

MLVA update

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PulseNet Methods Development and Reference Unit

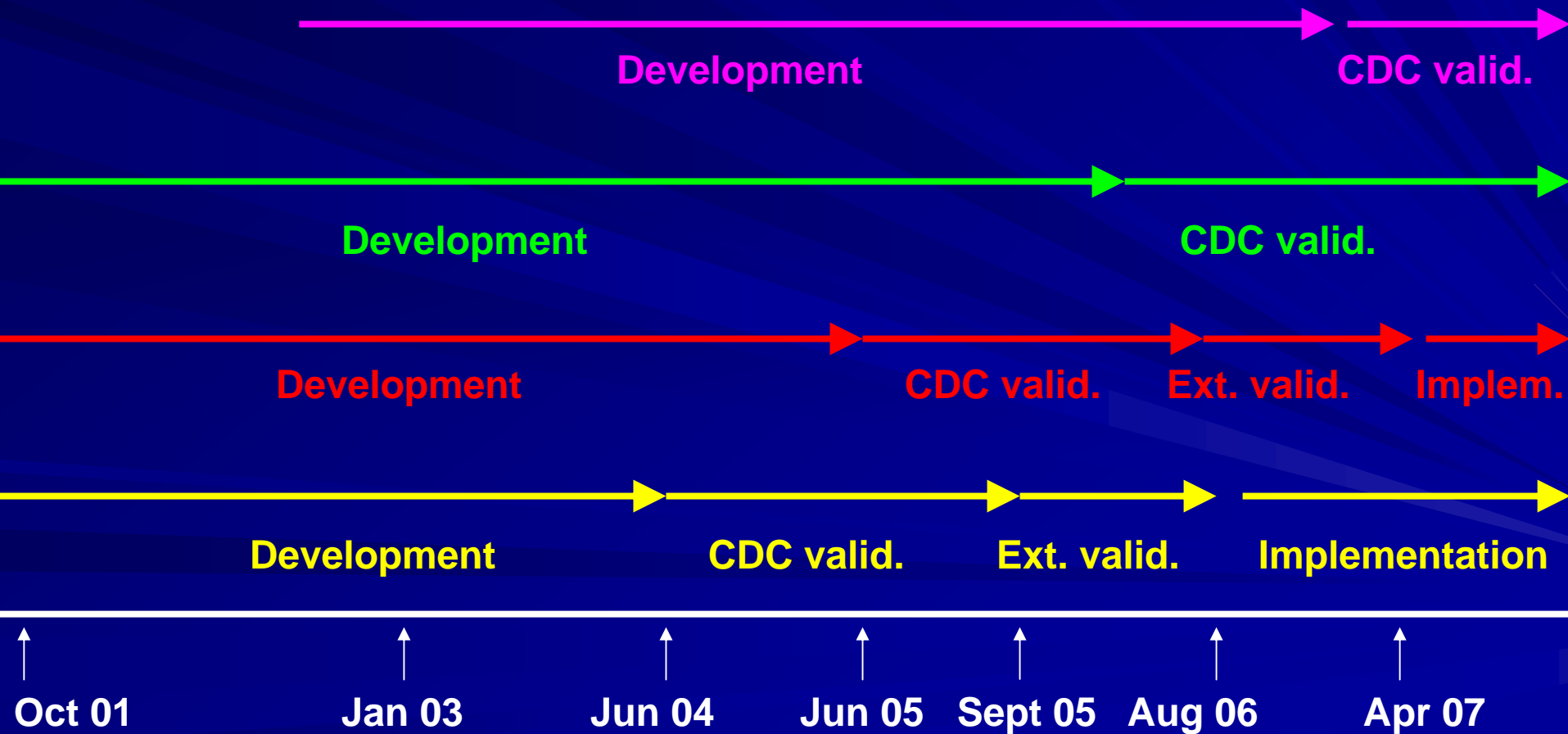
Enteric Diseases Laboratory Branch

CDC, Atlanta, GA



Beckman CEQ MLVA protocols

- STEC O157
- *S. Typhimurium*
- *S. Enteritidis*
- *L. monocytogenes*



ABI MLVA protocols

- STEC O157 protocol almost finalized
 - Re-validation (phase I only) in 3-4 laboratories needed
- *S. Typhimurium* protocol under CDC validation
 - External validation (phase I and II) in 3-4 laboratories needed
- *S. Enteritidis* and *L. monocytogenes* protocols will be subjected to external validation at the same time with the CEQ protocols

MLVA training

- First bench training workshop in Oct 2006
 - Beckman CEQ platform only
 - ABI workshops will be offered later this year
 - Hands-on laboratory work, troubleshooting, QA/QC and BioNumerics training for a maximum of four individuals at a time
- Additional workshops will be offered this year depending on the interest
 - Training requests: EHyytia-Trees@cdc.gov or ERibot@cdc.gov

MLVA certification

- Laboratorians required to be certified for each individual organism
- CDC provides positive controls, eight certification strains and primers
 - Prior training at CDC strongly recommended
 - Request for certification sets: EHyytia-Trees@cdc.gov
- Certification for peak files only
 - BioNumerics analysis will be added once national MLVA databases are on-line (March 08 for *E. coli* O157)

MLVA implementation

- Tiered approach
 - PFGE clusters with common PFGE patterns
 - All significant outbreaks
- National MLVA databases built on the CEQ data
 - ABI data will require a normalization step to be comparable with the CEQ data
 - PFGE and MLVA databases will be combined for each organism

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