How Accreditation Strengthens Data

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History of Ohio Department of Agriculture Accreditation

• The Ohio Department of Agriculture Consumer Protection Laboratory was first accredited in 2009.
• The PDP (Pesticide Data Program) was the first program brought under the ISO 17025 scope.
• The MDP (Microbiological Data Program) and the Analytical Toxicology Lab were soon to follow adding methods to the scope in 2010.
• In 2017 our Animal Disease Diagnostic Lab added two methods to the scope. In 2019 they will be adding 2 more methods including Whole Genome Sequencing.
• As of June 2019 we will have 15 methods on our Biological scope and 12 methods on our Chemical Scope.
Why do we want strong data?

• In Regulatory Labs = Product may need to be destroyed based on laboratory results.
• In Diagnostic Labs = Animals lives may be destroyed based on laboratory results.
• Legally Defensible = Legal Action may be taken against offender.
• Client’s confidence = The client has an associated Risk with results they receive from the lab. The client needs to have confidence that their results are reliable.
How Accreditation Strengthens Data

• Accreditation ensures that laboratories implement procedures that strengthen the data that they produce.

• I have compiled a list of the top 6 procedures I feel have been implemented in our laboratory because of accreditation which has had the biggest impact on producing strong data.
Training

Accreditation ensures that the lab has a standardized way to train which evaluates competency BEFORE working on client samples.

Before ISO 17025 Accreditation

• Training was brief and haphazard.
  – No control over how training was done

After ISO 17025 Accreditation

• Training is standardized and ensures competency.
Training Documentation
Accreditation ensures the lab is documenting training.

Before ISO 17025 Accreditation
• Documentation of training was not organized and there were many missing records.
• “I have every training record but the one you asked for.”

After ISO 17025 Accreditation
• Documentation of training is very organized, complete and easily retrievable. Training records have been converted to entirely electronic.
Control of Documents

Accreditation ensures that the lab has control over SOPs.

Before ISO 17025 Accreditation

• Analysts were sometimes working from an older version of an SOP.
• “No, the SOP was revised to say NOT to heat the solution!!!”

After ISO 17025 Accreditation

• The laboratory has a document control system to ensure that the lab is operating from the most up to date SOP.
Environmental Monitoring
Accreditation ensures that the lab is monitoring equipment and environment.

Before ISO 17025 Accreditation

• The lab was not consistent checking refrigerator/freezer temperatures everyday.

After ISO 17025 Accreditation

• By checking the environment everyday potential problems are caught before they occur.
Ensuring the Validity of Results
Accreditation ensures that the lab is monitoring performance.

Before ISO 17025 Accreditation
- Only the supervisors reviewed PT’s.
- No control charts were being done.
- Only supervisors were reviewing calibration records.
- No action taken if the controls were outside the pre-defined criteria. Issues would re-occur because the root of the problem had not been discovered.

After ISO 17025 Accreditation
- Each section of the lab participates in PT’s and submits reports to the QAO.
- Uses quality control materials and analysis in control charts which are reviewed monthly in the sections Quality Assurance Meeting.
- Calibrates equipment which records are checked during internal audits.
- Corrective actions are initiated if the laboratory is outside of pre-defined criteria to rectify the issue.
Internal Audits

Accreditation ensures that the lab is abiding by the quality system by performing internal audits.

Before ISO 17025 Accreditation

• No internal audits were conducted.

After ISO 17025 Accreditation

• Internal audits are conducted on each laboratory section once per quarter.
• Internal audits are a way to hold employees accountable. We have different sets of eyes in the labs to ensure employees are actually doing what is required.
Accreditation = Strong Data = Legally Defensible = Satisfied Client

When there is an outbreak situation the regulatory agencies breathe a sigh of relief when the results are coming from a lab that is accredited because

ACCREDITATION = STRONG DATA
Contact Information

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