**ATTACHMENT – C: Survey Instrument**

**Evaluation of the CDC Molecular Detection of Drug Resistance Testing Service for isolates of *Mycobacterium tuberculosis* complex (Pilot Survey Version 1, 10/19/2011)**

1. How did you **first** get information on the MDDR testing service offered by CDC?

CDC website

“Dear Colleague” letter

Conference call with CDC

Professional meeting

Regional Training and Medical Consultation Center (RTMCC)

TB control program

Another public health laboratory

CDC TB Laboratory Consultant

1. Who initiates requests for the molecular detection of drug resistance (MDDR) testing at CDC? (Check all that apply.)

Health care provider

TB control program

Laboratory

Laboratory only after consultation with program staff

Other. Please explain:       \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Were you satisfied with the turnaround time for receiving results from the MDDR testing service?

Very satisfied

Satisfied

Neither satisfied nor dissatisfied

Dissatisfied

Very dissatisfied

1. What is the usual timeframe for your laboratory to report interim molecular results from the MDDR service to health care providers?

Molecular results are reported directly to health care provider within 1 business day of receipt from CDC

Molecular results are reported directly to health care provider within 2 business days of receipt from CDC

Reporting time to health care provider varies depending on circumstances

Molecular results are reported to health care provider by TB Control Program

Not applicable. Health care provider receives separate MDDR report from CDC

1. In general, does your laboratory withhold reporting molecular results from the MDDR service until conventional drug susceptibility testing is completed by **CDC**?

Yes. Please state why molecular results are withheld:

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Sometimes. Please state why molecular results are sometimes withheld:

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No, molecular results are reported as soon as possible

Not applicable. Molecular results are reported to health care provider by TB Control Program

Not applicable. Health care provider receives separate report from CDC

1. In general, does your laboratory withhold reporting molecular results from the CDC MDDR service until conventional drug susceptibility testing is completed by **your laboratory**?

Yes. Please state why molecular results are withheld

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Sometimes. Please state why molecular results are sometimes withheld:

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No, molecular results are reported as soon as possible

Not applicable. Molecular results are reported to health care provider by TB Control Program

Not applicable. Health care provider receives separate report from CDC

1. How are results from the CDC MDDR service reported?(Check all that apply)

Verbally

Copy of CDC report is provided

CDC results are transcribed into LIMS for reporting

Not applicable. CDC results are not reported by our laboratory

1. Does your laboratory compare **molecular** results from the CDC MDDR service with your local test results for conventional drug susceptibility with first-line drugs?

Yes, we always compare molecular results from CDC with our local test results (Skip to question 10)

Sometimes we compare molecular results from CDC with our local test results (Skip to question 10)

No, we report the molecular results from CDC without comparing to our local test results

Not applicable. We do not perform first-line drug susceptibility testing

1. If you indicated that you **do not** compare molecular results from CDC with local testing, please indicate the reason (Check all that apply).

Our laboratory is not fully qualified to compare molecular results from CDC with our local results

We report molecular results from CDC and results from local testing without further comparison and interpretation

We only compare conventional drug susceptibility test results from CDC with our local testing.

Other. Please explain     \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

(AFTER ANSWERING QUESTION #9, PLEASE SKIP TO #12.)

1. If you indicated that you do compare molecular results from CDC with your local testing results for first-line drugs, please indicate the reason. (Check all that apply)

Results are compared for quality assurance purposes

Results are compared for increasing understanding of molecular testing

Results are compared to find discordance

Results are compared in preparation for consultation with the health care provider or TB Control Program if needed

Other. Please explain      \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. If you indicated that you do compare molecular results from CDC with your own local testing results for first-line drugs, have you ever found potential discordance (i.e., mutation detected indicating potential resistance to rifampin but conventional local drug susceptibility test result was rifampin susceptible)?

Yes, we found potential discordance between the CDC molecular result and the conventional local drug susceptibility test result

No, we have not found any potentially discordant results (Skip to question 13)

1. If you found discordance between the molecular results from CDC and local test results for conventional drug susceptibility what additional actions, if any, were initiated by your laboratory? (Check all that apply.)

No additional actions were taken.

Contacted the Division of Tuberculosis Elimination Laboratory Branch at CDC to discuss results

Retested isolate in our laboratory

Withheld sending CDC results to health care provider or TB Control

Contacted TB Control Program to notify them of potential discordance

Initiated a corrective action plan in our laboratory

Referred an isolate from the patient to another laboratory other than CDC for molecular testing

Referred an isolate from the patient to another laboratory other than CDC for conventional drug susceptibility testing

Additional action taken by our laboratory depends on what drug is indicated as having the potential discordance (i.e., contact CDC about potential discordant result for rifampin but not for isoniazid)

* + - Please provide any additional information for this response:      \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Do you compare molecular results from CDC for potential discordance with second-line drug susceptibility test results obtained from local testing?

Yes, always

Yes, sometimes. Please explain:      \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

No, we do not perform second-line drug susceptibility testing

No, we perform conventional second-line drug susceptibility testing but do not compare with molecular results from CDC

1. If the **molecular** results from the MDDR service are the **first** results available regarding susceptibility of an isolate, how do these results impact conventional drug susceptibility testing performed locally?

Results have no impact on local testing

Local results are disregarded

If resistance is indicated by molecular results, isolate is referred to another laboratory other than CDC for additional testing

Other. Please explain:      \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Have you observed, as indicated on the CDC final report, potential discordance between the preliminary molecular results and the phenotypic test results **reported by CDC**? (In answering this question, only consider results from CDC and not local testing.)

Yes, we have observed discordance

No, we have not observed discordance (Skip to question 17)

No, we do not examine CDC results for discordance (Skip to question 17)

1. If you observed potential discordance between the preliminary molecular and final phenotypic test results **reported by CDC**, what additional actions, if any, were initiated by your laboratory? (In answering this question, only consider results from CDC and not local test results) (Check all that apply**.**)

No additional actions were taken

Contacted the Division of Tuberculosis Laboratory Branch at CDC to discuss results

Retested isolate in our laboratory

Withheld sending CDC results to health care provider or TB Control

Contacted TB Control Program to notify them of potential discordance

Referred an isolate from the patient to another laboratory other than CDC for molecular testing

Referred an isolate from the patient to another laboratory other than CDC for conventional drug susceptibility testing

Additional action taken by our laboratory depends on what drug is indicated as having the potential discordance (i.e., contact CDC about potential discordant result for rifampin but not for isoniazid)

* + - Please provide any additional information regarding action depends on the specific antituberculosis drug indicated:      \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Did you have any difficulty interpreting the molecular results from the MDDR service as provided on the report form?

The results were very difficult to interpret

The results were somewhat difficult to interpret

The results were not difficult to interpret

The results were very easy to interpret

1. Were you comfortable discussing interpretation of the molecular results from the MDDR service with health care providers or TB control?

Very comfortable discussing the results

Had some difficulty explaining the results

In most instances, not contacted for help interpreting the results

1. If you experienced any difficulty interpreting the molecular results from the MDDR service, where did you seek help? (Check all that apply.)

Contacted CDC TB Laboratory for help interpreting the report

Visited the CDC website for more information on the MDDR testing service

Consulted with other laboratory experts to interpret results

Consulted with clinician for help in interpreting results

Did my own research to find information on interpretation

Contacted local TB program in consultation for interpreting the results

Contacted RTMCC in consultation for interpreting the results

I did not seek additional help for interpreting the results