

Exposure to Secondhand Smoke at Home among Children in 21 Countries: Global Adult Tobacco Survey (GATS), 2008-2013

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Abstract

Exposure to secondhand smoke (SHS) can cause disease and death among infants and children, including sudden infant death syndrome (SIDS), respiratory problems, ear infections, and asthma attacks. In this study, we estimated the number of children exposed to SHS in the home in 21 low and middle income countries using data from the Global Adult Tobacco Survey (GATS) conducted in 21 countries between 2008 and 2013: Argentina (2012), Bangladesh (2009), China (2010), Egypt (2009), Greece (2013), India (2009-10), Indonesia (2011), Malaysia (2011), Mexico (2009), Nigeria (2011), Panama (2012), Philippines (2009), Poland (2010), Qatar (2012), Romania (2011), Russia (2010), Thailand (2009), Turkey (2008), Ukraine (2010), Uruguay (2009), and Viet Nam (2010). To estimate the number of children exposed to SHS in homes, we calculated the number of households that reported exposure to SHS inside the home. UN 2012 population projections were used to standardize estimates for comparability across countries and survey years. A total of 484.2 million children (48.7% of total children) aged less than 15 years old were exposed to SHS in the home in the 21 low and middle income countries evaluated. The largest total numbers of children exposed to SHS in the home were observed in China (165 million), India (162 million), Indonesia (57 million), and Bangladesh (27 million). These countries accounted for 84.8% of the overall number of children exposed to SHS in the home. The proportion of children exposed to SHS in the home was highest in Indonesia (79.0%) and Viet Nam (75.5%), and lowest in Panama (4.5%) and Nigeria (5.4%). Efforts to reduce exposure to SHS at home in countries with large populations, including the enhanced adoption of voluntary smoke-free home rules, have the potential to reduce the number of children exposed to SHS and at risk of SHS-related disease and death. Countries with higher smoking prevalence generally had higher proportions of children exposed to SHS in homes indicating the cessation among smokers could improve the health of these individuals, and also help to reduce SHS exposure among youth in their homes.

Key Words

Secondhand smoke, Global Adult Tobacco Survey, Children, Low and Middle Income Countries, Home