Ear Infection

For use by healthcare professionals only

Clinical Assessment/Management tool for Children

Healthier Together

NHS

Primary and Community Care Settings

Clinical Assessment	History	Risk factors for severe disease
Most cases are due to a viral infection and will resolve without antibiotics Acute Otitis Media (AOM) is very common and peak age prevalence is 6-18 months Do not accept AOM as the sole diagnosis in a sick febrile young child. Other more serious causes need to be excluded Avoid routine use of antibiotics See also Febrile Child under 5 years pathway Exposure to cigarette smoke is a risk factor	Recent onset ear pain (irritability in preverbal children) Ear Discharge, reduced hearing/not responding to sounds Pulling/tugging at the ear Fever Loss of appetite, vomiting, lethargy Viral Symptoms (cough, sore throat)	Less than three months 3 to 6 months plus temp greater than 39C Cochlear implant Craniofacial syndroms Immunodeficiency Exposure to cigarette smoke

RED FLAGS / CONCERNS

Suspected mastoiditis

(Redness/swelling and or tenderness behind ears)

Suspected intracranial spread

(Drowsiness, irritability, severe headaches, persistent vomiting, retro orbital pain, or abnormal neurology)

Examination	
Ear examination: • Distinctly red, yellow, cloudy Tympanic Membrane (TM) • Moderate to severe bulging with loss of landmarks and an air-fluid level • Perforation of TM or discharge in external auditory canal **External Ear** (for signs of otitis externa) • Itchy, tender ear canal • Skin of external ear canal swollen • Debris in canal • Difficult to visualise ear drum	**Signs of systemically unwell** High fever Lethargy, Vomiting **Look for redness or tenderness over mastoid (to rule out mastoiditis)** **Signs of associated viral infection** • Lymph nodes • Red throat • Coryzal

Investigation	Look out for	Management	Antibiotics	Complications	Send to hospital if
• There are no routine investigations for acute ear infection • Diagnostic imaging is only required if complications are suspected • Swab if purulent discharge out of one ear or recurrent infection	• Alternative diagnosis • Sick or febrile young child • Red flags or complications	• Simple analgesia (paracetamol, ibuprofen) • Short term use of topical analgesia can be used if there is an intact TM and severe pain • There is no role for decongestants, steroids or antihistamines in AOM • Consider back up antibiotics (use if not improved in 72 hours or worsening)	• Antibiotics are not indicated in the vast majority of cases • For AOM worsening rapidly or where there are underlying health concerns or pus draining from the ear consider Amoxicillin as per the BNFc Antibiotics may be indicated for 1.AOM worsening 2.Where there are underlying health concerns 3.Frank pus from ear *Amoxicillin as per BNFc or Clarithromycin* if true penicillin allergy	• TM Perforation • Acute Mastoiditis – this requires prompt treatment and referral to ENT. It is diagnosed due to protruding auricle, erythema, oedema and tenderness or fluctuance in the post auricular region • Intracranial suppurative collection occurs but is rare • Facial nerve palsy associated with AOM should be discussed with ENT • Persistent effusion beyond 3 months should trigger a hearing assessment and ENT referral	• Systemically unwell • Young infant where diagnosis is uncertain • Children with acute mastoiditis or cochlear implants should be discussed with ENT • Evidence or concern about complications

This guidance has been reviewed and adapted by healthcare professionals across Humber and North Yorkshire with consent from the Hampshire development groups, in accordance with NICE Guidance.