



- Offer an antibiotic
- Consider marking extent of infection with a single-use surgical marker pen

### Advise:

- possible adverse effects of antibiotics
- skin will take some time to return to normal after finishing the antibiotic course
- seeking medical help if symptoms worsen rapidly or significantly at any time, or do not start to improve within 2 to 3 days



- Do not routinely offer antibiotic prophylaxis
- For adults who have had treatment in hospital, or under specialist advice, for at least 2 episodes of cellulitis or erysipelas in the past 12 months, consider a trial of antibiotic prophylaxis
- Advise seeking medical help if symptoms of cellulitis or erysipelas recur

### Reassess if:

- symptoms worsen rapidly or significantly at any time, or do not start to improve within 2 to 3 days
- the person is systemically very unwell, has severe pain out of proportion to the infection, or redness or swelling extending beyond the initial presentation

Take account of other possible diagnoses, symptoms or signs of something more serious (such as lymphangitis, necrotising fasciitis or sepsis) and previous antibiotic use, which may have led to resistant bacteria

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Refer to hospital if the person has any symptoms or signs suggesting a more serious illness or condition such as lymphangitis, necrotising fasciitis or sepsis.

### Consider referring or seeking specialist advice if they:

- are severely unwell or have a higher risk of complications, or
- have infection near the eyes or nose, or
- may have uncommon pathogens, or
- have spreading infection not responding to oral antibiotics, or
- cannot take oral antibiotics (to explore giving intravenous antibiotics at home or in the community if appropriate)



### Background

Acute cellulitis and erysipelas are:

- skin infections
- usually caused by *Streptococcus pyogenes* and *Staphylococcus aureus* bacteria
- treated with antibiotics



### Antibiotics

When choosing antibiotics, take account of:

- the severity of symptoms
- the site of infection
- the risk of developing complications
- previous antibiotic use

Give oral antibiotics first line if possible

Review intravenous antibiotics by 48 hours and consider switching to oral antibiotics if possible

Discuss any trial of antibiotic prophylaxis to ensure shared decision making, and choose:

- phenoxymethylpenicillin 250 mg twice a day, or
- erythromycin 250 mg twice a day for penicillin allergy

Review at least every 6 months

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## Choice of antibiotic for treatment: adults aged 18 years and over

Antibiotic <sup>1</sup>	Dosage and course length <sup>2</sup>
First choice oral antibiotic	
Flucloxacillin	500 mg four times a day for 7 days <sup>3</sup>
Alternative first choice oral antibiotics for penicillin allergy or if flucloxacillin unsuitable	
Clarithromycin	500 mg twice a day for 7 days <sup>3</sup>
Erythromycin (in pregnancy)	500 mg four times a day for 7 days <sup>3</sup>
First choice oral antibiotic if infection near the eyes or nose <sup>4</sup> (consider seeking specialist advice)	
Co-amoxiclav	500/125 mg three times a day for 7 days <sup>3</sup>
Alternative first choice oral antibiotics if infection near the eyes or nose <sup>4</sup> for penicillin allergy or if co-amoxiclav unsuitable (consider seeking specialist advice)	
Clarithromycin <i>with</i>	500 mg twice a day for 7 days <sup>3</sup>
Metronidazole	400 mg three times a day for 7 days <sup>3</sup>
First choice intravenous antibiotic (if unable to take oral antibiotics or severely unwell) <sup>5,6</sup>	
Flucloxacillin	500 mg to 2 g four times a day
Alternative choice intravenous antibiotics for penicillin allergy, if flucloxacillin unsuitable, or if infection near the eyes or nose <sup>4</sup> (consider seeking specialist advice). Antibiotics may be combined if susceptibility or sepsis a concern <sup>6</sup>	
Clarithromycin	500 mg twice a day
Co-amoxiclav (not if penicillin allergy)	1.2 g three times a day
Cefuroxime	750 mg to 1.5 g three or four times a day
Clindamycin	600 mg to 2.7 g daily in two to four divided doses, increased if necessary to 4.8 g daily (maximum per dose 1.2 g)
Gentamicin	Initially 5 to 7 mg/kg once a day, subsequent doses adjusted according to serum gentamicin concentration <sup>7</sup>
Vancomycin	15 to 20 mg/kg two or three times a day (maximum 2 g per dose), adjusted according to serum vancomycin concentration <sup>8</sup>
Linezolid (if vancomycin cannot be used; specialist advice only)	600 mg twice a day
<p><sup>1</sup>See BNF for appropriate use and dosing in specific populations, for example, hepatic impairment, renal impairment, pregnancy and breast-feeding, and administering intravenous antibiotics.</p> <p><sup>2</sup>Oral doses are for immediate release medicines.</p> <p><sup>3</sup>A longer course (up to a further 7 days) may be needed based on clinical assessment. However, skin does take some time to return to normal, and full resolution of symptoms at 7 days is not expected.</p> <p><sup>4</sup>Infection around the eye or the nose (the triangle from the bridge of the nose to the corners of the mouth, or immediately around the eyes) is of more concern because of risk of serious intracranial complication.</p> <p><sup>5</sup>Give oral medicines first line if the person can take oral medicines and the severity of their symptoms does not require intravenous antibiotics.</p> <p><sup>6</sup>Review intravenous antibiotics by 48 hours and consider switching to oral antibiotics where possible for a total of 7 days.</p> <p><sup>7</sup>Therapeutic drug monitoring and assessment of renal function is required (BNF, February 2019).</p> <p><sup>8</sup>Therapeutic drug monitoring and assessment of renal function is required. A loading dose of 25 to 30 mg/kg (maximum per dose 2 g) can be used in seriously unwell people to facilitate rapid attainment of the target trough serum vancomycin concentration (BNF, February 2019).</p>	

# Cellulitis and erysipelas: antimicrobial prescribing

## Choice of antibiotic for treatment: children and young people under 18 years

Antibiotic <sup>1</sup>	Dosage and course length <sup>2</sup>
First choice oral antibiotic	
Flucloxacillin	1 month to 1 year, 62.5 mg to 125 mg four times a day for 7 days <sup>3</sup> ; 2 to 9 years, 125 mg to 250 mg four times a day for 7 days <sup>3</sup> 10 to 17 years, 250 mg to 500 mg four times a day for 7 days <sup>3</sup>
Alternative first choice oral antibiotics for penicillin allergy or if flucloxacillin unsuitable	
Clarithromycin	1 month to 11 years: Under 8 kg, 7.5 mg/kg twice a day for 7 days <sup>3</sup> ; 8 to 11 kg, 62.5 mg twice a day for 7 days <sup>3</sup> ; 12 to 19 kg, 125 mg twice a day for 7 days <sup>3</sup> 20 to 29 kg, 187.5 mg twice a day for 7 days <sup>3</sup> ; 30 to 40 kg, 250 mg twice a day for 7 days <sup>3</sup> 12 to 17 years: 250 mg to 500 mg twice a day for 7 days <sup>3</sup>
Erythromycin (in pregnancy)	8 to 17 years, 250 mg to 500 mg four times a day for 7 days <sup>3</sup>
First choice oral antibiotic if infection near the eyes or nose <sup>4</sup> (consider seeking specialist advice)	
Co-amoxiclav	1 to 11 months, 0.25 ml/kg of 125/31 suspension three times a day for 7 days <sup>3</sup> (dose doubled in severe infection) 1 to 5 years, 0.25 ml/kg of 125/31 suspension or 5 ml of 125/31 suspension three times a day for 7 days <sup>3</sup> (dose doubled in severe infection) 6 to 11 years, 0.15 ml/kg of 250/62 suspension or 5 ml of 250/62 suspension three times a day for 7 days <sup>3</sup> (dose doubled in severe infection) 12 to 17 years, 250/125 mg or 500/125 mg three times a day for 7 days <sup>3</sup>
Alternative first choice oral antibiotics if infection near the eyes or nose <sup>4</sup> for penicillin allergy or if co-amoxiclav unsuitable (consider seeking specialist advice)	
Clarithromycin	See doses above; for 7 days <sup>3</sup>
<b>with (if anaerobes suspected)</b> Metronidazole	1 month, 7.5 mg/kg twice a day for 7 days <sup>3</sup> ; 2 months to 11 years, 7.5 mg/kg three times a day (maximum per dose 400 mg) for 7 days <sup>3</sup> 12 to 17 years, 400 mg three times a day for 7 days <sup>3</sup>
First choice intravenous antibiotic (if unable to take oral antibiotics or severely unwell) <sup>5,6</sup>	
Flucloxacillin	1 month to 12 years, 12.5 mg to 25 mg/kg four times a day (maximum 1 g four times a day)
Alternative choice intravenous antibiotics for penicillin allergy, if flucloxacillin unsuitable, or if infection near the eyes or nose <sup>4</sup> (consider seeking specialist advice). Antibiotics may be combined if susceptibility or sepsis a concern <sup>6</sup>	
Clarithromycin	1 month to 11 years, 7.5 mg/kg twice a day (maximum 500 mg per dose); 12 to 17 years, 500 mg twice a day
Co-amoxiclav (not if penicillin allergy)	1 to 2 months, 30 mg/kg twice a day; 3 months to 17 years, 30 mg/kg three times a day (maximum 1.2 g three times a day)
Cerfuroxime	1 month to 17 years, 20 mg/kg three times a day (maximum 750 mg per dose), increased to 50 to 60 mg/kg three or four times a day (maximum 1.5 g per dose) for severe infections
Clindamycin	1 month to 17 years, 3.75 to 6.25 mg/kg four times a day, increased if necessary to 10 mg/kg four times a day (maximum per dose 1.2 g); total daily dose may alternatively be given in three divided doses (maximum per dose 1.2 g)
Gentamicin	Initially 7 mg/kg once a day, subsequent doses adjusted according to serum gentamicin concentration <sup>7</sup>
Vancomycin	1 month to 11 years, 10 to 15 mg/kg four times a day, adjusted according to serum vancomycin concentration <sup>8</sup> ; 12 to 17 years, 15 to 20 mg/kg two or three times a day (maximum 2 g per dose), adjusted according to serum vancomycin concentration <sup>8</sup>
Linezolid <sup>9</sup> (if vancomycin cannot be used; specialist advice only)	1 month to 11 years, 10 mg/kg three times a day (maximum 600 mg per dose); 12 to 17 years, 600 mg twice a day

See table for adults for footnotes 1 to 8.

<sup>9</sup>Linezolid is not licensed in children and young people under 18 years, so use would be off label. The prescriber should follow relevant professional guidance, taking full responsibility for the decision. Informed consent should be obtained and documented. See the General Medical Council's Good practice in prescribing and managing medicines and devices for further information.