

BACKGROUND or INTRODUCTION

One of the goals of the Laboratory Efficiencies Initiative (LEI) is to improve the collection of access to public health test service information required for decision making, planning and collaboration with state and local public health laboratories (PHL). The LEI-Data workgroup identified a need to develop a tool for laboratory directors to gather and organize management information most often required for certification and accreditation purposes.

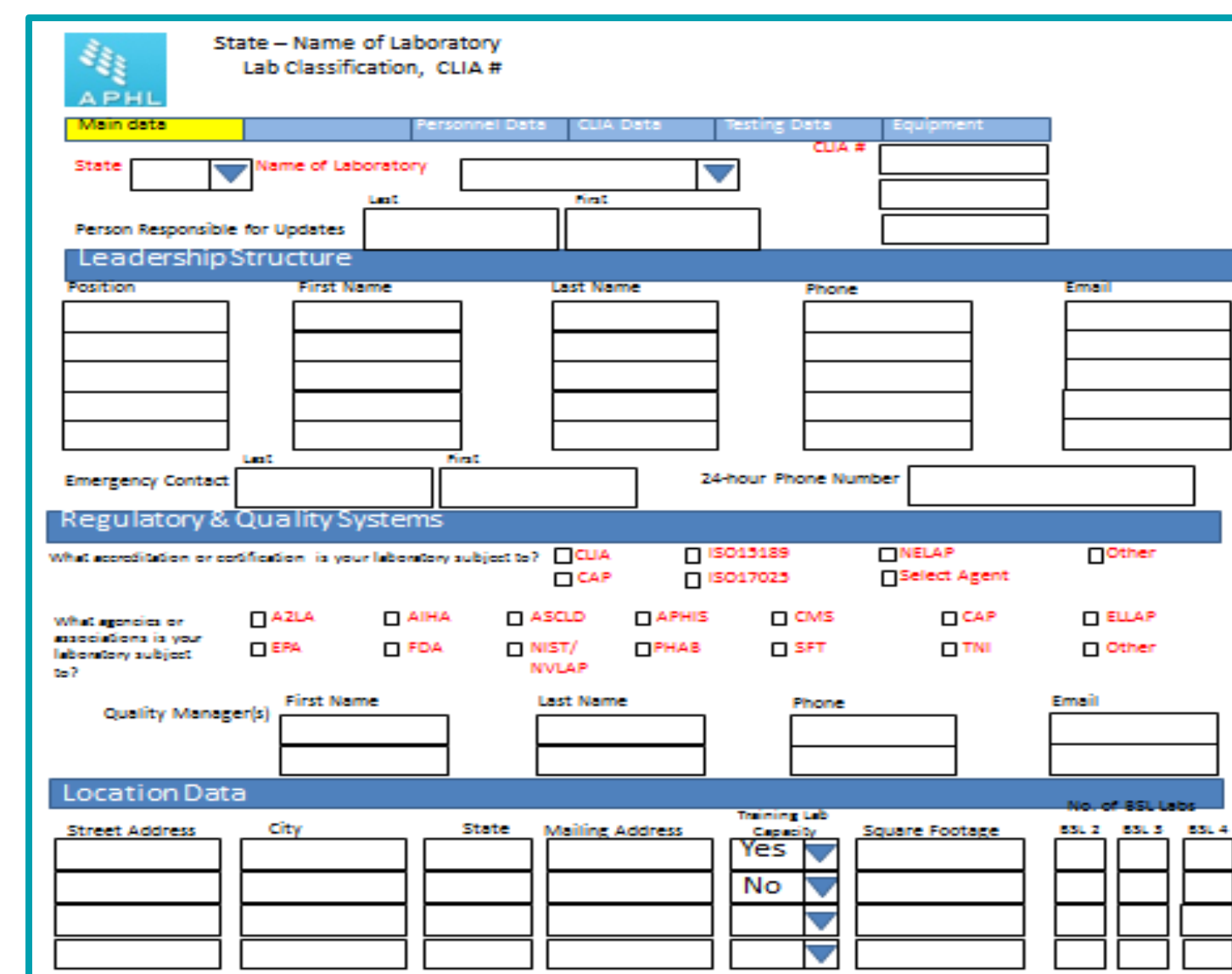
METHODS

The LEI-Data subcommittee has initiated a project to develop a database for the management of PHL facility-level information that also provides the capability of exporting consistent and comprehensive data on PHL test services and methods. The database is modeled after the CDC Office of Infections Diseases (OID) Laboratory Quality Management Program database which was developed to manage personnel, test and instrument information, including CLIA requirements, among CDC infectious disease laboratories. The LEI-Data subcommittee recommended the creation of the database in response to information management needs expressed by its membership. The consultant that developed the CDC OID database was contracted to adapt the database to meet the needs of PHLs. Multiple meetings, both in-person and via conference call, were held to determine the type of data needed by laboratory directors to prepare for certifications and accreditation inspections. A detailed and comprehensive list of potential test services and methods was compiled using various states' PHLs test service menus to ensure standardization of test names. The database covers laboratory capacity data including organization, tests, personnel, infrastructure and certifications routinely used by PHLs in managing their activities, meeting regulatory requirements, and sharing information with partners for mutual assistance purposes.

The aim of this database is to provide a tool that can be used by each PHL to manage and control their own capacity data. Select data from each PHL database will be uploaded to APHL in order to create a nationwide test service directory. Maintenance and update of the database is optional, however, APHL will encourage yearly updates on the test service data.

RESULTS

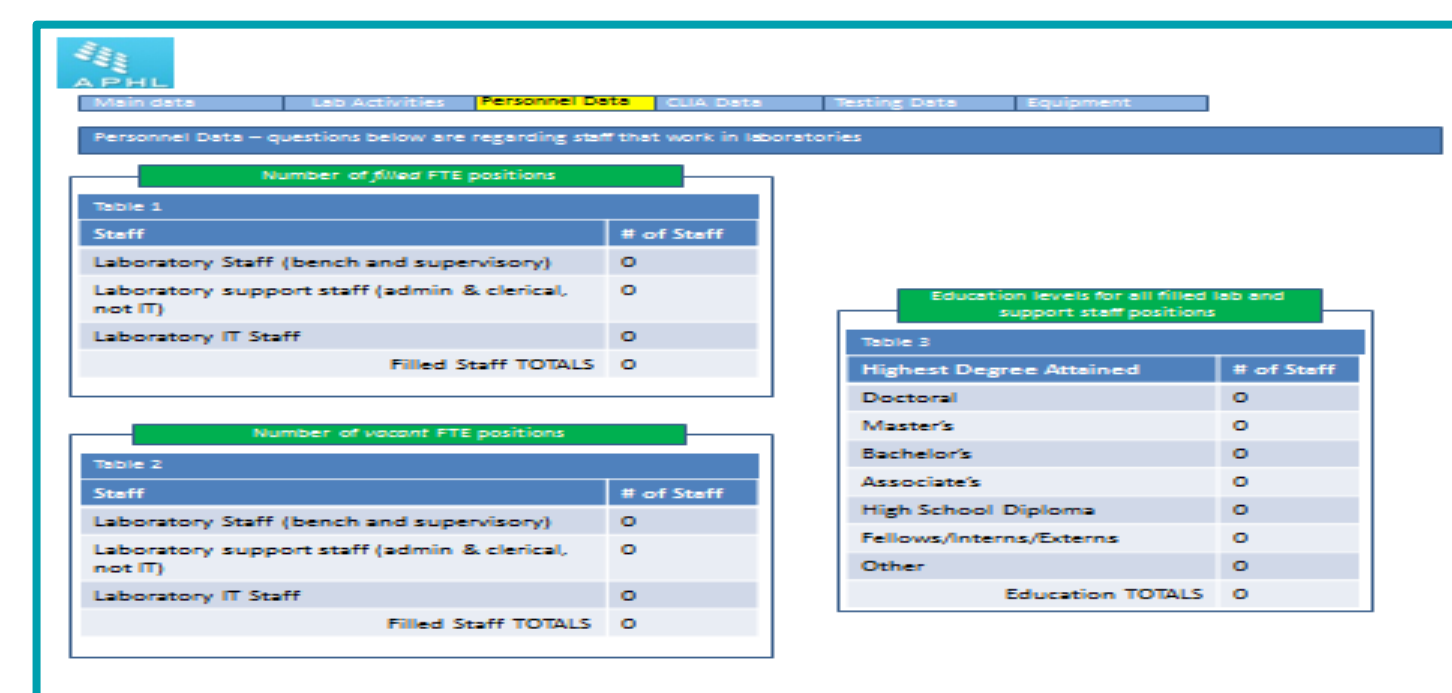
Figure 1. Main Data



The screenshot shows the 'Main Data' form with tabs for Main Data, Personnel Data, CLIA Data, Testing Data, and Equipment. Key sections include:

- Main Data:** State, Name of Laboratory, Lab Classification, CLIA #.
- Leadership Structure:** Person Responsible for Updates, Position, First Name, Last Name, Phone, Email.
- Regulatory & Quality Systems:** What accreditation or certification is your laboratory subject to? (CLIA, CAP, ISO15189, etc.).
- Location Data:** Street Address, City, State, Mailing Address, Training Lab, Square Footage, No. of ISO Labs.

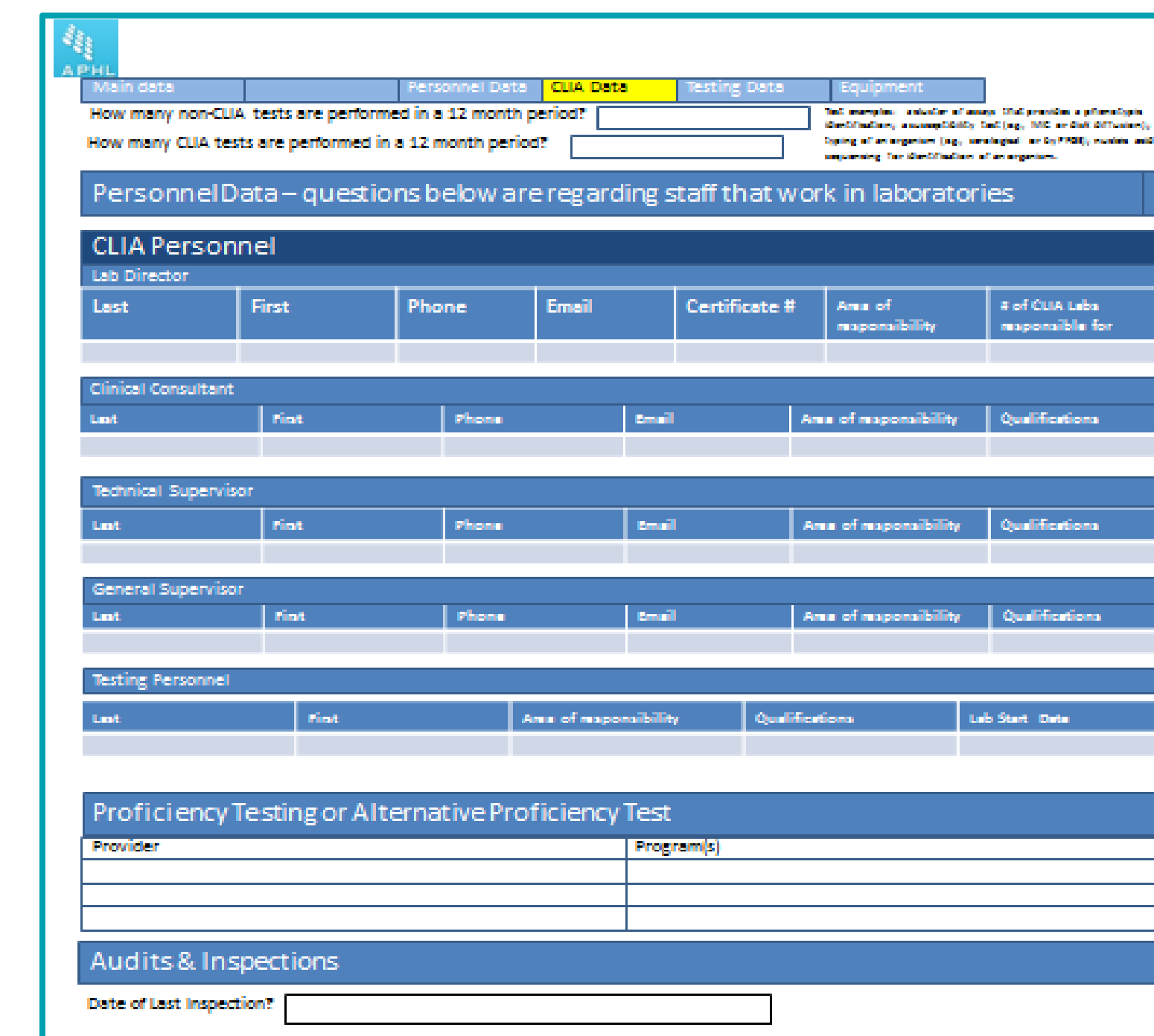
Figure 2. Personnel Data



The screenshot shows the 'Personnel Data' form with tabs for Main Data, Personnel Data, CLIA Data, Testing Data, and Equipment. Key sections include:

- Number of FTE positions:** Tables for Full-time and Part-time positions across different staff types.
- Education levels for staff:** Highest Degree Attained (Doctorate, Master's, Bachelor's, etc.).

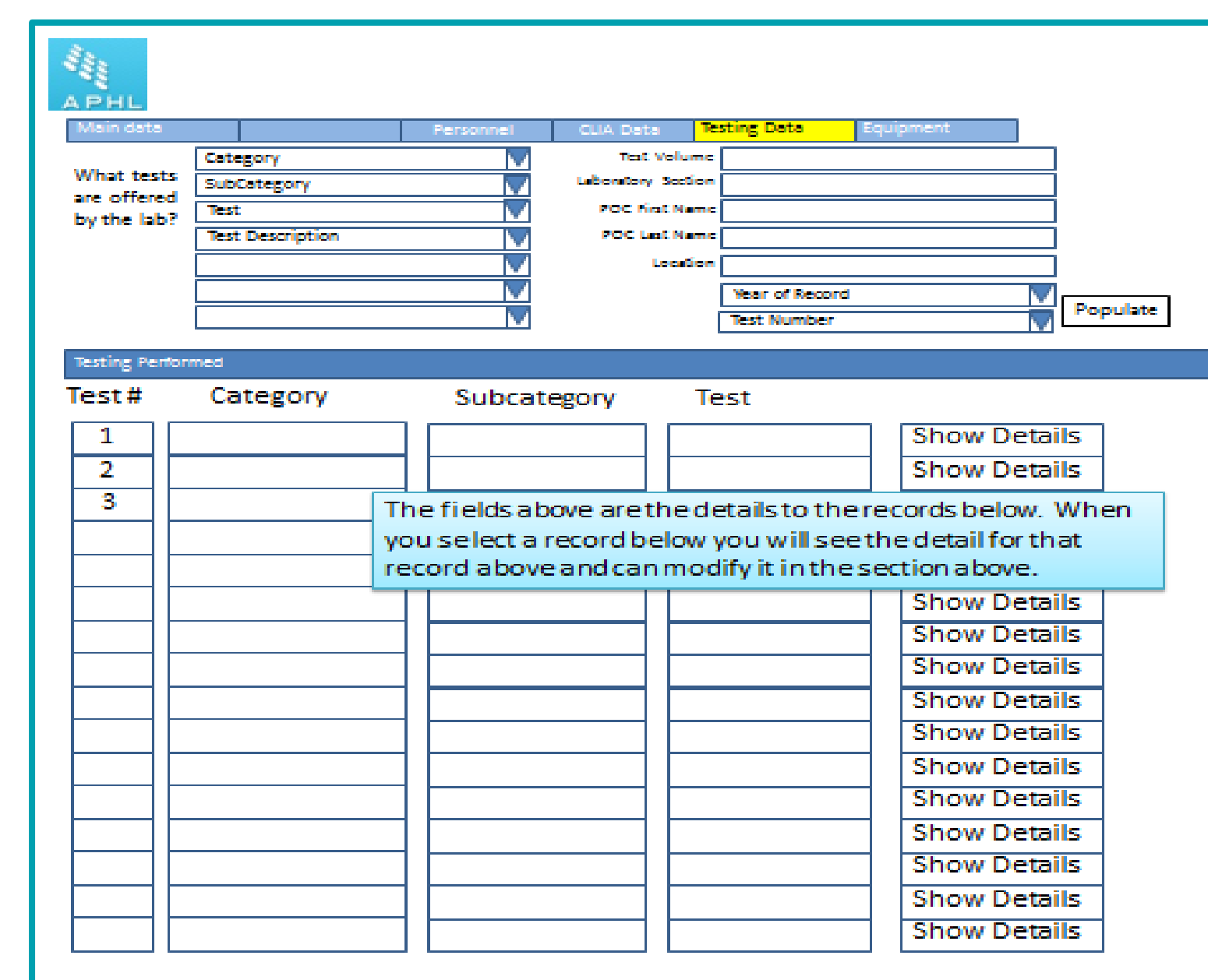
Figure 3. CLIA Data



The screenshot shows the 'CLIA Data' form with tabs for Main Data, Personnel Data, CLIA Data, Testing Data, and Equipment. Key sections include:

- Personnel Data:** Questions regarding staff that work in laboratories.
- CLIA Personnel:** Tables for Lab Director, Clinical Consultant, Technical Supervisor, and General Supervisor.
- Testing Personnel:** Table for testing staff.
- Proficiency Testing or Alternative Proficiency Test:** Provider and Program(s).
- Audits & Inspections:** Date of last inspection.

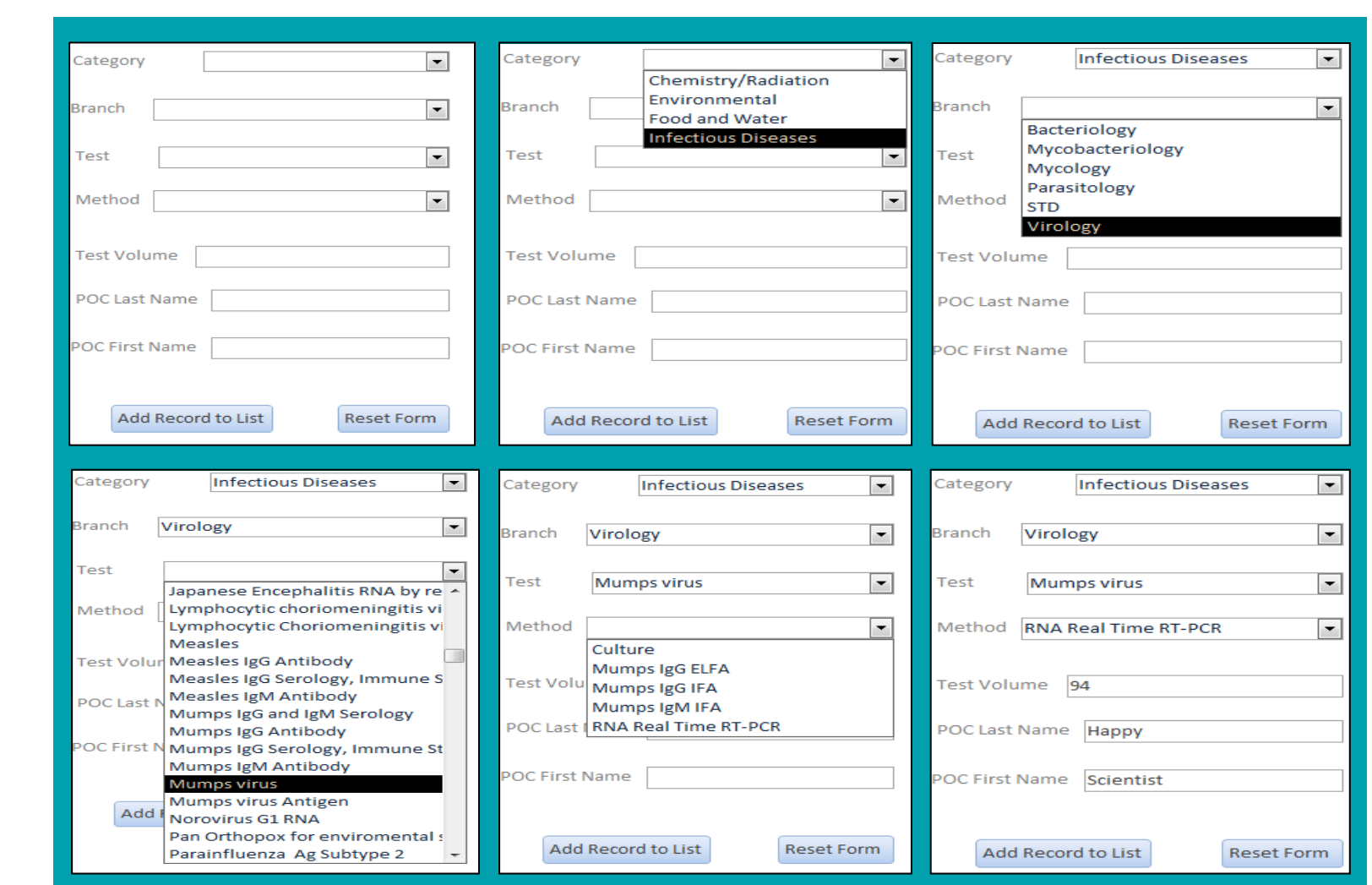
Figure 4. Testing Data



The screenshot shows the 'Testing Data' form with tabs for Main Data, Personnel Data, CLIA Data, Testing Data, and Equipment. Key sections include:

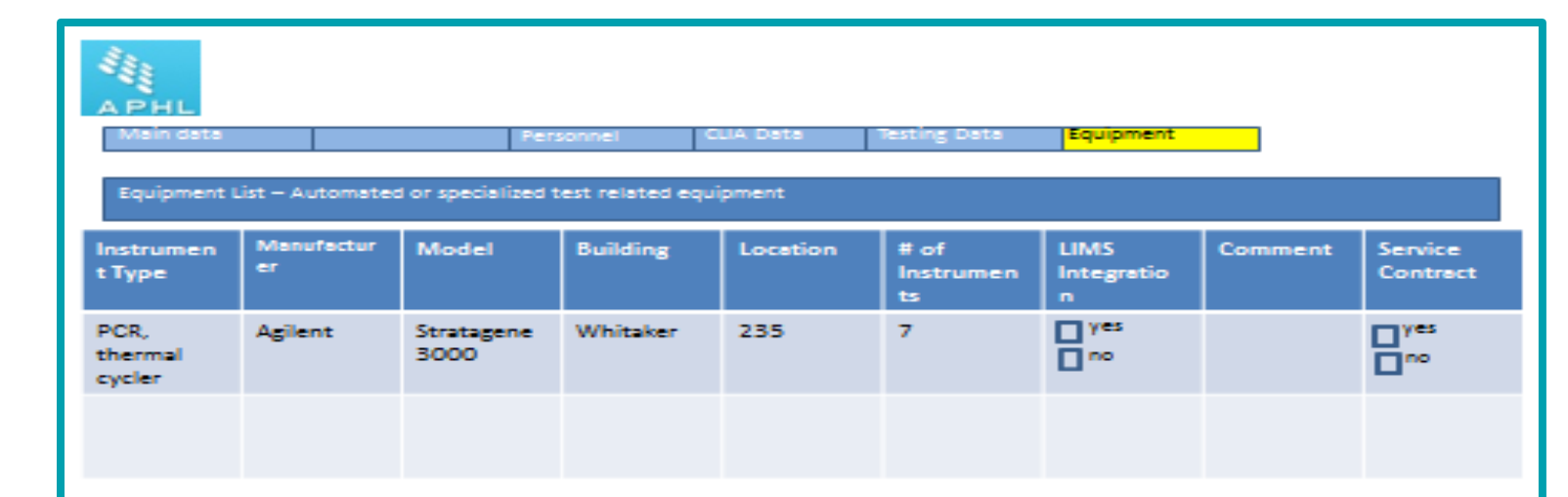
- What tests are offered by the lab?:** Category, Subcategory, Test, Test Description, Test Volume, POC Last Name, Location, Year of Record, Test Number.
- Testing Performed:** Table with columns for Test #, Category, Subcategory, Test, and Show Details.

Figure 5. Test Service List/Example of test drop-down list



The screenshot shows the 'Test Service List' form with tabs for Main Data, Personnel Data, CLIA Data, Testing Data, and Equipment. It displays three examples of test drop-down lists with categories like Infectious Diseases, Chemistry/Radiation, and Environmental Food and Water.

Figure 6. Equipment Data



Instrument Type	Manufacturer	Model	Building	Location	# of Instruments	LIMS Integration	Comment	Service Contract
PCR, thermal cycler	Agilent	Stratagene 3000	Whitaker	235	7	<input type="checkbox"/> YES <input type="checkbox"/> NO		<input type="checkbox"/> YES <input type="checkbox"/> NO

CONCLUSION

The database will increase the efficiency of laboratory information management and reduce data gathering efforts in response to requests by CDC programs and APHL surveys. Entries to this database are optional and each laboratory only needs to complete sections applicable to their needs. However, the expectation is that each laboratory will complete the test service menu section in order to create a nationwide laboratory test and method directory. This will potentially eliminate many of the data requests from CDC, APHL and other agencies.

For More Information

Please contact Deborah Kim, Institutional Research Director at Deborah.kim@aphl.org

Acknowledgements / Sources

LEI Data subcommittee members: Christine Bean, John Besser, Roberta Carey, Greg Jones, Billie Juni, Grace Kubin, Renee Ned, Bonnie Rubin and Angela Starks

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