**WHO suggested outbreak case definition**

**Suspected case:**
- any person with an illness of upper respiratory tract with:
  - pharyngitis, nasopharyngitis, tonsillitis or laryngitis; and
  - adherent pseudomembrane of the pharynx, tonsils, larynx and/or nose.

**Final case classification:**
- **Laboratory-confirmed case:** a person with Corynebacterium spp. isolated by culture and positive for toxin production, regardless of symptoms
  - Laboratory-confirmed classic respiratory diphtheria cases meet the suspected case definition and are laboratory-confirmed as defined above.
  - Laboratory-confirmed mild respiratory/asymptomatic diphtheria cases have some respiratory symptoms such as pharyngitis and tonsillitis, but no pseudomembrane, or no symptoms (usually identified via contact tracing).
  - Non-respiratory laboratory-confirmed diphtheria cases have a skin lesion or non-respiratory mucosal infection (for example, eye, ear or genitalia) from which Corynebacterium spp. Is isolated by culture and tests positive for toxin production
- **Epidemiologically linked case:** a person that meets the definition of a suspected case and is linked epidemiologically to a laboratory-confirmed case
- **Clinically compatible case:** a person that meets the definition of a suspected case and lacks both a confirmatory laboratory test result and epidemiologic linkage to a laboratory-confirmed case.
**Discarded case/non-case**: suspected case that meets either of these criteria: *Corynebacterium spp.* but negative Elek test (non-toxigenic *Corynebacterium*) OR negative PCR for the diphtheria toxin (tox) gene

1 A diphtheria pseudomembrane is an exudate that is greyish, thick, firmly adherent and patchy to confluent. Dislodging the pseudomembrane is likely to cause profuse bleeding. Some countries may choose to expand the suspected case definition to include suspect cases without a pseudomembrane.

2 Refer to Figure 1: *Diphtheria: Surveillance standards for vaccine-preventable diseases* (Geneva: World Health Organization; 2018)

3 PCR is normally considered a complementary tool to the gold standard of culture and Elek testing.

4 Epidemiological link: In this situation, a person has had intimate respiratory or physical contact with a laboratory-confirmed case within the 14 days prior to onset of sore throat

### WHO surveillance case definition

- [Diphtheria: Surveillance standards for vaccine-preventable diseases](Geneva: World Health Organization; 2018 (pp. 4–5)).

### Data collection tools

- Line list: Recommended data elements: [Diphtheria: Surveillance standards for vaccine-preventable diseases](Geneva: World Health Organization; 2018 (pg. 8-9)
- Electronic tool: Not available.

### Laboratory confirmation

- [WHO laboratory manual for the diagnosis of diphtheria and other related infections](World Health Organisation; 2021)

### Response tools and resources

- [WHO laboratory manual for the diagnosis of diphtheria and other related infections](World Health Organisation; 2021)

### Training