected MDR specimens as they are collected at your health unit. You should register specimens as soon as they are collected. To register a specimen, send the keyword **TSRS** followed by the DTU laboratory registration number. The registration number usually looks like **123/08** or **042/10** where **123** and **042** are the lab registration numbers, and **08** and **10** correspond to the years in which they were registered.

EXAMPLE: Your unit has collected a sputum specimen from a patient with the lab registration number of 123/08. To register this specimen you would send the following SMS:

tsrs 123/08

TSRS keyword

DTU laboratory
registration number



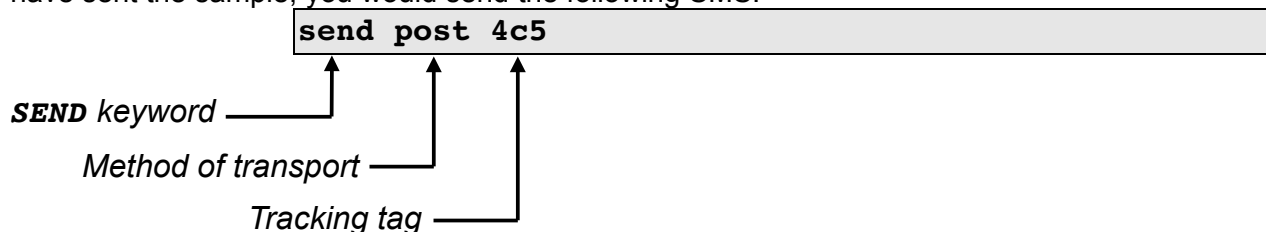
Important Notes:

- After registering a specimen you will receive a response with a *tracking tag*. You should record this tag somewhere with the specimen as you will need to refer to it when you send the specimen to NTRL.
 - Do not include any roman numerals in the lab registration number. If you are requested to send a repeat sample for a patient, you should use the same registration number.
 - You can only register one specimen at a time. You must send a separate SMS for each suspected MDR specimen collected.
- space or a full stop instead. For example, **123 08** or **123.08** will both be recognised by the system the as **123/08**.

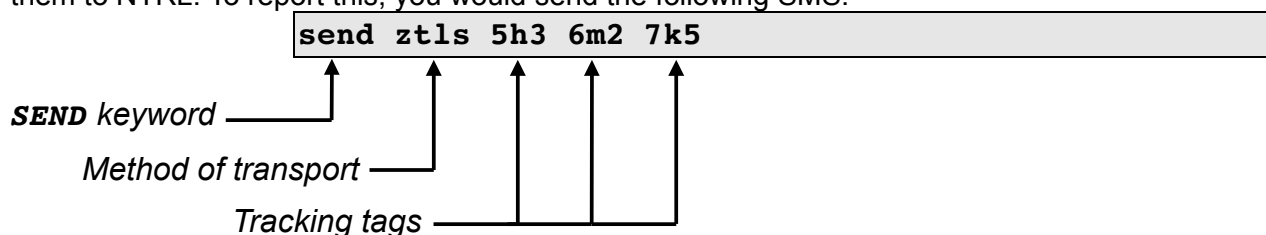
4. Sending Specimens

After you have registered a suspected MDR specimen, you must send an additional SMS when you actually send the specimen to NTRL. To report that a specimen has been sent, send the keyword **SEND** followed by the method of specimen transport (**POST**, **ZTLS**, or **OTHER**) followed by one or more tracking tags.

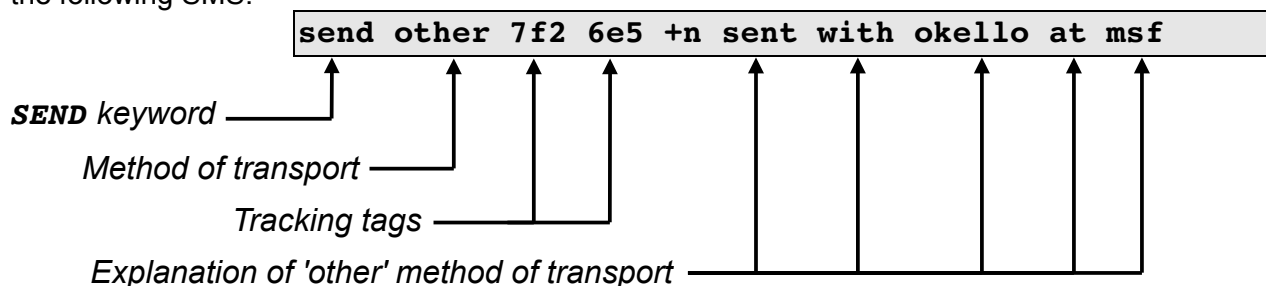
EXAMPLE: You registered a specimen yesterday using the **TSRS** keyword and received a tracking tag of **4c5**. You are now sending the sample today through the Posta Uganda. To report that you have sent the sample, you would send the following SMS:



EXAMPLE: Your health unit has collected and registered three specimens and received a tracking tag for each of them. You are giving them to the ZTLS who will be traveling to Kampala to deliver them to NTRL. To report this, you would send the following SMS:



EXAMPLE: Your health unit has collected and registered two specimens and received a tracking tag for each. Your partner, MSF, will deliver them to NTRL for you. To report this, you would send the following SMS:



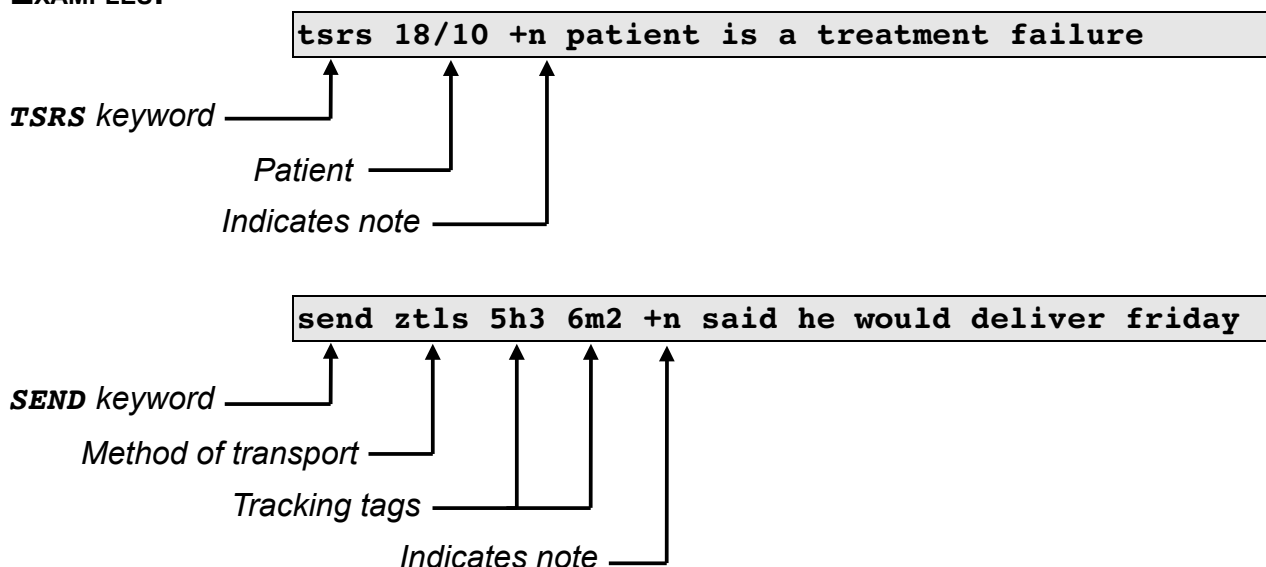
Important Notes:

- You cannot send a specimen until you first register it using the **TSRS** keyword.
- If the method of specimen transport is **OTHER**, you must provide a note explaining how the sample was sent. See section **5. Including Notes** for more information.

5. Including Notes

You can include a note containing additional information about a specimen or how you are sending it when you send the **TSRS** or **SEND** SMSs. To include a note, simply insert **+N** at the end of your SMS then write your note.

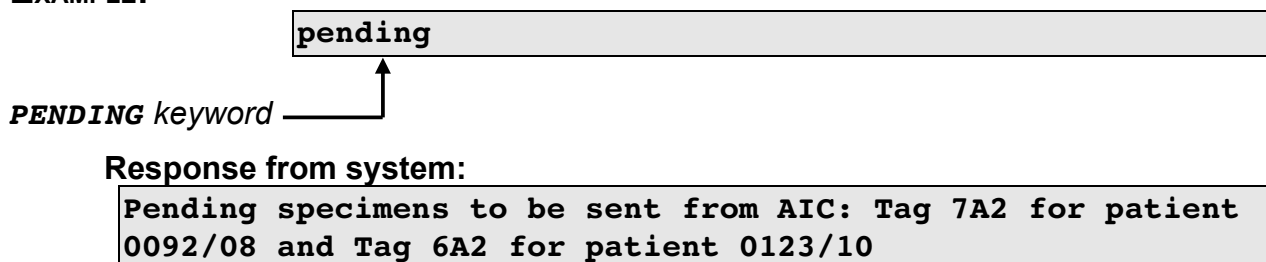
EXAMPLES:



6. Looking Up Tracking Tags to be Sent

In the event that you have registered a specimen using the **TSRS** keyword, but have lost the tracking tag, send an SMS with only the word **PENDING**. You will receive a response SMS listing all tracking tags and the corresponding laboratory registration numbers for specimens waiting to be sent from your DTU.

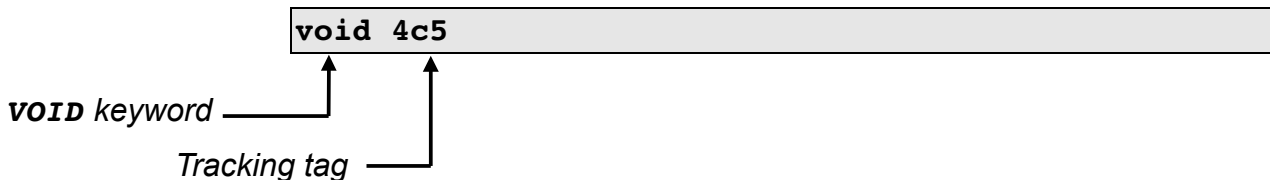
EXAMPLE:



7. Voiding a Registered Specimen

In the event that you accidentally register a specimen that you don't intend to send to NTRL, or if you accidentally register a specimen using the wrong laboratory registration number, you can void the registration using the **VOID** keyword. Simply send **VOID** followed by one or more tracking tags.

EXAMPLE:



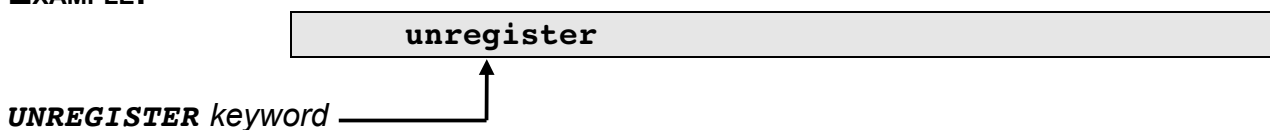
8. Moving DTUs

If you move to a different DTU, simply send the same **LAB** message that you initially sent to register (see section **2. User Registration**) with the new DTU code.

9. Unregistering

If you discontinue your position at the DTU, or you go on leave, you can unregister from the SMS system by sending the keyword **UNREGISTER**. After unregistering you will no longer be able to register any specimens, and you will not receive any results through SMS. If you would like to re-register again, you can simply send the **LAB** keyword again (see section **2. User Registration**).

EXAMPLE:



Important Notes:

- The SMS messages are not case sensitive. Letters can be capital letters or small letters.
- Be careful to differentiate between 0 (zero) and o (the letter O). Those characters appear similar on many phones, but interchanging them may result in your message being rejected.
- You should receive a response after every message you send. If you don't receive a response, wait one hour before trying again. If you still don't receive a response, process the specimen according to normal TSRS procedures and then report the problem to your DTLS or ZTLS.

one's SMS inbox for unread messages before reporting any problems