

VAGINAL CANDIDIASIS

Background

This case definition was developed by the Armed Forces Health Surveillance Branch (AFHSB) for the purpose of epidemiological surveillance of a common type of genitourinary tract infection among women.

Clinical Description

Vaginal candidiasis, commonly referred to as a yeast infection, is an inflammation of the vagina and vulva caused by the fungus *Candida*. Infection is often caused by changes in the normal bacterial flora or vaginal pH due to antibiotic use, high estrogen levels, tight fitting clothing, douches, and conditions that alter normal immune functions. Symptoms include redness, swelling, itching, and soreness of the vaginal area sometimes accompanied by a thick white vaginal discharge. Treatments include antifungal creams, suppositories, and oral medication, many which are available over the counter.¹

Case Definition and Incidence Rules

For surveillance purposes, a case of vaginal candidiasis is defined as:

- *One hospitalization or outpatient medical encounter* with any of the defining diagnoses of a vaginal candidiasis (see ICD9 and ICD10 code lists below) in the *primary* 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 defining diagnosis of a vaginal candidiasis.
- An individual may be considered a new incident case if *at least 30 days* have passed since the last medical encounter with a case defining diagnosis of a vaginal candidiasis (*see explanation of “gap” rule below*).
- For “first occurrence” incident rate calculations an individual may be considered an incident case *only once per surveillance period*.
- *For recurrent case calculations*, an individual is considered a recurrent case if they meet the case defining criteria for a “new incident case” one or more times during the surveillance period.

(continued on next page)

¹ Armed Forces Health Surveillance Center. Vaginal Yeast Infections While Deployed in Southwest/Central Asia, Active Component Females, U.S. Armed Forces, 2008-2013. *Medical Surveillance Monthly Report (MSMR)*. 2014 Aug; 21(8): 13-15.



Case Definition and Incidence Rules *(continued)*

Exclusions:

- None

Codes

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

Condition	ICD-10-CM Codes	ICD-9-CM Codes
Vaginal yeast infection	B37.3 (candidiasis of vulva and vagina)	112.1 (candidiasis of vulva and vagina)
	B37.4 (other urogenital candidiasis)	112.2 (candidiasis of other urogenital sites)
	- B37.41 (candida cystitis and urethritis)	
	- B37.49 (candidiasis of other urogenital sites)	

Development and Revisions

- In November of 2017 the case definition was updated to include ICD10 codes.
- This case definition was developed in August of 2014 by the *Medical Surveillance Monthly Report (MSMR)* staff for use in a MSMR article on vaginal yeast infections. The case definition was developed based on reviews of the ICD9 codes, the scientific literature, and previous AFHSC analyses.

Case Definition and Incidence Rule Rationale

- This case definition uses a 30-day “gap in care” incidence rule for medical encounters to define a new incident case of a vaginal candidiasis. Use of this methodology presumes that medical encounters for a vaginal candidiasis that occur within 30 days of a previous such encounter constitute follow-up care of the previously diagnosed case. The goal of the “gap in care” rule is to lessen the frequency with which encounters for follow-up care are treated as new incident cases of infection. The “gap in care” rule differs slightly from an absolute 30-day incidence rule – used for other case definitions - in which an individual may be considered an incident case once every 30 days.

Code Set Determination and Rationale

- ICD10 code B37.42 (candida balanitis) is a yeast infection specific to males; therefore it is not included in the code set documented here. The code was added to the ICD10 code set in October of 2014 and converts to ICD9 code 112.2 (candidiasis of other urogenital sites)



Reports

AFHSB reports on vaginal candidiasis the following reports:

- None

Review

Nov 2017	Case definition reviewed and adopted by the AFHSB Surveillance Methods and Standards (SMS) working group.
Aug 2014	Case definition developed by AFHSC MSMR staff.

Comments

None

