



Identifying Healthcare-associated Infections (HAI) in NHSN

Any infection reported to NHSN must meet the definition of an NHSN healthcare-associated infection (HAI), that is, a localized or systemic condition resulting from an adverse reaction to the presence of an infectious agent(s) or its toxin(s). There must be no evidence that the infection was present or incubating at the time of admission to the care setting. Clinical evidence may be derived from direct observation of the infection site or review of information in the patient chart or other clinical records.

For certain, but not all, infection sites, a physician's or surgeon's diagnosis of infection derived from direct observation during a surgical operation, endoscopic examination, or other diagnostic studies or from clinical judgment may be an acceptable criterion for an NHSN infection, unless there is compelling evidence to the contrary.

NOTE: Physician's diagnosis of pneumonia alone is not an acceptable criterion for healthcare-associated pneumonia.

HAIs may be caused by infectious agents from endogenous or exogenous sources.

- Endogenous sources are body sites, such as the skin, nose, mouth, GI tract, or vagina that are normally inhabited by microorganisms.
- Exogenous sources are those external to the patient, such as patient care personnel, visitors, patient care equipment, medical devices, or the healthcare environment.

The following special considerations are important when identifying HAIs:

- Infections occurring in infants that result from passage through the birth canal are considered HAIs.
- The following infections are not considered healthcare associated:
 - Infections associated with complications or extensions of infections already present on admission, unless a change in pathogen or symptoms strongly suggests the acquisition of a new infection.
 - Infections in infants that have been acquired transplacentally (e.g., herpes simplex, toxoplasmosis, rubella, cytomegalovirus, or syphilis) and become evident \leq 48 hours after birth.
 - Reactivation of a latent infection (e.g., herpes zoster [shingles], herpes simplex, syphilis, or tuberculosis).
- The following conditions are not infections:
 - Colonization, which means the presence of microorganisms on skin, on mucous membranes in open wounds, or in excretions or secretions but which are not causing adverse clinical signs or symptoms.
 - Inflammation that results from tissue response to injury or stimulation by noninfectious agents, such as chemicals.



Before an HAI is reported to NHSN, the person performing surveillance must decide that the clinical, laboratory, and other diagnostic information gathered concerning the patient satisfy the criteria for a particular type of HAI. To assist surveillance personnel in making these decisions consistently, each module in this manual contains a listing of specific infection sites used in the module and the criteria for determining the presence of an infection at each of those sites. The definitions used in this manual are the only criteria that should be used when identifying and reporting NHSN events. While all participants may not agree with all the criteria, it is important that NHSN participants consistently use them for reporting infections, so that rates between hospitals can be appropriately compared. The complete set of infection definitions, including all specific sites used for SSI organ/space infections can be found in Chapter 17¹.

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¹Centers for Disease Control and Prevention. CDC/NHSN surveillance definition of health care-associate infection and criteria for specific types of infections in the acute care setting. *Am J Infect Control* 2008;36:309-32.