

## INFECTIOUS MONONUCLEOSIS

### Background

This case definition was developed by the Armed Forces Health Surveillance Branch (AFHSB) for the purpose of epidemiological surveillance of a condition important to military-associated populations.

### Clinical Description

Infectious mononucleosis (IM) is an acute infectious illness characterized by swollen lymph nodes, fever, pharyngitis, fatigue, and body aches. In 90% of cases, the infection is caused by Epstein-Barr virus (EBV) transmitted through saliva and other bodily fluids. Acute symptoms usually present within 4 to 6 weeks of infection with EBV and resolve within 2 to 4 weeks. Diagnosis is typically based on clinical presentation and optional laboratory confirmation of IM heterophile antibodies. Complications are rare but may include splenic rupture, hepatitis, respiratory tract or nasopharyngeal obstruction and chronic fatigue syndrome.<sup>1</sup> Management is supportive and includes adequate hydration, fever management, and throat lozenges or sprays. Antibiotics are not effective.<sup>2</sup>

#### Case Definition and Incidence Rules

For surveillance purposes, a case of infectious mononucleosis is defined as:

- *One hospitalization* with a case defining diagnosis of infectious mononucleosis (see ICD9 and ICD10 code lists below) in the *first* diagnostic position; or
- *One outpatient medial encounter* with a case defining diagnosis of infectious mononucleosis (see ICD9 and ICD10 code lists below) in the *first* diagnostic position.

#### Incidence rules:

For individuals who meet the case definition:

- The incidence date is considered the date of the first hospitalization or outpatient medical encounter that includes a case defining diagnosis of infectious mononucleosis.
- If an individual has both an inpatient and an outpatient medical encounter on the same day, the inpatient diagnosis is prioritized over the outpatient diagnosis.
- An individual is considered an incident case only *once per lifetime*.

#### Exclusions:

- None

<sup>1</sup> Armed Forces Health Surveillance Branch. Infectious Mononucleosis, Active Component, U.S. Armed Forces, 2002-2018. *Medical Surveillance Monthly Report (MSMR)*. 2019 July; 26(7): 28-33.

<sup>2</sup> Ebell, Mark H. Epstein-Barr Virus Infectious Mononucleosis. *American Family Physician*. 2004 October; 70(7): 1279-1287. Available at: <https://www.aafp.org/afp/2004/1001/p1279.html>. Accessed August 2019.



## Codes

The following ICD9 and ICD10 codes are included in the case definition:

Condition	ICD-10-CM Codes	ICD-9-CM Codes
Infectious mononucleosis	<i>B27 (infectious mononucleosis)</i>	075 (infectious mononucleosis)
	B27.0 (gammaherpesviral mononucleosis...)	
	- B27.00 ( <i>without</i> complication)	
	- B27.01 ( <i>with</i> polyneuropathy)	
	- B27.02 ( <i>with</i> meningitis)	
	- B27.09 ( <i>with</i> other complications)	
	B27.1 (cytomegaloviral mononucleosis...)	
	- B27.10 ( <i>without</i> complication)	
	- B27.11 ( <i>with</i> polyneuropathy)	
	- B27.12 ( <i>with</i> meningitis)	
	- B27.19 ( <i>with</i> other complications)	
	B27.8 (other infectious mononucleosis...)	
	- B27.80 ( <i>without</i> complication)	
	- B27.81 ( <i>with</i> polyneuropathy)	
	- B27.82 ( <i>with</i> meningitis)	
	- B27.99 ( <i>with</i> other complications)	
	B27.9 (infectious mononucleosis, unspecified...)	
	- B27.90 ( <i>without</i> complication)	
	- B27.91 ( <i>with</i> polyneuropathy)	
	- B27.92 ( <i>with</i> meningitis)	
- B27.99 ( <i>with</i> other complications)		

## Development and Revisions

- This case definition was developed in July 2019 by the *Medical Surveillance Monthly Report (MSMR)* staff for use in an article on infectious mononucleosis.<sup>1</sup> The case definition was developed based on reviews of the ICD9 and ICD10 codes, the scientific literature, and previous AFHSB analyses.



### *Case Definition and Incidence Rule Rationale*

- For the purposes of counting new incident cases, AFHSB uses a once per lifetime incidence rule unless a specific timeframe is more appropriate and is specified (e.g., individuals may be counted as an incident case once every 365 days). Historically, a "once per surveillance period" incidence rule was used due to limited data in the Defense Medical Surveillance System (DMSS), but that is no longer necessary.

### **Reports**

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AFHSB reports on infectious mononucleosis in the following reports:

- Periodic *MSMR* articles

### **Review**

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Aug 2019	Case definition reviewed and updated by the AFHSB Surveillance Methods and Standards (SMS) working group.
Jul 2019	Case definition reviewed and adopted by the AFHSB <i>MSMR</i> staff.

### **Comments**

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None

