

Pneumocystis pneumonia characteristically appears on chest X-ray (CXR) as a diffuse interstitial pneumonia. Patients have diffuse infiltrates throughout both lung fields in an interstitial pattern. A ground glass pattern is often seen especially on CT scans. Pneumatoceles can also occur.

TMP-SMX

[Tampon on SMX-snowmobile](#)

Trimethoprim/sulfamethoxazole (TMP-SMX) is a sulfonamide antibiotic that disturbs folate metabolism in microorganisms. It is used both as treatment for Pneumocystis as well as for prophylaxis against the disease. Prophylaxis is indicated for example in HIV patients with CD4+ count below 200.

Start prophylaxis when CD4 drops under 200

[Purple-axes Dropping CD \(4\) Fork \(200\) Tooth-fairy](#)

HIV patients should begin taking TMP-SMX prophylactically to prevent this disease when CD4+ cell counts drop below 200. This is because CD4+ cells (helper T cells) are crucial to normal immune system functioning, so when their numbers are depleted, patients are susceptible to opportunistic infections.