

Healthy People 2010 Operational Definition

23-13. Increase the proportion of Tribal and State public health agencies that provide or assure comprehensive laboratory services to support essential public health services.

23-13a. Disease prevention, control, and surveillance.

National Data Source	Comprehensive Laboratory Services Survey (CLSS), Association of Public Health Laboratories (APHL).
State Data Source	Comprehensive Laboratory Services Survey, Association of Public Health Laboratories (APHL).
Healthy People 2000 Objective	Not applicable.
Changes since the 2000 Publication	New subobjective (see Comments). Revised text (see Comments). Revised baseline (see Comments). Revised baseline year (see Comments). Revised target (see Comments).
Measure	Percent.
Baseline (Year)	98 (2006)
Target	100
Target-Setting Method	Expert opinion. For a discussion of target-setting methods, see Part A, section 4.
Numerator	Number of States and Territories participating in the survey that meet the defined standards/criteria for Disease, Prevention, Control, and Surveillance.
Denominator	Number of States and Territories participating in the survey.
Population Targeted	State and Territory public health laboratories
Questions Used To Obtain the National Baseline Data	From the 2006 Comprehensive Laboratory Services Survey:

- *Does your laboratory collect information on turn around time (TAT) that is:*
 - a) *Used internally (for laboratory quality assurance and improvement only) (0.5)*
 - b) *Used externally (to inform submitters in order to improve pre-and post-analytical QA or to measure overall program productivity) (0.5)*
 - c) *Used both internally and externally (1.0)*
 - d) *No (0)*
- *Does your laboratory procedures manual contain standards for TAT (i.e. maximum acceptable TAT), and do you monitor them for quality improvement?*
 - a) *All tests (1)*
 - b) *Most tests (>50% of the time) (0.67)*
 - c) *Some tests (<50% of the time) (0.33)*
 - d) *Never (0)*
- *Does your laboratory participate in the following CDC disease surveillance programs? (Check all that apply)*
 - a) *Laboratory Response Network (LRN) (0.09)*
 - b) *Emerging Infections Program/Epidemiology Laboratory Capacity (EIP/ELC) (0.09)*
 - c) *Foodborne Disease active Surveillance Network (FoodNet) (0.09)*
 - d) *Health Alert Network (HAN) (0.09)*
 - e) *Influenza (CDC/WHO Surveillance Network) (0.09)*
 - f) *Arbovirus Surveillance (ArboNet) (0.09)*
 - g) *National Enteric Respiratory Virus Surveillance System (NERVSS) (0.09)*
 - h) *National Molecular Subtyping Network for Foodborne Disease Surveillance (PulseNet) (0.09)*
 - i) *FERN (Food Emergency Response Network) (0.09)*
 - j) *Elexnet (Electronic Laboratory Exchange Network) (0.09)*
 - k) *DPDx (Laboratory Identification of Parasites of Public Health Concern) (0.09)*
 - l) *Other (Specify) (0: do not score- info only)*
- *Do staff of the state laboratory interact with the staff of the state epidemiologist's office on at least a weekly basis?*
 - a) *Yes (1)*
 - b) *No (0)*

- *Does your State Public Health Laboratory provide or assure the following (check all that apply):*
 - *Identification of gonococcal isolates from clinical specimens?*
 - a) *Provide testing (1)*
 - b) *Assure testing (1)*
 - c) *Neither provide nor assure (0)*
 - *Confirmatory identification of gonococcal isolates from other laboratories?*
 - a) *Provide testing (1)*
 - b) *Assure testing (0.75)*
 - c) *Neither provide nor assure (0)*
 - *Antibiotic Susceptibility Testing for gonococcal isolates*
 - a) *Provide testing (1)*
 - b) *Assure testing (0.75)*
 - c) *Neither provide nor assure (0)*
- *Which type of laboratory provides confirmatory identification of gonococcal isolates for family planning and STD clinics in your state? (Check all that apply; maximum score of 1)*
 - a) *Public Health Laboratories (1)*
 - b) *Clinical Laboratories (1)*
 - c) *National Reference Laboratories (1)*
- *Which type of laboratory provides antibiotic susceptibility testing results for gonococcal isolates for family planning and STD clinics in your state? (check all that apply; maximum score of 1)*
 - a) *Public Health Laboratories (1)*
 - b) *Clinical Laboratories (1)*
 - c) *National Reference Laboratories (1)*
- *How many days a week does your laboratory **routinely** process and culture specimens for tuberculosis?*
 - a) *Five (0.5)*
 - b) *Six (0.75)*
 - c) *Seven (1)*
- *Does your laboratory perform fluorochrome acid-fast smears on respiratory specimens submitted for mycobacterial testing?*
 - a) *Yes (1)*
 - b) *No (0)*
- *Are the results of the smears reported to the health care provider within 24 hours from the receipt of specimen in the laboratory?*
 - a) *Always (1)*
 - b) *Most of the time (>50% of the time) (0.67)*
 - c) *Some of the time (<50% of the time) (0.33)*
 - d) *Never (0)*

- *Is the culture identification of Mycobacterium tuberculosis complex reported to the submitter within 21 days of specimen receipt in the laboratory?*
 - a) Always (1)
 - b) Most of the time (>50% of the time) (0.67)
 - c) Some of the time (<50% of the time) (0.33)
 - d) Never (0)
- *Which type of media is used for primary inoculation of respiratory cultures for Mycobacterium tuberculosis?*
 - a) Broth only (0.75)
 - b) Solid only (0.25)
 - c) Broth and Solid (1)
- *Does your laboratory provide identification of Mycobacterium tuberculosis complex using? (Check all that apply; maximum score of 1)*
 - a) HPLC (High Pressure Liquid Chromatography) (1)
 - b) NAAT (Nucleic Acid Amplification Testing) [e.g. Mycobacterium Tuberculosis Direct test (MTD), Polymerase Chain Reaction (PCR)] (1)
 - c) Biochemicals (1)
 - d) Non-amplified probe (e.g. AccuProbe) (1)
 - e) Other (Specify) (1)
 - f) None of the above
- *Does your laboratory provide or assure testing for susceptibility to first-line anti-tuberculosis drugs? (Check all that apply)*
 - *Streptomycin*
 - a) Provide testing (0.2)
 - b) Assure testing (0.2)
 - c) Neither provide nor assure (0)
 - *Isoniazid*
 - a) Provide testing (0.2)
 - b) Assure testing (0.2)
 - c) Neither provide nor assure (0)
 - *Rifampin*
 - a) Provide testing (0.2)
 - b) Assure testing (0.2)
 - c) Neither provide nor assure (0)
 - *Ethambutol*
 - a) Provide testing (0.2)
 - b) Assure testing (0.2)
 - c) Neither provide nor assure (0)
 - *Pyrazinamide*
 - a) Provide testing (0.2)
 - b) Assure testing (0.2)
 - c) Neither provide nor assure (0)

- *Is primary drug susceptibility testing for M. tuberculosis reported back to the submitter within 30 days of specimen receipt in the laboratory?*
 - a) Always (1)
 - b) Most of the time (>50% of the time) (0.67)
 - c) Some of the time (<50 percent of the time) (0.33)
 - d) Never (0)
- *Does your laboratory program regularly provide positive results of tuberculosis to your State Tuberculosis Control Program within 48 hours?*
 - a) Yes (1)
 - b) No (0)
- *Does your laboratory provide or assure testing for the following:*
 - *Viral Isolation for Influenza*
 - a) Provide testing (1)
 - b) Assure testing (1)
 - c) Neither provide nor assure (0)
 - *Viral Subtyping for Influenza*
 - a) Provide testing (1)
 - b) Assure testing (1)
 - c) Neither provide nor assure (0)
- *What method(s) are used to identify viral isolates for influenza? (Check all that apply; maximum score of 1)*
 - a) DFA (Direct Fluorescent Antibody) (1)
 - b) CPE (Cytopathic Effect) and Hemadsorption (1)
 - c) PCR (Polymerase Chain Reaction) (1)
 - d) Other (Specify) (1)
 - e) None of the above
- *What methods are used to perform subtyping of influenza isolates? (Check all that apply; maximum score of 1)*
 - a) PCR (Polymerase Chain Reaction) (1)
 - b) Hemagglutinin (HA) & Hemagglutination inhibition (HI) (1)
 - c) IFA (Indirect Fluorescent Antibody) (1)
 - d) Other (Specify) (1)
 - e) None of the above
- *Does your laboratory perform PFGE (Pulsed Field Gel Electrophoresis) analysis for isolates of the following:*
 - *Escherichia coli* O157:H7
 - a) Yes (0.25)
 - b) No (0)
 - *Samonella serypes*
 - a) Yes (0.25)
 - b) No (0)
 - *Listeria monocytogenes*
 - a) Yes (0.25)

- b) No (0)
- *Shigella*
 - a) Yes (0.25)
 - b) No (0)
- *Does your laboratory provide or assure testing for the following:*
 - *Arbovirus serology*
 - a) *Provide testing* (0.09)
 - b) *Assure testing* (0.09)
 - c) *Neither provide nor assure* (0)
 - *Hepatitis C serology*
 - a) *Provide testing* (0.09)
 - b) *Assure testing* (0.09)
 - c) *Neither provide nor assure* (0)
 - *Legionella serology*
 - a) *Provide testing* (0.09)
 - b) *Assure testing* (0.09)
 - c) *Neither provide nor assure* (0)
 - *Measles serology*
 - a) *Provide testing* (0.09)
 - b) *Assure testing* (0.09)
 - c) *Neither provide nor assure* (0)
 - *Varicella serology*
 - a) *Provide testing* (0.09)
 - b) *Assure testing* (0.09)
 - c) *Neither provide nor assure* (0)
 - *Mumps serology*
 - a) *Provide testing* (0.09)
 - b) *Assure testing* (0.09)
 - c) *Neither provide nor assure* (0)
 - *N. meningitidis serotyping*
 - a) *Provide testing* (0.09)
 - b) *Assure testing* (0.09)
 - c) *Neither provide nor assure* (0)
 - *Shigella serotyping*
 - a) *Provide testing* (0.09)
 - b) *Assure testing* (0.09)
 - c) *Neither provide nor assure* (0)
 - *Salmonella serotyping*
 - a) *Provide testing* (0.09)
 - b) *Assure testing* (0.09)
 - c) *Neither provide nor assure* (0)
 - *B. pertussis detection*
 - a) *Provide testing* (0.09)
 - b) *Assure testing* (0.09)
 - c) *Neither provide nor assure* (0)
 - *Plasmodium identification*
 - a) *Provide testing* (0.09)
 - b) *Assure testing* (0.09)
 - c) *Neither provide nor assure* (0)

➤ Does your laboratory provide or assure testing for the following newborn conditions? (Check all that apply)

● **Core Panel: OA**

- **IVA** Isovaleric academia (Isovaleryl-CoA dehydrogenase)
 - a) Provide testing (0.034)
 - b) Assure testing (0.034)
 - c) Neither provide nor assure (0)
- **GA-1** Glutaric academia type 1
 - a) Provide testing (0.034)
 - b) Assure testing (0.034)
 - c) Neither provide nor assure (0)
- **HMG** 3-Hydroxy 3-methylglutaric aciduria (3-Hydroxy 3-methylglutaryl-CoA lyase)
 - a) Provide testing (0.034)
 - b) Assure testing (0.034)
 - c) Neither provide nor assure (0)
- **MCD** Multiple carboxylase (Holocarboxylase synthetase)
 - a) Provide testing (0.034)
 - b) Assure testing (0.034)
 - c) Neither provide nor assure (0)
- **MUT** Methylmalonic Acidemia (methylmalonyl-CoA-mutase)
 - a) Provide testing (0.034)
 - b) Assure testing (0.034)
 - c) Neither provide nor assure (0)
- **3-MCC** 3-Methylcrotonyl-CoA carboxylase
 - a) Provide testing (0.034)
 - b) Assure testing (0.034)
 - c) Neither provide nor assure (0)
- **CBL A,B** Methylmalonic academia (Vitamin B12 Disorders)
 - a) Provide testing (0.034)
 - b) Assure testing (0.034)
 - c) Neither provide nor assure (0)
- **PROP** Propionic academia (Propionyl-CoA carboxylase)
 - a) Provide testing (0.034)
 - b) Assure testing (0.034)
 - c) Neither provide nor assure (0)
- **BKT** Beta ketothiolase (mitochondrial acetoacetyl-CoA thiolase: short-chain ketoacyl thiolase; T2)
 - a) Provide testing (0.034)
 - b) Assure testing (0.034)
 - c) Neither provide nor assure (0)

- **Core Panel FAO**
 - **MCAD** Medium-chain acyl-CoA dehydrogenase
 - a) Provide testing (0.034)
 - b) Assure testing (0.034)
 - c) Neither provide nor assure (0)
 - **VLCAD** Very long-chain acyl-CoA dehydrogenase
 - a) Provide testing (0.034)
 - b) Assure testing (0.034)
 - c) Neither provide nor assure (0)
 - **LCHAD** Long-chain L-3-hydroxyacyl-CoA dehydrogenase
 - a) Provide testing (0.034)
 - b) Assure testing (0.034)
 - c) Neither provide nor assure (0)
 - **TFP** Trifunctional protein deficiency
 - a) Provide testing (0.034)
 - b) Assure testing (0.034)
 - c) Neither provide nor assure (0)
 - **CUD** Carnitine uptake defect (Carnitine transport defect)
 - a) Provide testing (0.034)
 - b) Assure testing (0.034)
 - c) Neither provide nor assure (0)
- **Core Panel: AA**
 - **PKU** Phenylketonuria/hyperphenylalaninemia
 - a) Provide testing (0.034)
 - b) Assure testing (0.034)
 - c) Neither provide nor assure (0)
 - **MSUD** Maple syrup urine disease (branched-chain ketoacid dehydrogenase)
 - a) Provide testing (0.034)
 - b) Assure testing (0.034)
 - c) Neither provide nor assure (0)
 - **HCY** Homocystinuria (cystathionine beta synthase)
 - a) Provide testing (0.034)
 - b) Assure testing (0.034)
 - c) Neither provide nor assure (0)
 - **CIT I** Citrullinemia type I (Argininosuccinate synthetase)
 - a) Provide testing (0.034)
 - b) Assure testing (0.034)
 - c) Neither provide nor assure (0)
 - **ASA** Argininosuccinate academia
 - a) Provide testing (0.034)
 - b) Assure testing (0.034)
 - c) Neither provide nor assure (0)
 - **TYR-1** Tyrosinemia Type 1

- a) *Provide testing* (0.034)
- b) *Assure testing* (0.034)
- c) *Neither provide nor assure* (0)
- **Core Panel: HbPathies**
 - **HB S/S** *Sickle cell disease*
 - a) *Provide testing* (0.034)
 - b) *Assure testing* (0.034)
 - c) *Neither provide nor assure* (0)
 - **HB S/A** *S-βeta thalassemia*
 - a) *Provide testing* (0.034)
 - b) *Assure testing* (0.034)
 - c) *Neither provide nor assure* (0)
 - **HB S/C** *Sickle - C disease*
 - a) *Provide testing* (0.034)
 - b) *Assure testing* (0.034)
 - c) *Neither provide nor assure* (0)
- **Core Panel: Others**
 - **CH** *Congenital hypothyroidism*
 - a) *Provide testing* (0.034)
 - b) *Assure testing* (0.034)
 - c) *Neither provide nor assure* (0)
 - **BIO** *Biotinidase*
 - a) *Provide testing* (0.034)
 - b) *Assure testing* (0.034)
 - c) *Neither provide nor assure* (0)
 - **CAH** *Congenital adrenal hyperplasia*
 - a) *Provide testing* (0.034)
 - b) *Assure testing* (0.034)
 - c) *Neither provide nor assure* (0)
 - **GALT** *Transferase deficient galactosemia (Classical)*
 - a) *Provide testing* (0.034)
 - b) *Assure testing* (0.034)
 - c) *Neither provide nor assure* (0)
 - **HEAR** *Hearing screening*
 - a) *Provide testing* (0.034)
 - b) *Assure testing* (0.034)
 - c) *Neither provide nor assure* (0)
 - **CF** *Cystic fibrosis*
 - a) *Provide testing* (0.034)
 - b) *Assure testing* (0.034)
 - c) *Neither provide nor assure* (0)

Expected Periodicity Approximately every two years.

Comments Questions to determine whether a State or Territory is providing or assuring comprehensive laboratory services in support of essential public health services were selected by the Leadership Committee of the Association of Public Health Laboratories (APHL). The committee consists of

practicing and retired public health laboratory directors, members of academia, and other laboratory practitioners.

A State/Territory is considered to have met the core function of Disease Prevention, Control and Surveillance if it scored at least 18 of the 25 total possible points for this subobjective.

Forty-six of the 56 States and Territories responded to the Internet-based survey system entitled “LabNet” in 2006.

Objective 24-13 moved from developmental to measurable during the Healthy People 2010 Midcourse Review. The original objective included comprehensive laboratory services provided by State, Tribal, and local health agencies. Local health agencies were dropped from the objective scope due to the lack of a data source. Eleven subobjectives were created, each addressing specific components of comprehensive laboratory services.

For this objective, the term “State” includes the District of Columbia and Puerto Rico.

The first CLSS survey was fielded in 2004. Between 2004 and 2006, significant changes were made to improve the survey instrument. These include modifications to clarify questions that may have been confusing; updates to reflect changes in current laboratory practice; and the addition of follow-up questions to enable more accurate measurement of given subobjectives.

Consequently, the original 2004 baseline of 90 percent was replaced with the 2006 measure of 98 percent. The original target of 98 percent was proportionally adjusted to 100 percent to reflect the revised baseline using the original target-setting methodology.

At this time, data for Tribal agencies are not collected. However, if data should become available by 2010, the information will be included.

See Appendix A for focus area contact information.