

MENORRHAGIA

Background

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

Clinical Description

Menorrhagia, or heavy menstrual bleeding, is defined clinically as excessive bleeding (greater than 80 milliliters per period, often with large blood clots) that occurs during menstrual periods that last seven days or longer over several consecutive monthly cycles. Such periods often interfere with work and activities of daily living and, if left untreated, can lead to iron deficiency anemia. The condition is most common among women of reproductive age, especially those approaching menopause. Common etiologies include hormonal disorders, bleeding disorders, uterine polyps, and uterine fibroids. Treatment depends upon the underlying cause of the bleeding and, as appropriate, the woman's desire to preserve fertility.^{1,2}

Case Definition and Incidence Rules

For surveillance purposes, a case of menorrhagia is defined as:

- *One hospitalization* with any of the defining diagnoses of menorrhagia (see ICD9 and ICD10 code lists below) in the *primary* diagnostic position; or
- *Two outpatient medical encounters*, occurring *within a 180-day period*, with any of the defining diagnoses of menorrhagia (see ICD9 and ICD10 code lists below) in *any* 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 menorrhagia.
- An individual is considered a new incident case if *at least 365 days* have passed between medical encounters with a case defining diagnosis of menorrhagia (*see explanation of "gap" rule below*).

Exclusions:

- None

¹ Dorsey, K.S. Armed Forces Health Surveillance Center. Menorrhagia, Active Component Service Women, U.S. Armed Forces, 1998-2012. *Medical Surveillance Monthly Report (MSMR)*. 2013; 20(9): 20-24.

² Treatment of Menorrhagia. *American Family Physician*. 2007 Jun 15; 75(12): 1813-1819.



Codes

The following ICD9 codes are included in the case definition:

Condition	ICD-10-CM Codes	ICD-9-CM Codes
Menorrhagia	N92.0 (excessive and frequent menstruation with regular cycle)	626.2 (excessive or frequent menstruation; includes heavy periods, menometrorrhagia, menorrhagia, and polymenorrhea)
	N92.2 (excessive menstruation at puberty)	626.3 (puberty bleeding; excessive bleeding associated with onset of menstrual periods; pubertal menorrhagia)
	N92.4 (excessive bleeding in the premenopausal period)	627.0 (premenopausal menorrhagia)

Development and Revisions

- In January of 2015 the case definition was updated to include ICD10 codes.
- This case definition was developed in September of 2013 by Armed Forces Health Surveillance Center staff for use in a MSMR article on menorrhagia. The 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 365-day “gap in care” incidence rule to define a new incident case of menorrhagia. Use of this methodology presumes that medical encounters for menorrhagia that occur within 365 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 the condition.³ The “gap in care” rule differs slightly from an absolute 365-day incidence rule in which an individual may be considered an incident case once every 365 days.
- A period of 365 days between encounters is used to allow for adequate treatment and resolution of a case of menorrhagia and to avoid confusing medical encounters for follow-up care with medical encounters for a new case.
- Denominators for rates were calculated by summing the person-time in military service for all female active component service members who served during the surveillance period. For denominator calculations for the 2013 MSMR on menorrhagia, females with a history of prior hysterectomy were not excluded. Investigators may wish to remove these women for future analyses.

³ Detailed information on this analysis is available through the Armed Forces Health Surveillance Center; reference Defense Medical Surveillance System (DMSS) Request #58558 (Menorrhagia, Final, Active Component U.S. Armed Forces, 2002-2011), 2012.



Code Set Determination and Rationale

- The code set is intended to be specific for menorrhagia, as such; the following codes are *not* included.

ICD-10-CM Codes	ICD-9-CM Codes
N92.1 (excessive and frequent menstruation with irregular cycle)	626.6 (metrorrhagia - uterine bleeding at irregular intervals, between periods)
N92.5 (other specified irregular menstruation) N93.8 (other specified abnormal uterine and vaginal bleeding)	626.8 (dysfunctional uterine bleeding (DUB) and uterine hemorrhage)

- ICD9 code 626.2 (excessive or frequent menstruation) includes not only menorrhagia but also menometrorrhagia (prolonged or excessive uterine bleeding occurring irregularly and more frequently than usual). Because the only other ICD9 codes that mention menorrhagia are 626.3 (puberty bleeding) and 627.0 (premenopausal menorrhagia), the exclusion of code 626.2 would omit instances of menorrhagia diagnosed between puberty and the premenopausal period. Since most cases of menorrhagia occur during that interval, code 626.2 is retained in the case definition, even though it also includes menometrorrhagia.
- The ICD10 code N92.1 (excessive and frequent menstruation with irregular cycle) includes menometrorrhagia but is clearly not applicable to menorrhagia. Menorrhagia is well-covered by ICD10 codes N92.0, N92.2, and N92.4.

Reports

None

Review

Jan 2015	Case definition reviewed and updated by the AFHSC Surveillance Methods and Standards (SMS) working group.
Jan 2014	Case definition reviewed and adopted by the AFHSC Surveillance Methods and Standards (SMS) working group.
Sept 2013	Case definition developed by AFHSC MSMR staff.

