

# H antigen

## E Coli O Serogroup for H antigen

When creating or requesting concepts for the H antigen for Escherichia Coli O serogroup that cannot be typed, SNOMED International requests are declined due to ambiguity, but reporting of these organisms is sometimes necessary for Public Health reporting in Canada. In these cases, the SNOMED CT Canadian Edition accommodates requests for public health reporting as needed.

Conventional Escherichia coli (E. coli) O:H serotyping is by agglutination of somatic (O) and flagellar (H) antigens with the use of E. Coli polyclonal antiserum. This is time-consuming, expensive, and available only in a small number of reference laboratories. When reporting the H antigen, it should be remembered that the O antigen is always present. Over the years, few in Canada have reported untyped or untype-able O antigens. For all organisms, the flagellar has to have the somatic (O).

For the Ecoli with H typed we have examples like Escherichia coli serotype O7: H18, where the parent is Escherichia coli serogroup O7:

- 458090002 |Escherichia coli serogroup O7 (organism)| (Parent)
  - 458099001 |Escherichia coli serotype O7: H18 (organism)| Child

For E Coli where the O antigen is **not** typed or was unable to be typed, the guidance is to use E. coli serogroup O undetermined: H

Example:

- Escherichia coli serogroup O (organism)| (Parent)
  - E coli serogroup O undetermined: H (organism) (Child)
    - Escherichia coli serogroup O undetermined:H19 (organism) (Child)

Reference: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1183322/pdf/2363-04.pdf>