

**Health Services Research Centre  
School of Government  
and Victoria Management School**

**Tobacco Modelling in New Zealand  
*Dr Martin Tobias and Assoc Prof Bob Cavana***

**Thursday, 5 August 2010, 12.30 - 1.30pm  
RWW501, Level 5, West Wing Railway Station  
(Entrance through Railway Station please take Lift 3 to level 5)  
Pipitea Campus, Victoria University, Wellington**

Dr Martin Tobias, a Senior Epidemiologist with the New Zealand Ministry of Health, and Assoc Prof Bob Cavana, a Reader in Systems Management with the Victoria Management School, will discuss their recent published work related to tobacco policy modelling in New Zealand.

'In our American Journal of Public Health paper, we estimated (with Dr Ashley Bloomfield) the long-term effects of smoking cessation interventions to inform government decision-making regarding investment in tobacco control. We extracted data from the 2006 New Zealand Tobacco Use Survey and other sources and developed a system dynamics model with the iThink computer simulation package. The model derived estimates of population cessation rates from smoking behaviours and applied these over a 50-year period, from 2001 to 2051, under business-as-usual and enhanced cessation intervention scenarios. The model generated reliable estimates of the effects on health and on tobacco use of interventions designed to enhance smoking cessation. These results informed a decision announced in May 2007 by the New Zealand Government to increase funding for smoking cessation by NZ\$42 million over 4 years.

Our paper published in Systems Research & Behavioural Science summarises more details related to the system dynamics model we developed, and a number of other tobacco control policy experiments.'

(1) Tobias M, Cavana RY, Bloomfield A, 2010. Application of a system dynamics model to inform investment in smoking cessation services in New Zealand. American Journal of Public Health 100(7): 1274-1281. [Special issue on tobacco control].

(2) Cavana RY, Tobias M (2008). Integrative system dynamics: analysis of policy options for tobacco control in New Zealand. Systems Research & Behavioural Science. 25(5): 675-694. [Special issue of papers selected from the 2007 International Society for Systems Science Conference in Tokyo].

***Feel free to bring your lunch – our seminars are informal  
You are welcome to bring your colleagues  
RSVPs are not required and there is no charge***

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