

INFECTIOUS AND PARASITIC DISEASES

A00 – B99

Presented by

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INTRODUCTION

Chapter 1 of ICD-10 classifies infectious and parasitic diseases that are easily transmissible (communicable). The primary axis for this chapter is the organism responsible for the condition. Infectious and parasitic conditions are classified in one of several ways, making careful use of the Alphabetic Index imperative.

USE OF ADDITIONAL CODES FROM CHAPTER 1 TO IDENTIFY THE ORGANISM

- Certain infections are classified in chapters other than Chapter 1 and no organism is identified as part of the infection code. In these instances, it is necessary to use an additional code from Chapter 1 to identify the organism:

Example:

Urinary tract infection due to Enterococcus

N39.0 Urinary tract infection, site not specified

B95.2 Enterococcus as the cause of diseases classified elsewhere

COMBINATION CODES

- Combination codes frequently identify both the condition and the organism.

Examples:

B26.0 Mumps orchitis

B02.31 Herpes zoster conjunctivitis

DUAL CLASSIFICATION

- Dual classification is used extensively for Chapter 1:

Example:

B49 + J99 Bronchomycosis

This code appears in the Index as follows:

Bronchomycosis NOS B49 [J99]

*When a code appears with a code in brackets after it, you always code both codes in this order.

ORGANISM VS SITE/OTHER SUBTERM

- A thorough search of the Alphabetic Index is required in coding infection. When the main term for the condition has been located, a subterm for the organism always takes precedence over a more general subterm (such as “acute” or “chronic”) when both subterms occur at the same indentation level in the Alphabetic Index.
- For example, the diagnosis of chronic cystitis due to gonococcus, the Alphabetic Index provides subterms for both chronic and gonococcal:

Cystitis (exudative) . . .

chronic N30.20 . . .

gonococcal A54.01

- In this case, only code A54.01 is assigned because the subterm for the organism takes precedence over the subterm "chronic."

WEST NILE VIRUS FEVER

- Subcategory A92.3 is used to report West Nile virus infection. The virus is transmitted to humans by the bite of a mosquito that has bitten an infected bird. Most healthy people infected by the virus have few symptoms or have a mild illness consisting of fever, headache, and body aches prior to recovering. In elderly patients or those with a weakened immune system, the virus may cause encephalitis, meningitis, or permanent neurological damage and may be life threatening.
- Subcategory A92.3 is further subdivided to distinguish between:

West Nile virus infection

A92.30 West Nile virus infection unspecified

A92.31 West Nile virus infection with **encephalitis**

A92.32 West Nile virus infection with **other neurologic manifestation**

A92.39 West Nile virus infection with other complications

- This expansion allows the differentiation between the milder cases of the disease and those with more serious complications and neurological manifestations.

TUBERCULOSIS

Although we do not see Tuberculosis often, **R76.11** is the diagnosis code for a positive tuberculin skin test without a diagnosis of tuberculosis. Included in this code are the following:

- **Nonspecific reaction to tuberculin skin test without active tuberculosis**
- **Positive tuberculin skin test without active tuberculosis**
- **Positive PPD (skin test)**
- **Abnormal result of Mantoux test**
- **Tuberculin (skin test) positive**
- **Tuberculin (skin test) reactor**

CODING EXERCISE #1

Code the following diagnoses:

- 1) Postmeasles otitis media
- 2) Acute scarlet fever
- 3) Herpes zoster of conjunctiva

ANSWERS EXERCISE #1

- 1) Postmeasles otitis media: **B05.3**
- 2) Acute scarlet fever: **A38.9**
- 3) Herpes zoster of conjunctiva: **B02.31**

SEPSIS, SEVERE SEPSIS, AND SEPTIC SHOCK

TERMS TO KNOW

- **Bacteremia**
presence of bacteria in the bloodstream after a trauma or an infection
- **Sepsis**
SIRS due to infection; a severe case indicates organ dysfunction
- **Septic shock**
circulatory failure associated with severe sepsis
- **Septicemia**
a systemic disease associated with pathological microorganisms or toxins in the bloodstream
- **SIRS**
systemic inflammatory response syndrome; a systemic response to infection or trauma with such symptoms as fever and tachycardia

BACTEREMIA

- **Bacteremia** (**R78.81**) refers to the presence of bacteria in the bloodstream after trauma or mild infection. This condition is usually transient and ordinarily clears promptly through the action of the body's own immune system.

SEPSIS

For a diagnosis of sepsis, the appropriate code for the underlying systemic infection should be assigned.

One example is Streptococcal sepsis, it is classified to category **A40** with the third character specifying sepsis due to different streptococci strains as follows:

- A40.0** Sepsis due to streptococcus, **group A**
- A40.1** Sepsis due to streptococcus, **group B**
- A40.3** Sepsis due to Streptococcus **pneumoniae**
- A40.8** Other streptococcal sepsis
- A40.9** Streptococcal sepsis, unspecified

SIRS/SYSTEMIC INFLAMMATORY RESPONSE SYNDROME

- **Systemic inflammatory response syndrome (SIRS)** generally refers to the systemic response to infection, trauma/burns, or other insult (such as cancer), with symptoms including fever, tachycardia, tachypnea, and leukocytosis.
- SIRS of noninfectious origin is coded to subcategory **R65.1** depending on whether there is:
 - R65.10** SIRS of noninfectious origin **without organ dysfunction**
 - R65.11** SIRS of noninfectious origin **with organ dysfunction**

SEVERE SEPSIS AND SEPTIC SHOCK

- **Severe sepsis** (subcategory **R65.2**) generally refers to sepsis with associated acute or multiple organ dysfunction. Subcategory **R65.2** is further subdivided to identify the following:
 - R65.20 Severe sepsis without septic shock**
 - R65.21 Severe sepsis with septic shock**
- **Septic shock** generally refers to circulatory failure associated with severe sepsis and therefore represents a type of acute organ dysfunction. The physician must specifically record "septic shock" in the diagnostic statement in order to code it as such. Septic shock indicates the presence of severe sepsis and code **R65.21, Severe sepsis with septic shock**, must be assigned, even if the term "severe sepsis" is not documented.

Severe Sepsis

The coding of severe sepsis requires a minimum of two codes:

- Sequence first a code for the underlying infection followed by a code from subcategory **R65.2-**, Severe sepsis.
- If the causal organism is not documented, assign code **A41.9, Sepsis, unspecified organism**, for the infection.
- An additional code(s) should also be assigned for the associated acute organ dysfunction.

Sepsis and Severe Sepsis with a Localized Infection

When the reason for the admission is both sepsis, or severe sepsis, and a localized infection (such as, pneumonia or cellulitis):

- The code for **sepsis** should be assigned as the **first/principal diagnosis**.
- The code for the **pneumonia or cellulitis** should be assigned as a **secondary diagnosis**.
- If the patient has severe sepsis, a code from subcategory **R65.2-** should also be assigned as a secondary diagnosis.

If the patient is admitted with pneumonia or cellulitis, and the sepsis/severe sepsis does not develop until after admission, the sepsis/severe sepsis would be secondary codes.

Sepsis due to a Postprocedural Infection

- As with all postprocedural complications, code assignment for sepsis due to a postprocedural infection is based on the provider's documentation of the relationship between the infection and the procedure. The following codes should be coded first:
 - T80.2-** Infections following infusion, transfusion, and therapeutic injection
 - T81.4** Infection following a procedure
 - T88.0** Infection following immunization
 - O86.0** Infection of obstetric surgical wound
- Followed by the code for the specific infection.
- In addition, for severe sepsis, the appropriate code from subcategory **R65.2** should also be assigned along with the code(s) for any acute organ dysfunction.

Sepsis due to a Postprocedural Infection continued...

- Postprocedural infections can result in severe sepsis and postprocedural septic shock. In these cases, the code for the precipitating complication should be coded first:
 - T81.4** Infection following a procedure, or
 - O86.0** Infection of obstetrical surgical wound
- Followed by code:
 - R65.21** Severe sepsis with septic shock
 - Code for the systemic infection**

Sepsis and Severe Sepsis Associated with a Noninfectious Process

- In some cases, a noninfectious process such as trauma, may lead to an infection that can result in sepsis or severe sepsis.
- If sepsis or severe sepsis is documented as associated with a noninfectious condition, such as a burn or serious injury, and this condition meets the definition for principal diagnosis:
 - **the code for the noninfectious condition should be sequenced first,**
 - **followed by the code for the resulting infection.**

CODING EXERCISE #2

Code the following diagnoses:

- 1) Anaerobic gram-negative sepsis
- 2) Sepsis due to methicillin-resistant *Staphylococcus aureus* (MRSA)
- 3) Streptococcal sepsis

ANSWERS EXERCISE #2

- 1) Anaerobic gram-negative sepsis: **A41.4**
- 2) Sepsis due to methicillin-resistant *Staphylococcus aureus* (MRSA): **A41.02**
- 3) Streptococcal sepsis: **A40.9**

AIDS AND OTHER HIV INFECTIONS

Because the human immunodeficiency virus (HIV) infection has become a major health care concern, the collection of accurate and complete data on conditions associated with HIV infection is important for health care resource planning. Code **B20** is assigned for all types of HIV infections, which are described by a variety of terms, such as the following:

- AIDS
- Acquired immune deficiency syndrome
- Acquired immunodeficiency syndrome
- AIDS-related complex (ARC)
- AIDS-related conditions
- HIV infection, symptomatic

Serologic Testing for HIV Infection

- When an asymptomatic patient with no prior diagnosis of HIV infection or positive-HIV status requests testing to determine his or her HIV status, use code:
 - Z11.4** Encounter for screening for **human immunodeficiency virus [HIV]**.
- When the patient makes a return visit to learn the result of the serology test, code:
 - Z71.7** **Human immunodeficiency virus [HIV] counseling**, should be assigned as the reason for the encounter when the test result is negative, inconclusive (**R75**), or positive.

Sequencing of HIV-Related Diagnoses

- When a patient is admitted for treatment of an HIV infection or any related complications, code **B20**, **Human immunodeficiency virus (HIV) disease**, is sequenced as the principal diagnosis, with additional codes for the HIV-related conditions.
- When a patient with an HIV infection is admitted for treatment of an entirely unrelated condition, such as an injury, that condition is designated as the principal diagnosis, with code **B20** and codes for any associated conditions assigned as additional codes.

COMMON INFECTIOUS AND PARASITIC DXS

ICD-9	DESCRIPTION	ICD-10	DESCRIPTION
078.10	Viral warts, unspecified	B07.9	Viral wart, unspecified
078.12	Plantar wart	B07.0	Plantar wart
053.9	Herpes zoster without mention of complication	B02.9	Zoster without complication
008.45	Intestinal infection due to Clostridium difficile	A04.7	Enterocolitis due to Clostridium difficile
009.0	Infectious colitis, enteritis and gastroenteritis	A09	Infectious gastroenteritis and colitis, unspecified

CODING EXERISE #3

Code the following diagnoses:

- 1) Acute lymphadenitis due to HIV infection
- 2) Inconclusive HIV test
- 3) Candidiasis, of esophagus, opportunistic, secondary to AIDS

ANSWERS EXERCISE #3

- 1) Acute lymphadenitis due to HIV infection:
B20
- 2) Inconclusive HIV test: **R75**
- 3) Candidiasis, of esophagus, opportunistic,
secondary to AIDS: **B20 and B37.81**