

BITES (HUMAN/DOG/CAT) ANTIBIOTIC PRESCRIBING V2.2

Comments from the Expert Advisory Group

- The most common mammalian bites are associated with humans, dogs, and cats and infection is a risk if there is a break in the skin with bleeding.
- Seek specialist advice for bites from a wild or exotic animal (including birds) because the bacteria involved may be different and there may be a risk of other serious non-bacterial infections.
- Consider rabies in the following cases:
 - Bites/scratches from terrestrial animals encountered overseas, especially domestic, tame, or stray dogs. Other terrestrial species may also pose a risk e.g. monkeys/rats/cats/foxes etc.
 - Bites from imported animals originating from countries where rabies is endemic.
 - Bites from bats, including those occurring within the UK and Ireland.
 - Patients with pre-exposure rabies vaccination still need post-exposure treatment.
 - Please refer to the latest rabies guidance and treatment algorithms from the [Health Protection Surveillance Centre](#).
- Human bites are either clenched-fist injuries ('fight bites') or occlusal injuries. Most human bites occur on the hand. Human bites are known to be at risk of infection and subsequent complications with an infection rate ranging from 10-50%. Injuries to the clenched fist can be particularly serious.
- Dogs can cause significant crush injury and tissue devitalisation, in addition to laceration, puncture, and avulsion (tearing away of tissue) injury. An estimated 3% to 18% of dog bites become infected (median time to infection is 24 hours).
- Cats have weaker biting force than dogs however they have thin, sharp teeth; 85% of cat bite wounds are puncture wounds, which inoculate organisms deep into the tissue. Due to the high rate of puncture wounds, infection rates after cat bites may be as high as 50% (median time to infection is 12 hours). Infected cat bites are more likely to be associated with complications such as tenosynovitis, osteomyelitis and septic arthritis.

General Management Advice

- Assess and manage associated injuries (e.g. possible head injury / fractures etc.).
- Removal of any foreign bodies if applicable.
- The affected skin surface should be cleaned, and the unclosed wound copiously irrigated with warm running water, normal saline, or lactated Ringer's solution (with a giving set or IV catheter tip and large syringe).
- Assess tetanus and rabies risk (relevant travel).
- Assess HIV / hepatitis B & C risk (relevant to human bite) <https://www.hpsc.ie/a-z/emii/>
- Wound closure is a controversial issue. There is general agreement that infected wounds, and those seen more than 24 hours after the bite, should be left open.
- Consider referral to secondary care for facial injuries (except minor) or penetrating wounds involving underlying structures (joints, nerves, muscles, tendons, bones). Note: penetrating bites to the hands, feet or head are at particular risk of infection and complications.
- If the wound is infected, send pus or deep wound swab for culture.
- Antibiotics are recommended for infected bites (treatment) and, in certain circumstances, non-infected bites as prophylaxis.

Give advice to people with a human or animal bite about:

- possible adverse effects of antibiotics (if they have been offered antibiotics)
- seeking medical help if symptoms or signs of infection develop or worsen rapidly or significantly at any time, or do not start to improve within 24 to 48 hours of starting treatment.

BITES (HUMAN/DOG/CAT) ANTIBIOTIC PRESCRIBING V2.2

Prophylaxis

Adopted from [NICE NG184](#)

Antibiotic prophylaxis for an uninfected bite			
Type of bite	Bite has not broken the skin	Bite has broken the skin but not drawn blood	Bite has broken the skin and drawn blood
Human bite	Do not offer antibiotics	Consider antibiotics if it is in a high-risk area or person at high risk	Offer antibiotics
Cat bite	Do not offer antibiotics	Consider antibiotics if the wound could be deep	Offer antibiotics
Dog or other traditional pet bite	Do not offer antibiotics	Do not offer antibiotics	Offer antibiotics if it has caused considerable, deep tissue damage or is visibly contaminated (for example, with dirt or a tooth) Consider antibiotics if it is in a high-risk area or person at high risk

High-risk areas include the hands, feet, face, genitals, skin overlying cartilaginous structures or an area of poor circulation. People at high risk include those at risk of a serious wound infection because of a co-morbidity (such as diabetes, immunosuppression, asplenia/ impaired splenic function or decompensated liver disease).

Treatment

Offer an antibiotic (see Treatment table) for people with a human or animal bite if there are symptoms or signs of infection, such as increased pain, inflammation, fever, discharge or an unpleasant smell. If concerns regarding severe infection, e.g. septic arthritis, then seek specialist input. If systemically unwell, consider urgent referral as may rapidly progress and intravenous therapy may be required.

Reassess if:

- symptoms or signs of infection develop or worsen rapidly or significantly at any time
- the person becomes systemically unwell
- there is severe pain that is out of proportion to the infection

BITES (HUMAN/DOG/CAT) ANTIBIOTIC PRESCRIBING V2.2

BITES (HUMAN/DOG/CAT) ANTIBIOTIC TREATMENT TABLE			
Drug	Dose	Duration*	Notes
1st choice option			
Co-amoxiclav	Adults: 625 mg every 8 hours Children: See Paediatric dosing table	3 days for prophylaxis 5 days for treatment*	Avoid in penicillin allergy.
Adults: 2nd choice option / Penicillin Allergy			
Metronidazole PLUS	400 mg every 8 hours	3 days for prophylaxis 5 days for treatment*	Advise patients to avoid alcohol during metronidazole therapy and for at least 48 hours after stopping.
Doxycycline	200 mg on first day, then 100 mg or 200 mg daily	3 days for prophylaxis 5 days for treatment*	Contraindicated in pregnancy. Advise to take with a glass of water and sit upright for 30 minutes after taking. Absorption of doxycycline significantly impaired by antacids, iron/ calcium/ magnesium/ zinc-containing products and should be separated by at least 3 hours Risk of photosensitivity
Children aged 3 months and older: 2nd choice option / Penicillin Allergy			
Co-trimoxazole**	24 mg/kg [§] PO 12 hourly Or dose banding as below: 3 months - < 6 months: 120 mg PO 12 hourly ≥6 months– < 6 years: 240 mg PO 12 hourly ≥6-< 12 years: 480 mg PO 12 hourly ≥12 years: 960 mg PO 12 hourly (usual adult dose)	3 days for prophylaxis 5 days for treatment	[§] Co-trimoxazole is a fixed combination of sulfamethoxazole and trimethoprim, 5:1 ratio Co-trimoxazole is associated with rare but serious side effects. Discontinue immediately if rash develops. Not recommended in < 6 weeks. Avoid in blood disorders / G6PD deficiency.
Pregnant women with Penicillin Allergy.			
Seek advice from Microbiologist			

*Note: A 5-day course is appropriate for treating most human or animal bites. The antibiotic course duration can be increased to 7 days if there was significant tissue destruction or the wound has penetrated bone, joint, tendon or vascular structures. Such wounds would require surgical management

** Co-trimoxazole dosing adopted from Paediatric Formulary Children's Health Ireland (CHI) (Accessed Feb 2024)

HSE Antimicrobial Resistance and Infection Control Programme

Version 2.2 Review date: March 2026

Document uploaded onto the HSE.ie site in February 2026