

# NATIONAL INSTITUTE FOR HEALTH AND CARE EXCELLENCE

## NICE guidelines

### Equality impact assessment

#### Pneumonia in children and adults: diagnosis and management

The impact on equality has been assessed during guidance development according to the principles of the NICE equality policy.

##### 1.0 Checking for updates and scope: before scope consultation

1.1 Is the proposed primary focus of the guideline a population with a specific communication or engagement need, related to disability, age, or other equality consideration?

If so, what is it and what action might be taken by NICE or the developer to meet this need? (For example, adjustments to committee processes, additional forms of consultation.)

No

1.2 Have any potential equality issues been identified during the check for an update or during development of the draft scope, and, if so, what are they?

This document has been compiled using evidence identified by scoping searches and the views of topic experts and committee members while drafting the scope of the guideline. Equality issues that were identified during the scoping and development of the 2014 pneumonia in adults guideline (CG191) were also considered.

- Age
  - Pneumonia is more common in older people (people who are 65 and over) and they have a higher risk of serious illness and worse outcomes. The rate of hospitalisation increases with age in older adults. This may be

linked to increasing frailty.

- Older adults may face difficulties with accessing healthcare due to their reduced ability to travel to appointments, or in the case of remote consultations, reduced access or ability to use technology, including using appointment booking systems.
- Frailty is associated with an increased susceptibility to and severity of pneumonia in older adults.
- There is evidence to also suggest that pneumonia is also more common in children younger than 5 years and it is more difficult to determine the causative agent in this age group. Babies, in particular, are at higher risk of serious illness if they develop pneumonia.
- Pneumococcal vaccination (either conjugate or polysaccharide) is offered to babies, children and older people by the NHS. It is effective at preventing pneumococcal pneumonia and reduces deaths due to pneumococcal pneumonia. There is some evidence to suggest that older people may not be aware of this vaccine or think it is not important and therefore are less likely to be vaccinated. Unvaccinated people are more vulnerable to catching pneumococcal pneumonia than vaccinated people.
- Disability
  - There is evidence to suggest that people with pre-existing health conditions (for example chronic obstructive pulmonary disease and heart disease), may be more likely to be hospitalised or develop severe pneumonia. In some cases, these pre-existing conditions may also be considered a disability depending on the severity and effects upon the individual.
  - There is also evidence to suggest that people with learning disabilities are more susceptible to respiratory illnesses like pneumonia. They also have poorer outcomes if admitted to hospital with pneumonia. This may be due to discrimination at point of care, not being listened to, or they may have trouble with accessing healthcare.
- Gender reassignment
  - No potential issues were identified.
- Pregnancy and maternity
  - There is some evidence to suggest pre-existing health conditions, like asthma and anaemia, increase the risk of pregnant women developing pneumonia.
- Race
  - There is some evidence to suggest that there are racial disparities in pneumonia care and management in hospitals that are associated with worse outcomes. This may be linked to a lack of awareness of the need to adjust test results to take into account differences between racial groups,

leading to poorer care for these groups. For example, some pulse oximetry devices have been reported to overestimate oxygen saturation levels in people with darker skin, which may lead to them not being treated when treatment is needed unless an adjustment is made in interpreting the test results.

- People who do not speak English may have barriers to accessing care, following information provided verbally or in writing and being involved in shared decision making regarding their care.
- Religion or belief
  - Some people may not be vaccinated against pneumococcal pneumonia due to their family's religion or beliefs. Unvaccinated people are more vulnerable to catching pneumococcal pneumonia than vaccinated people.
- Sex
  - There is some evidence to suggest that there is a higher incidence of community acquired pneumonia in males and that it is more severe than in females. This may be associated with biological differences, such as hormonal cycles and variation in cultural and health practices between males and females. Furthermore, there are differences in help seeking behaviour between males and females, which may increase the males' risk for pneumonia hospitalisation.
- Sexual orientation
  - No potential issues were identified.
- Socio-economic factors
  - In 2014, the committee were aware of the fact that pneumonia rates vary with deprivation level and those social circumstances impact on the care of people with pneumonia following hospital discharge.
  - There is evidence to suggest that people from lower socio-economic groups have increased pneumonia incidence and mortality. This is associated with factors like disproportionate exposure to air pollutants, poor housing, fuel poverty, poor diet and prevalence of chronic conditions (like chronic obstructive pulmonary disease) compared to the general population.
  - Smoking is more common in lower socioeconomic groups, deprived and underserved populations like prisoners. Smoking is a risk factor for pneumonia and mortality. Specific consideration may also need to be given to children whose parents are smokers as they are more likely to develop chest infections like pneumonia.
- Other definable characteristics:
  - Newly arrived migrants (including refugees, asylum seekers and unaccompanied asylum-seeking children, irregular migrants)
    - There is some evidence about the disproportionate incidence of

pneumonia among refugees and immigrants in Europe. However, this is likely to vary between countries due to differences in immigration patterns, and differences in pneumococcal vaccine uptake, variations in rates of antimicrobial resistance, as well as the impact of previous childhood disease. In cases where migrants are not vaccinated against pneumococcal pneumonia, they could be more vulnerable to catching it. This risk may be further increased if they live in deprived areas or have poor living conditions or have poor access to healthcare services.

- People experiencing homelessness
  - People experiencing homelessness are more likely to develop pneumonia. This is associated with deprivation, poor living conditions, higher rates of smoking, reduced access to healthcare services as well as the higher prevalence of chronic conditions and the overrepresentation of certain pathogens that increase their risk of developing pneumonia. People experiencing homelessness also face challenges similar to those highlighted for people from lower socioeconomic groups.

- People with low levels of literacy/health literacy.

Literacy and health literacy entail people's knowledge, motivation, and competence to access, understand, appraise, and apply health information in order to make judgments and take decisions in everyday life concerning healthcare, disease prevention, and health promotion to maintain or improve quality of life during their life course. People with low levels of health literacy are more likely to be under-vaccinated and thus more vulnerable to catching pneumococcal pneumonia than vaccinated ones. They may also be from deprived or lower socioeconomic areas. People with low literacy levels may be unable to understand information leaflets relating to their care if they develop pneumonia.

### 1.3 What is the preliminary view on the extent to which these potential equality issues need addressing by the Committee?

Older people, younger children, people with pre-existing conditions including pregnant women, people with learning disabilities, people from ethnic minorities, males, people in lower socioeconomic or deprived groups, smokers, newly arrived migrants, people experiencing homelessness and people with low levels of literacy/health literacy: specific recommendations may need to be made for these groups.

Babies, children, young people and adults who are not vaccinated against

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pneumococcal pneumonia are more vulnerable to developing it and will be affected by this guideline. However, prevention of pneumonia by vaccination is out of scope of this work because pneumococcal vaccination is covered by the [NICE guideline on vaccine uptake in the general population](#) [NG155].

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