



Success Story

Indonesia: Building Laboratory Personnel Capacity Through Training in Supply Chain, Cold Chain, and Waste Management

As part of its laboratory capacity building efforts, the Institute of Vector and Reservoir Control Research and Development (IVRCRD) in Salatiga, Central Java conducted an assessment of its logistics, cold chain, and waste management systems with technical assistance from the USAID | DELIVER PROJECT. The technical assistance was provided under the USAID Emerging Pandemic Threats (EPT) funded collaboration between the WHO supported IDENTIFY Project and the USAID | DELIVER PROJECT to support EPT partner laboratory strengthening efforts.

The purpose of the assessment was to identify challenges and opportunities at the IVRCRD in these specific areas of laboratory management. A good logistics system ensures that laboratory reagents and specimen collection supplies are available when needed. A properly functioning cold chain system will help in preserving the integrity and viability of specimens as they are collected from the field and transported to the laboratory for testing. Specimen quality is a critical element, in addition to quality laboratory testing, for the production of reliable and useful laboratory results. It is also important that the waste generated from the laboratories is treated and disposed of safely to protect laboratory workers, the community, and the environment.

From the assessment it was noted that there were no documented standard operating procedures for logistics, cold chain, or laboratory waste management. USAID | DELIVER PROJECT technical advisors conducted a participatory system design workshop with IVRCRD staff to develop standardized logistics, cold chain, and laboratory waste management procedures which were documented in three Standard Operating Procedures manuals (SOPs). To successfully implement the new SOPs all staff are to be properly trained. In order to ensure this, the project developed the training curriculum and materials to use when training IVRCRD laboratory staff on the SOPs. In addition, project advisors conducted a Training of Trainers (TOT) for 15 IVRCRD staff who will, in turn, will provide training to the rest of the staff using these materials.

While implementation of the new laboratory, cold chain, and waste management SOPs is still in the early stages, short term feedback indicates that the introduction of the cold chain standards is already contributing positively towards IVRCRD 's capacity to collect specimens from the field and maintain their viability as they are transported to the laboratory for testing. In a recent Leptospirosis outbreak, IVRCRD staff were able to efficiently and effectively collect specimens from the field and transport them to the laboratory for testing which resulted in prompt confirmation of the

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Leptospirosis outbreak. While outbreaks are never welcome, it is encouraging if laboratories are able to identify outbreaks quickly and provide timely diagnosis for appropriate response.

As a result of IVRCRD's successful response to the Leptospirosis outbreak, the IVRCRD coordinator stated "I would like to thank WHO and USAID for supporting us with the IDENTIFY and DELIVER Projects, so we may increase our laboratory capacity in diagnosing and surveillance of zoonosis, as well as for the cold chain aspect" In addition, a USAID Jakarta official also had the following to say, "NIHRD's Laboratory for Vector Reservoir Control Research and Development (Salatiga) just gave us an update on their recent (Leptospirosis) outbreak investigation and highlighted , plus the *cold chain and logistics training* ALL helped tremendously."

The logistics, cold chain, and waste management interventions are positively complementing efforts being undertaken in other technical areas of the laboratory, for example, improving the testing proficiency of the technicians.

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