

- Moderate to severe bulging of the tympanic membrane or new-onset ear drainage (otorrhea) with signs and symptoms of middle-ear inflammation (e.g., ear pain, fever)
- Severe symptoms include ill appearance, moderate to severe otalgia, otalgia lasting at least 2 days, or temperature of 39 degrees Celsius (102.2 degrees Fahrenheit) or greater
- Most common bacterial pathogens causing acute otitis media (AOM) are *Streptococcus pneumoniae* (~25%), nontypeable *Haemophilus influenzae* (~50%), and *Moraxella catarrhalis* (~15%)

Treatment⁵

- For children <6 months old, a thorough examination should rule out other causes of infection, particularly for children with severe symptoms. If unilateral or bilateral AOM is confirmed, antibiotics are indicated due to risk for severe or systemic infection

1. Kaur R, Morris M, Pichichero ME. Epidemiology of acute otitis media in the postpneumococcal conjugate vaccine era. *Pediatrics*. 2017 Sep;140(3):e20170181. PMID: 28784702.
2. Ben-Shimol Shalom, Givon-Lav N, Leibovitz E, et al. Impact of widespread introduction of pneumococcal conjugate vaccines on pneumococcal and nonpneumococcal otitis media. *Clin Infect Dis*. 2016 Sep 1;63(5):611-8. PMID: 27225239.
3. Cohen R, Varon E, Doit C, et al. A 13-year survey of pneumococcal nasopharyngeal carriage in children with acute otitis media following PCV7 and PCV13 implementation. *Vaccine*. 2015 Sep 22;33(39):5118-26. PMID: 26271823.
4. Wald ER, DeMuri GP. Antibiotic recommendations for acute otitis media and acute bacterial sinusitis: Conundrum no more. *Pediatr Infect Dis J*. 2018 Dec;37(12):1255-7. PMID: 29570583.
5. Lieberthal AS, Carroll AE, Chonmaitree T, et al. The diagnosis and management of acute otitis media. *Pediatrics*. 2013 Mar;131(3):e964-99. PMID: 23439909.
6. Randolph AG, McCulloh RJ. Pediatric sepsis: important considerations for diagnosing and managing severe infections in infants, children, 8 6.