

## **Predictors of reductions in workers' daily tobacco smoking 2007-2016**

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**Introduction and Aims:** *Tobacco smoking creates substantial imposts on Australian society yet is highly preventable. The workplace is an under-utilized setting in which to implement/enhance smoke-free policies, prevention and intervention strategies. This study explored predictors of daily tobacco smoking (DTS) prevalence over time by industry and occupation of employment to inform future smoking reduction approaches.*

**Design and Methods:** *Frequency analyses and logistic regressions (using pooled 2007, 2010, 2013 and 2016 National Drug Strategy Household Survey datasets) were undertaken. Four models (M1-M4) adjusted effects of demographics on DTS in industries (M1) and occupations (M2) with high ( $\geq 20\%$ ) DTS prevalence; industries with low ( $\leq 15\%$ ) DTS prevalence (M3); and occupations with low/moderate ( $< 20\%$ ) DTS prevalence (M4).*

**Results:** *Workers' DTS prevalence declined significantly over time (18.5%-12.5%) but varied by industry and occupation. Greatest reduction occurred among industries where prevalence was originally low. Greater odds of DTS were associated with: low socio-economic status and very high psychological distress (M1-M4); males (M1-M3); workers aged 25-39yrs (M1-M2); non-metropolitan females (M2); and non-metropolitan based workers (M3-M4).*

**Discussions and Conclusions:** *Although smoking prevalence has decreased among employed Australians, reductions have not been equal across all work groups. These data provide the most finely differentiated examination of predictors of tobacco use reduction among workers to-date. Although current strategies have facilitated significant reductions, specific subgroups require more targeted efforts so that uniform reductions can be achieved with associated improvements to worker health and substantial cost savings.*

**Implications for Practice or Policy:** *DTS risk was elevated in some working subgroups. Select industries, occupations and subgroups require more tailored approaches to tackle smoking cessation and prevent initiation. At-risk groups include low socio-economic status workers and very highly distressed workers; industries with high DTS prevalence, young workers in high prevalence industries and occupations; and non-metropolitan workers in low prevalence industries and occupations.*

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