Pathology: Microbiology

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This section contains information to assist providers in billing for pathology procedures related to microbiology services.

Cultures and Cultures Sensitivity Studies

(CPT® codes 87040 thru 87158) must be billed separately from sensitivity studies (CPT codes 87181 thru 87190). Sensitivity studies should not be automatically performed or billed after growing a culture. It is generally considered inappropriate to perform a sensitivity study when the culture shows no growth or yields only normal flora.

Presumptive

Presumptive identification of microorganisms is defined as identification by the colony morphology, growth on selective media, gram stains, or up to three tests (eg, catalase, oxidase, indole and urease).

Definitive

Definitive identification of microorganisms is defined as identification to the genus or species level that require additional tests (eg, biochemical panels, slide cultures). If additional studies involve molecular probes, chromatography, or immunologic techniques, these should be separately coded in addition to definitive identification codes CPT codes 87140 thru 87158.

‹‹Table of CPT Codes ››

CPT Code	Description	Identification	Specimen Source
87040	Culture, bacterial; blood aerobic with isolation and presumptive identification of isolates (includes anaerobic culture, if appropriate)	Presumptive Identification	Blood
87045	Culture, bacterial; stool, aerobic, with isolation and preliminary examination (eg, KIA, LIA), Salmonella, Shigella species	Selective Media Screen	Stool
87046	Culture, bacterial; stool, aerobic, additional pathogens, isolation and presumptive identification of isolates, each plate	Presumptive Identification	Stool
87070	Culture, bacterial; any other source except urine, blood or stool, aerobic, with isolation and presumptive identification of isolates	Presumptive Identification	Any except urine, blood, stool

‹‹Table of CPT Codes (continued)››

CPT Code	Description	Identification	Specimen Source
87071	Culture, bacterial; quantitative, aerobic with isolation and presumptive identification of isolates, any source except urine, blood or stool	Presumptive Identification	Any except urine, blood, stool
87073	Culture, bacterial; quantitative, anaerobic with isolation and presumptive identification of isolates, any source except urine, blood or stool	Presumptive Identification	Any except urine, blood, stool
87075	Culture, bacterial; any source, except blood, anaerobic with isolation and presumptive identification of isolates	Presumptive Identification	Any except blood
87076	Culture, bacterial; anaerobic isolate, additional methods required for definitive identification, each isolate	Definitive Identification	Not Specified
87077	Culture, bacterial; aerobic isolate, additional methods required for definitive identification, each isolate	Definitive Identification	Not Specified
87081	Culture, presumptive, pathogenic organisms, screening only	Presumptive Identification	Not Specified
87084	Culture, presumptive, pathogenic organisms, screening only; with colony estimation from density chart	Presumptive Identification	Not Specified
87086	Culture, bacterial; quantitative colony count, urine	None	Urine
87088	Culture, bacterial; with isolation and presumptive identification of each isolate, urine	Presumptive Identification	Urine
87101	Culture fungi (mold or yeast), isolation, with presumptive identification of isolates; skin, hair, or nail	Presumptive Identification	Skin, hair or nails
87102	Culture, fungi (mold or yeast) isolation, with presumptive identification of isolates; other source (except blood)	Presumptive Identification	Other source except blood (and above)

Table of CPT Codes (continued)

CPT Code	Description	Identification	Specimen Source
87103	Culture, fungi (mold or yeast) isolation, with presumptive identification of isolates; blood	Presumptive Identification	Blood
87106	Culture, fungi, definitive identification, each organism; yeast	Definitive Identification	Not specified
87107	Culture, fungi, definitive identification, each organism; mold	Definitive Identification	Not Specified
87154	Culture, typing; identification of blood pathogen and resistance typing, when performed, by nucleic acid (DNA or RNA) probe, multiplexed amplified probe technique including multiplex reverse transcription, when performed, per culture or isolate, 6 or more targets	None	Not Specified
87181	Susceptibility studies, antimicrobial agent; agar dilution method, per agent, (eg, antibiotic gradient strip)	None	Not specified
‹‹87182	Susceptibility studies, antimicrobial agent; carbapenemase enzyme detection (eg, Klebsiella pneumoniae carbapenemase [KPC], New Delhi metallo-beta-lactamase [NDM], Verona integron-encoded metallo-beta-lactamase [VIM]), multiplex immunoassay, qualitative, per isolate	None	Not specified››
‹‹87183	Susceptibility studies, antimicrobial agent; carbapenem resistance genes (eg, blaKPC, blaNDM, blaVIM, blaOXA-48, blaIMP), amplified probe technique, per isolate	None	Not specified››

Table of CPT Codes (continued)

CPT Code	Description	Identification	Specimen Source
87184	Susceptibility studies, antimicrobial agent; disk method, per plate (12 or fewer agents)	None	Not specified
87185	Susceptibility studies, antimicrobial agent; enzyme detection (eg, beta lactamase), per enzyme	None	Not specified
87186	Susceptibility studies, antimicrobial agent; microdilution or agar dilution (minimum inhibitory concentration [MIC] or breakpoint), each multi-antimicrobial, per plate	None	Not Specified
87187	Susceptibility studies, antimicrobial agent; microdilution or agar dilution, minimum lethal concentration (MLC), each plate (List separately in addition to code for primary procedure)	None	Not specified
87188	Susceptibility studies, antimicrobial agent; macrobroth dilution method, each agent	None	Not specified
87190	Susceptibility studies, antimicrobial agent; mycobacteria, proportion method, each agent	None	Not specified

CPT Code 87205, 87206 or 87210: Documentation Required

Pathology smear procedure code 87205, 87206 or 87210 will not be separately reimbursed if billed for the same date of service as culture codes (CPT codes 87040 thru 87158), unless specifically ordered separately by the requesting clinician. If the smear code is ordered separately, claims billed for the smear procedure code and a culture code by the same provider for the same recipient and date of service must contain the date of the stain for the primary source smear. A statement included in the *Remarks* field (Box 80)/*Additional Claim Information* field (Box 19) or attached to the claim that states the stain was ordered separately from the culture is also required. Claims without this documentation will be denied.

CPT Codes 87076 and 87077: Documentation Required

Documentation is required when billing CPT codes 87076 (culture, bacterial; anaerobic isolate) and 87077 (Culture, bacterial; aerobic isolate, additional methods required for definitive identification, each isolate). The documentation must justify the reason for the additional identification method or describe the organism identified from the additional culture study. This information must be entered in the *Remarks* field (Box 80)/*Additional Claim Information* field (Box 19) or attached to the claim.

Antimicrobial Susceptibility Drug Testing: CPT Code 87190

CPT code 87190 (susceptibility studies, antimicrobial agent; mycobacteria, proportion method, each agent) is used to bill for antimicrobial susceptibility drug testing on isolates of Mycobacterium tuberculosis in patients infected with tuberculosis. Reimbursement is limited to susceptibility drug testing of seven antimicrobial drugs. Claims billed with eight or more drug susceptibility studies must include documentation indicating treatment failure or known multi-drug resistant tuberculosis (MDR-TB).

CPT Code 87905

CPT code 87905 (infectious agent enzymatic activity other than virus [eg, sialidase activity in vaginal fluid]) is not a split-billable service and must not be billed with modifier 26, 99 or TC.

HCPCS Codes Q0111 thru Q0113

HCPCS codes Q0111 thru Q0113 are Medi-Cal benefits and may be billed with modifiers 26 or TC. Providers billing these codes must meet Clinical Laboratory Improvement Amendments (CLIA) requirements.

Pathogen(s) Test for Platelets

HCPCS code P9100 (pathogen(s) test for platelets) is a Medi-Cal benefit. The frequency limit is 12 per day.

Microbiology Procedures

Microbiology CPT codes 87260 thru 87899 define the specific infectious agent and technique used to perform the test. The testing techniques include antigen detection, direct fluorescence microscopy, infectious agent detection and nucleic acid probe.

If the direct probe technique has been previously reimbursed, the amplified probe will be reimbursed at a reduced amount for the same date of service. The “quantification” probe technique will be reimbursed on a “By Report” basis.

Enzyme Immunoassay Procedure

CPT code 87389 (infectious agent antigen detection by immunoassay technique, qualitative or semiquantitative, multiple-step method; HIV-1 antigen(s), with HIV-1 and HIV-2 antibodies, single result) is split-billable. When billing for both the professional and technical service components of a split-billable procedure, a modifier is neither required nor allowed. When billing for only the professional component, use modifier 26. When billing for only the technical component, use modifier TC.

HIV Microbiology Procedures

CPT code 87536 (infectious agent detection by nucleic acid [DNA or RNA]; HIV-1, quantification, includes reverse transcription when performed) is used to report the HIV viral load test.

CPT code 87806 (infectious agent antigen detection by immunoassay with direct optical observation; HIV-1 antigen[s], with HIV-1 and HIV-2 antibodies) may be billed with any ICD-10-CM diagnosis code, but is not split-billable, and should not be billed with modifier 26 or TC.

Orthopoxvirus Procedure

CPT code 87593 (infectious agent detection by nucleic acid [DNA or RNA]; orthopoxvirus [e.g., monkeypox virus, cowpox virus, vaccinia virus], amplified probe technique, each) is used for orthopoxvirus. CPT code 87593 is used to report the monkeypox viral test.

HPV Testing

CPT codes 87624 (infectious agent detection by nucleic acid [DNA or RNA]; Human Papillomavirus [HPV], high-risk types), 87625 (…Human Papillomavirus [HPV], types 16 and 18 only, includes type 45, if performed) and 87626 (…Human Papillomavirus [HPV], separately reported high-risk types 16, 18, 31, 45, 51 and 52 and high-risk pooled results) are reimbursable for recipients 21 years of age and older.

For cervical cancer screening, the U.S. Preventive Services Task Force (USPSTF) recommends screening for cervical cancer every three years with cervical cytology alone in women 21 to 29 years of age. For women 30 to 65 years of age, the USPSTF recommends screening every three years with cervical cytology alone, every five years with high-risk human papillomavirus (hrHPV) testing alone or every five years with hrHPV testing in combination with cytology (co-testing). Any ICD-10-CM diagnosis code may be used. Use of modifier 33 indicates the service was provided in accordance with USPSTF A or B recommendation.

‹‹Medi-Cal reimbursement for primary (standalone) hrHPV testing includes self-collected vaginal specimen, which is an acceptable option for average-risk individuals according to Health Resources & Services Administration, American Cancer Society, and the Enduring Consensus Cervical Cancer Screening and Management Guidelines.››

‹‹Infectious Disease Panels

Table of Infectious Disease Panel Billing Instructions

Code and Description	TAR and/or Billing Requirements	Frequency
87627 Infectious agent detection by nucleic acid (DNA or RNA); joint space pathogens and drug resistance genes, multiplex amplified probe technique, 26 or more targets	*Treatment Authorization Request* (TAR) requires documentation of one of the following criteria: • There is a high clinical suspicion for joint infection caused by Kingella kingae and standalone amplified probe testing for Kingella kingae in synovial fluid is unavailable, or • There is a high clinical suspicion for joint infection, and synovial fluid was previously tested by culture, and synovial fluid culture was negative	N/A››

Additional Laboratory Tests

Table of CPT Codes Restrictions

CPT Code	Description	Restrictions
87467	Infectious agent antigen detection by immunoassay technique (for example, enzyme immunoassay [EIA], enzyme-linked immunosorbent assay [ELISA], fluorescence immunoassay [FIA], immunochemiluminometric assay [IMCA]), qualitative or semiquantitative; Hepatitis B surface antigen (HBsAg), quantitative	Twice per year
87469	Infectious agent detection by nucleic acid (DNA or RNA); Babesia microti, amplified probe technique	Not Applicable
87523	Infectious agent detection by nucleic acid (DNA or RNA); hepatitis D (delta), quantification, including reverse transcription, when performed	Not Applicable

‹‹Helicobacter Pylori Antibiotic Resistance

Claims for CPT code 87513 (infectious agent detection by nucleic acid [DNA or RNA]; Helicobacter pylori [H. pylori], clarithromycin resistance, amplified probe technique) require a TAR.

TAR requires documentation of the following criteria:

- Member has persistent Helicobacter pylori infection after completing a treatment regimen, and
- Additional treatment will be contingent on the test results.

Note: For additional Helicobacter pylori tests and associated billing instructions, please see the *Pathology: Chemistry* section in this manual.››

Mycoplasma Genitalium

CPT code 87563 (infectious agent detection by nucleic acid [DNA or RNA]; mycoplasma genitalium, amplified probe technique) must be billed with at least one ICD-10-CM diagnosis code in the following ranges: N34.0 thru N34.3 or N70.01 thru N77.1. This code is not split-billable and cannot be billed with modifier 26, TC or 99.

Influenza A and/or B Testing

Influenza A virus includes many subtypes, such as H1N1, H3N2 and H5N1. Testing to detect influenza A virus, influenza B virus and/or influenza A subtypes using nucleic acid amplification/PCR assays is covered with the following CPT codes:

Table of CPT Code Descriptions

CPT Code	Description
87501	Infectious agent detection by nucleic acid (DNA or RNA); influenza virus, reverse transcription and amplified probe technique, each type or subtype
87502	Infectious agent detection by nucleic acid (DNA or RNA); influenza virus, for multiple types or sub-types, includes multiplex reverse transcription, when performed, and multiplex amplified probe technique, first 2 types or sub-types
87503	Infectious agent detection by nucleic acid (DNA or RNA); influenza virus, for multiple types or sub-types, includes multiplex reverse transcription, when performed, and multiplex amplified probe technique, each additional influenza virus type or sub-type beyond 2

Hepatitis C Genotype Testing

CPT code 87902 (infectious agent genotype analysis by nucleic acid [DNA or RNA]; hepatitis C virus) is used for hepatitis C genotype testing. Code 87902 must be billed in conjunction with one of the following ICD-10-CM diagnosis codes:

Table of ICD-10-CM Code Descriptions

ICD-10-CM Code	Description
B17.10	Acute hepatitis C without hepatic coma
B17.11	Acute hepatitis C with hepatic coma
B18.2	Chronic viral hepatitis C
B19.20	Unspecified viral hepatitis C without hepatic coma
B19.21	Unspecified viral hepatitis C with hepatic coma

Claims for code 87902 do not require a “By Report” attachment. Code 87902 is reimbursable once in a lifetime. ‹‹An approved TAR/Service Authorization Request (SAR) is allowed to override the once-in-a-lifetime frequency limit for CPT code 87902.››

Human Immunodeficiency Virus (HIV) Drug Resistance Testing

Genotypic and phenotypic HIV drug resistance testing are Medi-Cal benefits.

Transmission of drug-resistant HIV strains has been well documented and has been associated with suboptimal virologic response to initial antiretroviral therapy. The likelihood that a patient will acquire a drug-resistant virus is related to the prevalence of drug resistance in persons engaging in high-risk behaviors in the community. In the United States and Europe, recent studies suggest the risk that transmitted virus will be resistant to at least one antiretroviral drug is in the range of 6 to 16 percent, with 3 to 5 percent of transmitted viruses exhibiting reduced susceptibility to drugs from more than one class.

Current treatment of HIV infection involves the use of combination antiretroviral drug therapy. The current drug regimens used to treat HIV infection usually consist of multiple drugs. The choice of drug regimen has become complicated by the emergence of resistance to many drugs available to treat HIV infection. HIV drug resistance testing has the potential to significantly improve the likelihood for treatment success of an antiretroviral drug regimen and avoid the expense of employing drug regimens that prove ineffective. HIV drug resistance testing can provide physicians with information that will permit the most effective use of antiretroviral medication and may help avoid the convenience, cost and toxicity of regimens with less chance of providing benefit.

Billing

Table of CPT Code Descriptions

CPT Code	Description
87901	Infectious agent genotype analysis by nucleic acid (DNA or RNA); HIV-1, reverse transcriptase and protease
87903	Infectious agent phenotype analysis by nucleic acid (DNA or RNA) with drug resistance tissue culture analysis, HIV-1; first through 10 drugs tested
87904	Infectious agent phenotype analysis by nucleic acid (DNA or RNA) with drug resistance tissue culture analysis, HIV 1; each additional drug tested (List separately in addition to code for primary procedure)
87906	Infectious agent genotype analysis by nucleic acid (DNA or RNA); HIV-1, other region (e.g., integrase, fusion)

COVID-19 Testing

The following CPT and HCPCS codes have been developed to further streamline the reporting and reimbursement of coronavirus testing offered by hospitals, health systems and laboratories in the United States. Providers may use the appropriate CPT or HCPCS codes outlined below. Frequency limit for each code may be overridden using a TAR.

COVID-19 Testing

CPT Code	Description and Billing Requirements	Daily Limit (any provider, per patient)
86328	Immunoassay for infectious agent antibody (ies), qualitative or semiquantitative, single step method (e. g, reagent strip); severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) (Coronavirus disease [COVID-19])	3
86408	Neutralizing antibody, severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) (Coronavirus disease [COVID-19)]; screen) There are no age or gender restrictions. May be billed with any ICD-10-CM diagnosis codes	1

COVID-19 Testing (continued)

CPT Code	Description and Billing Requirements	Daily Limit (any provider, per patient)
86409	Neutralizing antibody, severe acute respiratory syndrome Coronavirus 2 (SARS-CoV-2) (Coronavirus disease [COVID-19]; titer) are to be used for COVID-19 testing There are no age or gender restrictions. May be billed with any ICD-10-CM diagnosis codes	1
86413	Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), (Coronavirus disease [COVID-19]) antibody, quantitative	3
86769	Antibody; severe acute respiratory syndrome Coronavirus 2 (SARS-CoV-2) (Coronavirus disease [COVID-19])	3
87426	Infectious agent antigen detection by immunoassay technique, (e.g., enzyme immunoassay [EIA], enzyme-linked immunosorbent assay [ELISA], fluorescence immunoassay [FIA], immunochemiluminometric assay [IMCA]) qualitative or semiquantitative; severe acute respiratory syndrome coronavirus (e.g., SARS-CoV, SARS-CoV-2 [COVID-19])	3
87428*	Infectious agent antigen detection by immunoassay technique, (e. g, enzyme immunoassay [EIA], enzyme-linked immunosorbent assay [ELISA], fluorescence immunoassay [FIA], immunochemiluminometric assay [IMCA]) qualitative or semiquantitative; severe acute respiratory syndrome coronavirus (e. g, SARS-CoV, SARS-CoV-2 [COVID-19]) and influenza virus types A and B	3
87635*	Infectious agent detection by nucleic acid (DNA or RNA); severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) (Coronavirus disease [COVID-19[), amplified probe technique	2

COVID-19 Testing (continued)

CPT Code	Description and Billing Requirements	Daily Limit (any provider, per patient)
87636*	Infectious agent detection by nucleic acid (DNA or RNA); severe acute respiratory syndrome Coronavirus 2 (SARS-CoV-2) (Coronavirus disease [COVID-19]) and influenza virus types A and B, multiplex amplified probe technique. There are no age or gender restrictions. May be billed with any ICD-10-CM diagnosis codes.	3
87637*	Infectious agent detection by nucleic acid (DNA or RNA); severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) Coronavirus disease (COVID-19), influenza virus types A and B, and respiratory syncytial virus, multiplex amplified probe technique. There are no age or gender restrictions. May be billed with any ICD-10-CM diagnosis codes.	3
87811*	Infectious agent antigen detection by immunoassay with direct optical (i.e. visual) observation; severe acute respiratory syndrome Coronavirus 2 (SARS-CoV-2) (Coronavirus disease [COVID-19]) Can be used to report infectious agent antigen detection by immunoassay with direct visual observation. There are no age or gender restrictions. May be billed with any ICD-10-CM diagnosis codes.	3
‹‹87812	Infectious agent antigen detection by immunoassay with direct optical (ie, visual) observation; severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) (coronavirus disease [COVID-19]) and influenza virus types A and B	3››
87913	Infectious agent genotype analysis by nucleic acid (DNA or RNA); severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) (coronavirus disease [COVID-19]), mutation identification in targeted region(s). There are no age or gender restrictions. May be billed with any ICD-10-CM diagnosis codes.	1

COVID-19 Testing (continued)

HCPCS Code	Description and Billing Requirements	Daily Limit (any provider, per patient)
U0001*	CDC 2019 Novel Coronavirus (2019-nCoV) Real-Time RT-PCR Diagnostic Panel. Reimbursement is limited to the use of the Centers for Disease Control and Prevention (CDC) severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) real-time (RT)-PCR diagnostic panel assay by the CDC. These assays were approved under emergency use authorization (EUA) by the Food and Drug Administration (FDA) for use by laboratories certified under the Clinical Laboratory Improvement. Amendments of 1988 to perform high complexity tests. **Note:** Exempt from Assembly Bill 97 (10 percent payment reduction)	2
U0002*	2019-nCoV Coronavirus, SARS-CoV-2/2019-nCoV (COVID-19), any technique, multiple types or subtypes (includes all targets), non-CDC	2

Legend

Symbols used in the document above are explained in the following table.

Symbol	Description
‹‹	This is a change mark symbol. It is used to indicate where on the page the most recent change begins.
››	This is a change mark symbol. It is used to indicate where on the page the most recent change ends.
*	These codes are billable for students in transitional kindergarten through the 12th grade, given that they are Medi-Cal beneficiaries and the testing is provided in schools.