NICE National Institute for Health and Care Excellence

NICE Pathways

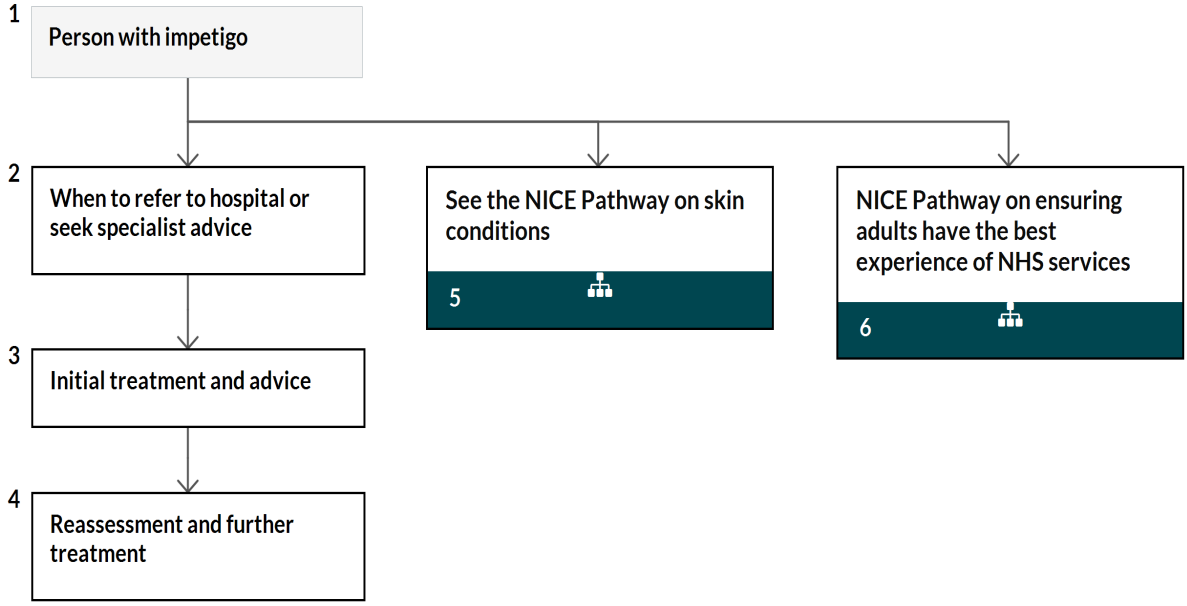
# Impetigo overview

NICE Pathways bring together everything NICE says on a topic in an interactive flowchart. NICE Pathways are interactive and designed to be used online.

They are updated regularly as new NICE guidance is published. To view the latest version of this NICE Pathway see:

http://pathways.nice.org.uk/pathways/impetigo
NICE Pathway last updated: 03 November 2020

This document contains a single flowchart and uses numbering to link the boxes to the associated recommendations.



## 1 Person with impetigo

No additional information

## 2 When to refer to hospital or seek specialist advice

Refer to hospital:

- people with impetigo and any symptoms or signs suggesting a more serious illness or condition (for example, cellulitis [see the NICE Pathway on cellulitis and erysipelas – antimicrobial prescribing])
- people with widespread impetigo who are immunocompromised.

Consider referral or seeking specialist advice for people with impetigo if they:

- have bullous impetigo, particularly in babies (aged 1 year and under)
- have impetigo that recurs frequently
- are systemically unwell
- are at high risk of complications.

NICE has produced a visual summary on antimicrobial prescribing for impetigo.

NICE has published a clinical knowledge summary on impetigo. This practical resource is for primary care professionals (it is not formal NICE guidance).

**Rationale**

See the NICE guideline to find out why we made these recommendations.

## 3 Initial treatment and advice

**Initial treatment**

**Localised non-bullous impetigo**

Consider hydrogen peroxide 1% cream for people with localised non-bullous impetigo who are not systemically unwell or at high risk of complications (see tables on antimicrobials for children and young people under 18 years [See page 7] and antimicrobials for adults aged 18 years and

over [See page 9]). Although other topical antiseptics are available for treating superficial skin infections, no evidence was found for using them to treat impetigo.

If hydrogen peroxide 1% cream is unsuitable, offer a short course of a topical antibiotic for people with localised non-bullous impetigo who are not systemically unwell or at high risk of complications (see tables on antimicrobials for children and young people under 18 years [See page 7] and antimicrobials for adults aged 18 years and over [See page 9]).

NICE has produced a visual summary on antimicrobial prescribing for impetigo.

NICE has published a clinical knowledge summary on impetigo. This practical resource is for primary care professionals (it is not formal NICE guidance).

See the NICE Pathways on antimicrobial stewardship and medicines optimisation.

### Widespread non-bullous impetigo

Offer a short course of a topical or oral antibiotic for people with widespread non-bullous impetigo who are not systemically unwell or at high risk of complications (see tables on antimicrobials for children and young people under 18 years [See page 7] and antimicrobials for adults aged 18 years and over [See page 9]). Take into account:

- that topical and oral antibiotics are both effective at treating impetigo
- the preferences of the person and, if appropriate, their parents or carers, including the practicalities of administration (particularly to large areas) and possible adverse effects
- previous use of topical antibiotics, because antimicrobial resistance can develop rapidly with extended or repeated use.

### Bullous impetigo or impetigo in people who are systemically unwell or at high risk of complications

Offer a short course of an oral antibiotic for:

- all people with bullous impetigo
- people with non-bullous impetigo who are systemically unwell or at high risk of complications.

See tables on antimicrobials for children and young people under 18 years [See page 7] and antimicrobials for adults aged 18 years and over [See page 9].

### Combination treatment

Do not offer combination treatment with a topical and oral antibiotic to treat impetigo.

### Advice

Advise people with impetigo, and their parents or carers if appropriate, about good hygiene measures to reduce the spread of impetigo to other areas of the body and to other people.

Advise people with impetigo, and their parents or carers if appropriate, to seek medical help if symptoms worsen rapidly or significantly at any time, or have not improved after completing a course of treatment.

NICE has written information for the public on antimicrobial prescribing for impetigo.

### Rationale

See the NICE guideline to find out why we made these recommendations.

## 4 Reassessment and further treatment

Reassess people with impetigo if their symptoms worsen rapidly or significantly at any time or have not improved after completing a course of treatment.

When reassessing people with impetigo, take account of:

- other possible diagnoses, such as herpes simplex
- any symptoms or signs suggesting a more serious illness or condition, such as cellulitis (see the NICE Pathway on cellulitis and erysipelas – antimicrobial prescribing)
- previous antibiotic use, which may have led to resistant bacteria.

For people with impetigo that is worsening or has not improved after treatment with hydrogen peroxide 1% cream, offer:

- a short course of a topical antibiotic if the impetigo remains localised **or**
- a short course of a topical or oral antibiotic if the impetigo has become widespread (see widespread non-bullous impetigo in initial treatment and advice [See page 3] in this NICE Pathway).

For people with impetigo that is worsening or has not improved after completing a course of

topical antibiotics:

- offer a short course of an oral antibiotic (see tables on antimicrobials for children and young people under 18 years [See page 7] and antimicrobials for adults aged 18 years and over [See page 9]) **and**
- consider sending a skin swab for microbiological testing.

For people with impetigo that is worsening or has not improved after completing a course of oral antibiotics, consider sending a skin swab for microbiological testing.

For people with impetigo that recurs frequently:

- send a skin swab for microbiological testing **and**
- consider taking a nasal swab and starting treatment for decolonisation.

If a skin swab has been sent for microbiological testing:

- review the choice of antibiotic when results are available **and**
- change the antibiotic according to results if symptoms are not improving, using a narrow-spectrum antibiotic if possible.

NICE has produced a visual summary on antimicrobial prescribing for impetigo.

**Rationale**

See the NICE guideline to find out why we made these recommendations.

## 5 See the NICE Pathway on skin conditions

See Skin conditions

## 6 NICE Pathway on ensuring adults have the best experience of NHS services

See Patient experience in adult NHS services

## Antimicrobials for children and young people under 18 years with impetigo

When prescribing an antimicrobial for impetigo, take account of local antimicrobial resistance data when available and follow the table below.

| Antimicrobial[1] | Dosage and course length[2] |
|---|---|
| **Topical antiseptic** | |
| Hydrogen peroxide 1%[3] | Apply two or three times a day for 5 days[4] |
| **First-choice topical antibiotic[5] if hydrogen peroxide unsuitable (for example, if impetigo is around eyes) or ineffective** | |
| Fusidic acid 2% | Apply three times a day for 5 days |
| **Alternative topical antibiotic if fusidic acid resistance suspected or confirmed** | |
| Mupirocin 2%[6] | Apply three times a day for 5 days |
| **First-choice oral antibiotic** | |
| Flucloxacillin (oral solution or capsules[7]) | 1 month to 1 year, 62.5 mg to 125 mg four times a day for 5 days<br><br>2 to 9 years, 125 mg to 250 mg four times a day for 5 days<br><br>10 to 17 years, 250 mg to 500 mg four times a day for 5 days |
| **Alternative oral antibiotics if penicillin allergy or flucloxacillin unsuitable (for example, if oral solution unpalatable and unable to swallow capsules)** | |

[1] See BNF for Children for appropriate use and dosing in specific populations, for example, hepatic impairment, renal impairment, pregnancy and breastfeeding. Dosing in some age groups may be off-label.

[2] Oral doses are for immediate-release medicines. The age bands apply to children of average size and, in practice, the prescriber will use the age bands in conjunction with other factors such as the severity of the condition being treated and the child's size in relation to the average size of children of the same age.

[3] Other topical antiseptics are available for superficial skin infections, but no evidence was found for using these in impetigo.

[4] A 5-day course is appropriate for most people with impetigo but can be increased to 7 days based on clinical judgement, depending on the severity and number of lesions.

[5] As with all antibiotics, extended or recurrent use of topical fusidic acid or mupirocin may increase the risk of developing antimicrobial resistance. See BNF for Children for more information.

[6] Licenses for use in infants vary between products. See individual summaries of product characteristics for details.

[7] See Medicines for Children, Helping your child to swallow tablets.

| | |
|---|---|
| Clarithromycin | 1 month to 11 years:<br>under 8 kg, 7.5 mg/kg twice a day for 5 days<br>8 to 11 kg, 62.5 mg twice a day for 5 days<br>12 to 19 kg, 125 mg twice a day for 5 days<br>20 to 29 kg, 187.5 mg twice a day for 5 days<br>30 to 40 kg, 250 mg twice a day for 5 days<br>12 to 17 years, 250 mg twice a day for 5 days[1] |
| Erythromycin (in pregnancy) | 8 to 17 years, 250 mg to 500 mg four times a day for 5 days |
| **If** MRSA **suspected or confirmed** | |
| Consult local microbiologist | |

## Antimicrobials for adults aged 18 years and over with impetigo

When prescribing an antimicrobial for impetigo, take account of local antimicrobial resistance data when available and follow the table below.

| **Antimicrobial**[2] | **Dosage and course length**[3] |
|---|---|
| **Topical antiseptic** | |
| Hydrogen peroxide 1%[4] | Apply two or three times a day for 5 days[5] |
| **First-choice topical antibiotic**[6] **if hydrogen peroxide unsuitable (for example, if impetigo** | |

[1] Dosage can be increased to 500 mg twice a day, if needed for severe infections.

[2] See BNF for appropriate use and dosing in specific populations, for example, hepatic impairment, renal impairment, pregnancy and breastfeeding.

[3] Oral doses are for immediate-release medicines.

[4] Other topical antiseptics are available for superficial skin infections, but no evidence was found for using these in impetigo.

[5] A 5-day course is appropriate for most people with impetigo but can be increased to 7 days based on clinical judgement, depending on the severity and number of lesions.

[6] As with all antibiotics, extended or recurrent use of topical fusidic acid or mupirocin may increase the risk of developing antimicrobial resistance. See BNF for more information.

| | |
|---|---|
| **is around eyes) or ineffective** | |
| Fusidic acid 2% | Apply three times a day for 5 days |
| **Alternative topical antibiotic if fusidic acid resistance suspected or confirmed** | |
| Mupirocin 2% | Apply three times a day for 5 days |
| **First-choice oral antibiotic** | |
| Flucloxacillin | 500 mg four times a day for 5 days |
| **Alternative oral antibiotics if penicillin allergy or flucloxacillin unsuitable** | |
| Clarithromycin | 250 mg twice a day for 5 days[1] |
| Erythromycin (in pregnancy) | 250 mg to 500 mg four times a day for 5 days |
| **If** MRSA **suspected or confirmed** | |
| Consult local microbiologist | |

## Glossary

### Bullous impetigo

(impetigo characterised by the presence of fluid-filled vesicles and blisters often with a diameter of over 1 cm that rupture, leaving a thin, flat, yellow-brown crust)

### Decolonisation

(use of topical treatments [antiseptic body wash, nasal ointment or a combination of both] and

personal hygiene measures to remove the bacteria causing the infection from the body)

**Non-bullous impetigo**

(impetigo characterised by thin-walled vesicles or pustules that rupture quickly, forming a golden-brown crust)

## Sources

Impetigo: antimicrobial prescribing (2020) NICE guideline NG153

## Your responsibility

### Guidelines

The recommendations in this guideline represent the view of NICE, arrived at after careful consideration of the evidence available. When exercising their judgement, professionals and practitioners are expected to take this guideline fully into account, alongside the individual needs, preferences and values of their patients or the people using their service. It is not mandatory to apply the recommendations, and the guideline does not override the responsibility to make decisions appropriate to the circumstances of the individual, in consultation with them and their families and carers or guardian.

Local commissioners and providers of healthcare have a responsibility to enable the guideline to be applied when individual professionals and people using services wish to use it. They should do so in the context of local and national priorities for funding and developing services, and in light of their duties to have due regard to the need to eliminate unlawful discrimination, to advance equality of opportunity and to reduce health inequalities. Nothing in this guideline should be interpreted in a way that would be inconsistent with complying with those duties.

Commissioners and providers have a responsibility to promote an environmentally sustainable health and care system and should assess and reduce the environmental impact of implementing NICE recommendations wherever possible.

[1] Dosage can be increased to 500 mg twice a day, if needed for severe infections.

### Technology appraisals

The recommendations in this interactive flowchart represent the view of NICE, arrived at after careful consideration of the evidence available. When exercising their judgement, health professionals are expected to take these recommendations fully into account, alongside the individual needs, preferences and values of their patients. The application of the recommendations in this interactive flowchart is at the discretion of health professionals and their individual patients and do not override the responsibility of healthcare professionals to make decisions appropriate to the circumstances of the individual patient, in consultation with the patient and/or their carer or guardian.

Commissioners and/or providers have a responsibility to provide the funding required to enable the recommendations to be applied when individual health professionals and their patients wish to use it, in accordance with the NHS Constitution. They should do so in light of their duties to have due regard to the need to eliminate unlawful discrimination, to advance equality of opportunity and to reduce health inequalities.

Commissioners and providers have a responsibility to promote an environmentally sustainable health and care system and should assess and reduce the environmental impact of implementing NICE recommendations wherever possible.

### Medical technologies guidance, diagnostics guidance and interventional procedures guidance

The recommendations in this interactive flowchart represent the view of NICE, arrived at after careful consideration of the evidence available. When exercising their judgement, healthcare professionals are expected to take these recommendations fully into account. However, the interactive flowchart does not override the individual responsibility of healthcare professionals to make decisions appropriate to the circumstances of the individual patient, in consultation with the patient and/or guardian or carer.

Commissioners and/or providers have a responsibility to implement the recommendations, in their local context, in light of their duties to have due regard to the need to eliminate unlawful discrimination, advance equality of opportunity, and foster good relations. Nothing in this interactive flowchart should be interpreted in a way that would be inconsistent with compliance with those duties.

Commissioners and providers have a responsibility to promote an environmentally sustainable health and care system and should assess and reduce the environmental impact of implementing NICE recommendations wherever possible.