**Lung function in a cohort of people who inject drugs in Victoria, Australia: a preliminary cross-sectional analysis.**

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**Introduction:**
Emerging international evidence suggests lung obstructions including asthma and chronic obstructive pulmonary disease may be common among people who inject drugs. However, little is known about lung health among Australians who inject drugs. We aimed to measure lung function in a community-recruited cohort of people who inject drugs at study recruitment.

**Methods:** Data were from a longitudinal study of people who inject drugs. Between January 2025 and March 2026 participants completing annual interviews at selected sites underwent field-based spirometry. Forced Expiratory Volume in 1 second (FEV1) and Forced Vital Capacity (FVC) were measured pre- and post-bronchodilator administration. Mean pre-bronchodilator absolute-FEV1, percentage of predicted FEV1 (FEV1%Predicted), and percentage change pre- to post-bronchodilator FEV1 (FEV1%Change) were calculated. Clinically significant lung obstruction was defined as pre-bronchodilator FEV1/FVC ratio below 0.7. Differences in FEV1 by demographic and drug use variables were assessed using linear regression.

**Results:** Among 268 participants (mean age = 45.9, standard deviation [SD] = 8.1), mean pre-bronchodilator FEV1 was 3.39L (SD: 0.92L), mean FEV1%Predicted was 92.86% (SD: 18.69), and mean FEV1%Change was 4.53% (SD: 13.81%). Sixty-six participants (25%) had clinically significant lung obstruction. Female sex (Coef: -0.851, 95% Confidence Interval [95%CI]: -1.093 – -0.609, p=<0.001) and increasing age (Coef: -0.048, 95%CI: -0.060 – -0.036; p>0.001) were associated with poorer FEV1. Methamphetamine as drug used most in the last month (versus opioids; Coef: 0.438, 95%CI: 0.167 – 0.709, p=0.002) was associated with improved FEV1. No differences in FEV1 were observed by Aboriginality, or drug or tobacco use frequency.

**Discussion:** In a cohort of people who injected drugs, we found one quarter of participants had clinically significant lung obstruction. Lung function was poorer among older participants and females.

**Implications on practice and policy:**
Integration of lung screening into services providing opioid dependence and hepatitis C treatment may improve lung health among people who inject drugs.

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