

**Missouri Department of Health and Senior Services  
Division of Community and Public Health  
Bureau of Communicable Disease Control and Prevention**

## **Performance Readiness Survey**

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## **Introduction and Background**

The purpose of the Performance Readiness survey was to assess the potential impact to Missouri's public health system from the recent cuts in core public health funding. The survey addressed specific communicable disease (CD) activities, and the tasks associated with those particular activities. The data provided through this survey will help in determining our collective ability (both local and state) to perform these tasks, and aid in prioritizing the tasks.

The survey contained seven separate activity categories with fifty-eight specific tasks supporting the seven activities. Four additional questions were asked related to current program procedures.

For each task associated with a particular activity, the local public health agency (LPHA) was asked to determine their "Estimated Performance Readiness" (EPR). EPR was defined as the degree of ability and willingness to accept, own and perform a specific task or activity at a sustained acceptable level. An acceptable level of sustainability was defined by the procedures of investigation put forth in the *Communicable Disease Investigation Reference Manual* (CDIRM). Most LPHAs have accepted this document as their policy and procedure guide. For the purpose of this survey, responses are expressed as a percentage of occurrences likely to be completed by the agency (0%, 25%, 50%, 75%, and 100%). The responses to each task were to reflect the agency's ability to perform the tasks for Fiscal Year (FY) 13, and only one response from each LPHA, for each task was accepted.

The "Task Importance" was defined as how important the specific task was to the agency being interviewed, or their community. The acceptable responses were rated on the following scale: 1= Important, 2 = Neutral, 3= Not Important. For consistency of data, a percent was calculated to deem the level of importance noted by the LPHA. "Neutral" and "Not Important" were combined into one category.

Bureau of Communicable Disease Control and Prevention (BCDCP) staff likewise completed a modified Performance Readiness Survey and were asked to prioritize each task, rating the tasks as *Important or Less Important*. Significant discussions ensued with BCDCP staff on our current practices and tasks to identify areas of possible improvement and tasks that may no longer be effective or needed.

## Methods

The responses from this report were analyzed and a statewide average determined. It was deemed appropriate performance readiness by the BCDCP for each task with an average of 75% and above. The average performance readiness for each task was considered fair with a percentage of 74% and below.

Task importance was also analyzed and examined statewide. A task was considered *Important* with 60% or more of the local agencies identifying the task as important; and *slightly Important* if 59% and less considered the task important.

To determine appropriate measures to put into place to address areas of concern, four categories were developed. The categories were based on the calculated percentages for EPR and task importance. The four categories that were developed are as follows:

- *Concentrate here* (< 75% EPR and  $\geq$  60% Importance)
- *Maintain performance* ( $\geq$  75% EPR and  $\geq$  60% Importance)
- *Non-priority* (< 75% EPR and < 60% Importance)
- *Over-performance* ( $\geq$  75% EPR and < 60% Importance)

For this report the two areas to be discussed are “*Concentrate here*” and the “*Non-priority*” rankings.

BCDCP staff were also asked to review the fifty-eight tasks and prioritize them as either important or less important to program operations, and possible solutions based on survey results from the LPHAs. The BCDCP also collaborated with the Office of Veterinary and Public Health (OVPH) and the Bureau of HIV, STD, and Hepatitis (BHSB) on tasks 21, 22, 24, 38, 39, 52, 53, 54, 55, 56, 57, and 58.

## Results and Recommendations

### CONCENTRATE HERE

- 2. Perform Active Surveillance:** This task can be discontinued by the LPHA. This process may be initiated as needed when a specific public health problem or event has been identified.
- 3. Respond to ESSENCE notifications:** BCDCP staff will perform this follow-up if requested to do so by the LPHA.
- 9. Submission of NORS Form and CD-51:** BCDCP staff will perform this task with input from the local public health agency.
- 10. Provide Final Outbreak Report:** BCDCP staff will provide consultation and other assistance as requested to help with developing the final outbreak report. BCDCP has

developed outbreak report training which has been provided in all districts in 2012. In 2013, BCDCP will develop a webinar for those agencies that may have missed the in-person training. The training provides minimal requirements for an outbreak report.

- 11. Establish existence of outbreak - Outside of Normal Business Hours; and**
- 12. Outbreaks occurring outside of Normal Business Hours – Conduct detailed epidemiological investigation; and**
- 13. Outbreaks occurring Outside of Normal Business Hours – Implement control measures and interventions:** When notified, BCDCP staff will contact the LPHA and proceed as requested; which may include BCDCP performing tasks 11, 12 and 13.
- 14. Perform initial entry of Category One Disease case reports within 24 hours of receipt by LPHA into WebSurv:** BCDCP staff will continue to process disease reports received by the Missouri Department of Health and Senior Services (DHSS), and enter them into WebSurv. The LPHA should notify DHSS/BCDCP immediately upon notification of a possible Category 1 condition. The LPHA/BCDCP can enter case reports as soon as resources allow.
- 17. Perform initial entry of Category Two Disease case reports within 24 hours of receipt by LPHA into WebSurv:** BCDCP staff will continue to process disease reports received by DHSS, and enter them into WebSurv. The LPHA should follow the “Reporting Requirements” to DHSS as established in the *CDIRM*. The LPHA can enter case reports as soon as resources allow.
- 21. Provide and follow up on recommendations pertaining to the disposition of the biting animal (i.e. quarantine or euthanization and testing):** This question addresses the “follow-up” of animal bite exposures after the initial investigation has been conducted to identify the circumstances surrounding the bite and after guidance or recommendations pertaining to the exposure have been performed. The follow-up of “**First party bite**” situations are at the discretion of the LPHA. “**Second party bite**” situations will generally require follow-up by the LPHA. “**First party bites**” are defined as a situation where the owner of a biting animal is directly related to the bite victim, that is parent-child, sibling-sibling, and grandparent-child; or when the legal residence of the animal owner and the bite victim are the same. “**Second party bites**” are all other circumstances not defined in “**First party bites**”.
- 27. Tuberculosis (TB) – Provide HIV testing:** The TB Program will provide webinar training to the LPHAs on the use of the rapid HIV testing. The TB Program will continue to educate the LPHAs on providing referrals to TB patients for HIV testing.
- 28. Tuberculosis – Perform Directly Observed Therapy (DOT):** The TB Program plans to work with Heartland National TB Center on this issue to create a webinar, on how to provide DOT to patients using DOT advocates in the community. The TB

Program plans to continue providing incentive and enabler funding for DOT patients. In addition, LPHAs could recommend to their local physicians that prescribing alternative intermittent regimens (rather than daily treatment regimens), which would decrease the number of days that DOT would be necessary.

- 29. Tuberculosis – Provide appropriate care for patients requiring IV antibiotics:** Contracts with home health care agencies or partnering with other groups will be necessary to accomplish this task. Another alternative would be to request that physicians prescribe non-IV antibiotics if possible, for Multi-Drug Resistant-TB patients. Non-IV antibiotics are significantly more expensive than IV antibiotics for MDR-TB. Although non-IV antibiotics are more expensive, it may be more cost-efficient based on the costs for a trained nurse to administer the IV antibiotics. The TB program is performing an analysis of the costs associated with administering IV antibiotics vs. non-IV antibiotics when appropriate.
- 30. Tuberculosis – Ensure proper isolation precautions are in place and followed:** This would only apply to pulmonary TB patients. BCDCP TB staff will provide training on TB isolation precautions and provide N95 masks as needed. Training can be provided to DOT workers or other community advocates to do spot checks to ensure isolation is maintained while the patient is infectious.
- 31. Tuberculosis – Ensure treatment completion:** The purpose of DOT is to ensure treatment completion. See response to question 28.
- 32. Tuberculosis – Ensure data entry of TB Disease cases into WebSurv reportable within 24 hours (confirmed and suspect cases):** TB Program/BCDCP staff will assume the responsibility for the entry of TB case information into WebSurv, except for the three LPHAs with TB contracts from DHSS. All other LPHAs need to notify the TB program of confirmed and suspect TB cases as soon as possible by telephone, fax or email, and provide case information as requested to the TB Program for entry into WebSurv.
- 34. Tuberculosis – Perform an extended contact investigation:** TB Program staff and regional/district bureau staff could help with extended contact elicitation, consultation on who should be tested/evaluated, data entry and paperwork, and other tasks associated with extended contact investigations as requested. The TB Program nurse, other DHSS program area nurses, and possibly other LPHA nurses in surrounding areas could assist with the administration of tuberculin skin testing or evaluation of contacts.
- 43. Latent Tuberculosis Infection – Provide DOT to children on LTBI treatment who are a contact to a known TB case:** Please see response to task number 28. In addition, the TB Program could provide training to school nurses, day care staff, or other community advocates to perform DOT.

- 44. Latent Tuberculosis Infection – Ensure treatment completion:** The TB Program will provide educational materials to LPHAs for LTBI patients on the importance of completing treatment. Some of these materials would be in the form of a written agreement between the LPHA and the patient emphasizing the responsibilities of the patient and the need to complete therapy if started.
- 46. Perform weekly entry of influenza case reports into the aggregate (WebSurv):** This issue is concentrated in the Central District (4,069) and Southwest District (2,497) LPHAs. Educational materials and/or webinars could be developed on the importance of Influenza Surveillance. During the Influenza season, it is possible that a BCDCP staff person could be available for data entry for Central and Southwest District LPHAs to perform influenza entry.
- 49. Attend annual TB Training or In-Service:** The TB Program staff will continue to provide in-person TB training as necessary and one-on-one orientation whenever possible. The TB Program will begin using webinars, recorded trainings, and other technology to make TB training more accessible as funding permits.
- 52. Update or perform initial entry of prenatal/perinatal hepatitis B virus (HBV) case into WebSurv on expecting females to include pregnancy status:** The LPHA will need to continue the initial entry of HBV case info into WebSurv. This task is essential in identifying at-risk individuals to ensure appropriate interventions are administered. Additionally, BSHS staff will create *Pregnancy* variables within WebSurv to facilitate case entry.
- 53. Complete IMM-29 and IMM-29A and forward to BSHS:** Completion of the IMM-29A is no longer required of LPHA staff. Completion of the IMM-29 following initial entry into WebSurv is crucial as BSHS will assume entry responsibilities for follow-ups and updates; each of which is dependent upon the accuracy of the initial IMM-29.
- 54. Elicit sexual and household contacts of prenatal hepatitis B case and provide or refer contacts for testing, vaccination and post-vaccination serology; enter contacts into WebSurv; submit IMM-29s as necessary:** The LPHA will perform this task as local resources are available.
- 55. Contact delivery hospital 6 weeks prior to due/delivery date to arrange for administration of HBIG and hepatitis B vaccine for infant:** The LPHA will need to continue with this task. BSHS will assist in reminder notifications to LPHAs as local contacts are vital to assuring appropriate prophylaxis and vaccination occurs.
- 56. Obtain documentation from hospital of vaccinations; update and submit IMM-29:** The LPHA will need to continue with obtaining and submitting the IMM-29 to BSHS. BSHS staff will update the IMM-29 information in WebSurv.

- 57. Follow infant through 2nd, 3rd and 4<sup>th</sup> (if using Pediarix) hepatitis B vaccination(s) and serology testing; update and submit IMMP-29 after each; if serology does not show immunity, follow through a second series of vaccinations and testing:** BSHS staff plan to create a reminder notification process to assist the LPHA in performing this task.

### **NON PRIORITY**

- 16. Perform closure of Category One Diseases in WebSurv within 10 calendar days of completion; and**
- 19. Perform closure of Category Two Disease in WebSurv within 10 calendar days of completion:** No timeframe will be associated with this task or task 16. If during Quality Assurance (QA) of the WebSurv information, BCDCP staff identify a case that is not closed after ~3 weeks from entry; the LPHA will be notified.
- 22. Perform entry of animal bite information into WebSurv or the Aggregate in accordance to the current animal bite algorithm:** The algorithm *Possible Human Exposure to Rabies, Cases to be Entered into WebSurv* should be used by the LPHA. Cases that are identified as *Rarely Entered by Name into WebSurv* or *Do not Enter by Name into WebSurv* are to be entered into WebSurv at the discretion of the LPHA. The LPHA may decide **not** to enter animal bites that are identified as (*Rarely Entered by Name into WebSurv* or *Do not Enter by Name into WebSurv*) using the algorithm; this includes the Animal Bite Aggregate Reporting component of WebSurv. All other animal bites should be entered into WebSurv by name.
- 24. Entry of individuals reported to be receiving rabies post exposure prophylaxis in WebSurv (it is understood these reports are Category Three):** BCDCP and OVPH will work on enhancements to WebSurv to eliminate dual entry of animal bites and RPEP. This enhancement should be implemented by the end of March 2013.
- 35. Perform initial entry of Category Three Disease case reports within 24 hours of receipt by the LPHA:** BCDCP staff will continue to process disease reports received by DHSS, and enter them into WebSurv. The LPHA should follow the “Reporting Requirements” to DHSS as established in the *CDIRM*. The LPHA can enter case reports as soon as resources allow.
- 37. Perform closure of Category Three Disease cases in WebSurv within 10 calendar days of completion:** No timeframe will be associated with this task. If during QA, BCDCP staff should identify a case that is not closed after ~3 weeks from entry; the LPHA will be notified.

**38. Tick-borne Disease – Perform epidemiological investigation:** LPHAs do not investigate reports of Rocky Mountain spotted fever (RMSF) that do not meet the laboratory criteria for RMSF as set forth in the *2012 Nationally Notifiable Diseases and Condition Case Definitions* (e.g., EIA screening tests and IGM only serology). DHSS will not fax, email, or enter these reports into WebSurv.

All other laboratory tests meeting criteria for national surveillance of RMSF should be verified with “Clinical Evidence” of RMSF **before pursuing a full epidemiological investigation**. “Clinical Evidence” must include **fever**; and one or more of the following: rash, eschar, headache, myalgia, anemia, thrombocytopenia, or any hepatic transaminase elevation. RMSF reports without “Clinical Evidence” **do not need further investigation**. The LPHA will notify (can be by email) BCDCP District staff that the report (by name) does not meet the RMSF case definition.

**39. Tick-borne Disease – Perform entry/closure of case in WebSurv within 10 calendar days of completion:** WebSurv entry is performed only for RMSF reports meeting both laboratory criteria and clinical evidence requirements as set forth in the *2012 Nationally Notifiable Diseases and Condition Case Definitions*. No timeframe is associated with RMSF entry/closure in WebSurv. If during QA, BCDCP staff identify a case that is not closed after ~3 weeks from entry; the LPHA will be notified.

OVPH is revising the tick-borne rickettsial disease case report form so that it will correspond to the flow of data entry fields in WebSurv.

**45. Latent Tuberculosis Infection – Ensure appropriate data entry of LTBI cases into WebSurv within 10 calendar days after evaluation:** The TB Program/BCDCP staff will assume the responsibility for data entry of LTBI case information into WebSurv, except for the three contracted LPHAs. All other LPHAs still need to notify the TB program of LTBI cases, and provide all case information to the TB Program for entry into WebSurv.

**50. Refugee – Perform refugee health screenings:** The BCDCP will provide training to the LPHAs on referring refugees for health screenings. Except for the two contracted LPHAs, the refugee program staff will assume the responsibility for completing the necessary paperwork as required, the information needs to be provided to the program by the LPHA. The training will point out that the Missouri State Public Health Laboratory performs the majority of the required refugee testing at no cost to the client, and what information is needed by the Refugee Health Program.

**58. Enter updated prenatal/perinatal hepatitis B information into WebSurv as received:** BSHS staff will perform this task upon submission of the IMM-29s and other relevant case information from the LPHA.

## **Discussion**

The findings from this survey for the most part were presented as statewide aggregate responses. Stratified analysis looking at individual regions determined there are some regional differences among the different tasks. It was observed that there may be capacity issues associated with metropolitan health departments as compared to rural health departments. The overall consensus from the analysis clearly indicates that data entry is a concern universally in the state. Further, it is clear that many LPHAs will struggle with activities surrounding TB and tick-borne disease in FY 13. Budget cuts may lead to staff reductions at LPHAs further adding to the challenges of responding to outbreaks after hours or on weekends. Likewise, animal bites continue to be an issue for LPHAs in terms of time and resource allocation to investigate the occurrences.

It is prudent to mention possible limitations associated with this survey. The limitations include but are not limited to the possible introduction of information bias in the form of interviewer bias or prevarication bias. Efforts were taken to minimize the potential impact of these biases. Interviewers were provided detailed written instructions and were provided several opportunities to discuss the survey and method of delivery. In addition, LPHA staff were encouraged to be honest and candid in providing responses as it was explained no penalty would be incurred based on answers given during the survey.

Based on the analysis of the LPHA surveys, combined with BCDCP survey results, an action plan has been developed to address those concerns brought forth with the survey. It is important to mention, that upon request the BCDCP staff will assist the LPHAs with any CD task as resources permit. The action plan includes suggested program changes. Most program changes were developed after extensive discussion of the findings among BCDCP and other program staff. The proposed changes are deemed a reasonable collaboration between local public health and state public health, to ensure the safety and improve the public health status for the citizens of this state.