



## How Long for Legionella?

The 2025 American Thoracic Society (ATS) Community Acquired Pneumonia (CAP) guidelines [recommend 3 days of antibiotics](#) for outpatients and inpatients with non-severe CAP who reach clinical stability.<sup>1</sup> A factor that weakens this recommendation is pneumonia due to an organism that requires a longer duration of therapy. *Legionella pneumophila* is specifically named to be an organism that requires a longer duration. How long should Legionella pneumonia be treated?

### What duration of therapy is recommended for Legionella pneumonia?

*Legionella pneumophila* is a [common causative pathogen for CAP](#). As mentioned above, the 2025 ATS CAP guidelines note that CAP due to *Legionella pneumophila* generally require durations longer than 3 days, citing this was excluded in key studies.<sup>1</sup> The 2019 ATS/IDSA CAP guidelines recommend a minimum of 5 days for CAP in patients meeting criteria for [clinical stability](#) and no specific duration of therapy recommendation is made for CAP due to *Legionella* spp.<sup>2</sup> Some have recommended azithromycin or levofloxacin for 3-7 days for mild Legionella pneumonia and 7-10 days for moderate to severe cases.<sup>3</sup>

### What is the evidence?

Randomized controlled trials that have established a 3-day minimum duration for CAP did not include patients with Legionella pneumonia.<sup>4-5</sup> In a randomized controlled trial comparing 5 days with physician determined duration for CAP, very few patients with Legionella pneumonia were included.<sup>6</sup> In one small retrospective cohort of non-ICU inpatients with Legionella pneumonia, all 16 patients were cured with 1.5 g azithromycin administered over 3 or 5 days. Pharmacokinetic parameters between [azithromycin 1.5 g administered over 3 or 5 days are similar](#) and provide therapeutic concentrations exceeding 5 days.<sup>8-9</sup> In studies with levofloxacin for Legionella CAP, 500 mg daily was given for 7-14 days and 750 mg was given for 5 days. In 13 patients who received levofloxacin 750 mg daily for 5 days, 12 (92.3%) achieved clinical success.<sup>10</sup>

**Key Takeaway:** Legionella pneumonia can be treated with a minimum of azithromycin 1.5 g administered over 3 or 5 days and levofloxacin 750 mg for 5 days. Clinical stability should guide total duration.

### References:

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