

Chemotherapy can contribute to cough both directly (drug toxicity to the lungs) and indirectly (infections, reflux, fluid overload), and new or worsening cough during treatment always needs evaluation.

Why chemotherapy causes cough

- Infections from low immunity: Chemotherapy suppresses the immune system, so respiratory infections such as bronchitis or pneumonia are common and often present with cough, fever, and green phlegm.
- Drug-induced lung toxicity: Several agents (for example bleomycin, methotrexate, cyclophosphamide, gemcitabine, taxanes) can cause pneumonitis or fibrosis; patients typically report a dry, persistent cough and breathlessness.
- Irritation and inflammation: Chemotherapy can worsen pre-existing asthma/COPD, trigger reflux, or cause fluid retention, all of which may provoke cough.

Typical features of “chemo cough”

- Often dry at first, sometimes becoming productive if infection develops.
- May start days to weeks after starting chemotherapy and can last for weeks; it usually improves once the underlying cause is treated or chemotherapy is adjusted.
- Can be accompanied by red-flag symptoms such as shortness of breath, chest pain, fever, or coughing up blood, which require urgent assessment.

When to worry and seek help

- Cough with fever, green/yellow sputum, or feeling generally unwell (possible infection/neutropenia).
- New or rapidly worsening dry cough with breathlessness in someone on drugs known for lung toxicity (for example bleomycin, methotrexate, gemcitabine, taxanes).
- Any cough that interferes with sleep, eating, or talking despite simple measures and over-the-counter remedies.

Management approaches

- Medical evaluation: Oncologist review, chest exam, chest X-ray or CT, blood tests, and sometimes sputum tests or bronchoscopy to distinguish infection, disease progression, embolism, or drug-induced lung injury.
- Treat the cause:
 - Antibiotics/antivirals for confirmed infections.
 - Steroids and stopping or changing the suspected chemotherapy drug for pneumonitis or lung toxicity.
- Symptom relief:
 - Cough suppressants (for dry, non-productive cough) and expectorants (if mucus is thick).

- Hydration, humidified air, avoiding smoke/irritants, and breathing exercises/physiotherapy to ease respiratory symptoms.