

**Figure:** Prevalence of hepatitis C virus infections among people who inject drugs in Hungary  
Data from seroprevalence studies done by the National Centre for Epidemiology between 2006 and 2014.

\*V Anna Gyarmathy, Péter Sárosi  
vgyarmat@jhsph.edu

Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, USA (VAG); Semmelweis University, Budapest, Hungary (VAG); Hungarian Civil Liberties Union, Budapest, Hungary (PS)

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## Challenges in mapping research investments for treatments against pneumonia

We thank Prabhavathi Fernandes for her interest in our work on

pneumonia-related research investments<sup>1</sup> and welcome her response.<sup>2</sup> It is encouraging to see the investments of Cemptra and the progress made in developing treatments for pneumococcal pneumonia, alongside the success of pneumococcal vaccination programmes.<sup>3</sup>

We would like to clarify Fernandes' point that "the authors are incorrect in stating that investment has been lacking for the development of antibiotics to treat pneumonia". Our reference to a lack of investment in clinical trials and for antimicrobial resistance is a finding from our dataset—ie, that of public and philanthropic awards to UK institutions. From these sources, the evidence is unequivocal. There is little research investment in the UK in the area of pneumonia and other respiratory infections,<sup>4</sup> which suggests that there is a real need to fill in the gaps in knowledge across all sources of investment.

We will expand the Research Investments in Global Health analyses in two key areas. Our first aim is to go beyond the UK and include in our dataset awards given to institutions in other countries (particularly the USA) for research into infectious disease. Second, we will engage

with the private sector globally and incorporate information on pharmaceutical and biotechnological research investment into our analyses, with the same level of detail we have for awards from the public and charitable sectors.

On this latter point, we will proactively seek out fruitful engagement on this subject that will benefit global policy makers, funders, and research institutions.

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\*Michael G Head, Joseph R Fitchett, Stuart C Clarke  
m.head@soton.ac.uk

University College London, Farr Institute for Health Informatics, London NW1 2DA, UK (MGH); Harvard University, Boston, MA, USA (JRF); Faculty of Medicine, University of Southampton, Southampton, UK (SCC, MGH); and University of Southampton Malaysia Campus, Nusajaya, Malaysia (SCC)

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## Soil-transmitted helminths in China

Simon Brooker and colleagues<sup>1</sup> analysed the feasibility of interrupting transmission of soil-transmitted helminths from a global view. It is encouraging that China is listed in the "most feasible" group. Indeed, drastic economic development and helminth control activity have contributed to the great decrease in soil-transmitted helminths in China: the estimated number of infected people declined from 536 million in 1988–1992 to 129 million in 2001–04.<sup>2</sup> Furthermore,

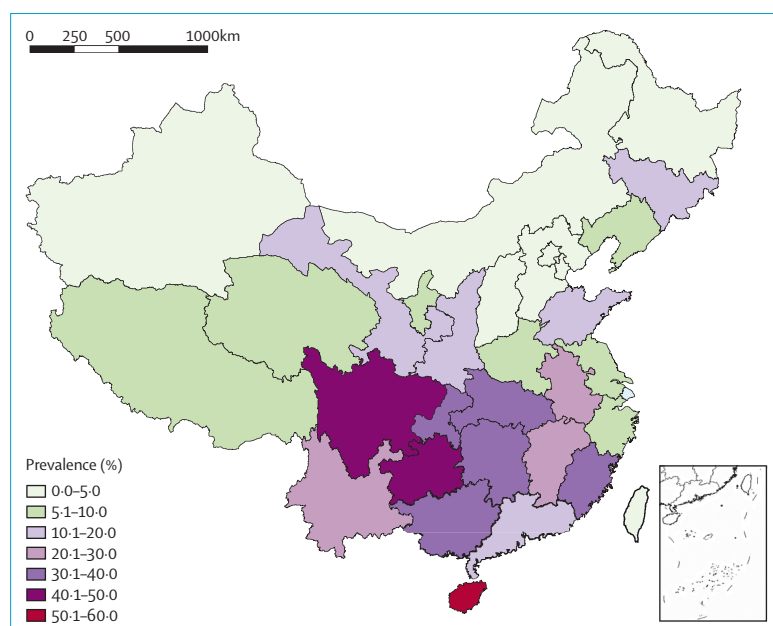


Figure: Epidemiological map of soil-transmitted helminths in China, 2001–04

recent data from national surveillance has shown a continuing pattern of decline.<sup>3</sup> Thus, it is reasonable to pursue a higher target—namely, the transmission interruption of soil-transmitted helminths in China, which will not only benefit the health of the Chinese people, but also contribute greatly to achievement of worldwide control.

Owing to the unsuitable environment in northern China and rapid economic development in the east, high endemicity of soil-transmitted helminths is only present in central and southwestern areas of China (figure).<sup>2</sup> Thus, the feasibility of transmission interruption should be further assessed at the provincial level. The method applied in Brooker and colleagues' Article could be used in China, but would require more accurate data to be extracted when applying the feasibility analysis at the provincial level. For example, the third national survey on parasitic diseases was initiated in 2014, in which sampling design was based on a provincial level and the Kato-Katz method was used to detect intestinal helminths.<sup>4</sup> Obviously, updated

prevalence and infection intensity at the provincial level will lay the foundation for objective and accurate assessment. After further collection of other required data, optimisation of modelling for suitability in China is needed. The assessment map for transmission interruption will help China's policy makers to prioritise areas and formulate further control programmes. Additionally, after the national survey on parasitic diseases in 2001–04, 22 national surveillance spots for soil-transmitted helminths were established in 2006.<sup>3</sup> More surveillance spots could be advocated after the updated national survey initiated in 2014. This expanded surveillance system for soil-transmitted helminths would provide real-time data for assessing the process of transmission interruption, which will benefit the adjustment of interventions accordingly.

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Men-Bao Qian, Shang Xia,  
\*Xiao-Nong Zhou  
ipdzhouxn@sh163.net

Key Laboratory on Biology of Parasite and Vector,  
Ministry of Health; National Center for  
International Research on Tropical Diseases;

WHO Collaborating Center for Tropical Diseases;  
and National Institute of Parasitic Diseases,  
Chinese Center for Disease Control and Prevention,  
Shanghai 200025, China

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## Anaplasma species in China

Hao Li and colleagues<sup>1</sup> recently described a novel *Anaplasma* species in China and provisionally named it "*Anaplasma capra*". We agree that this organism is a novel *Anaplasma* species because it is phylogenetically distinct from other recognised *Anaplasma* species.

We have also detected a novel *Anaplasma* species from *Haemaphysalis longicornis* ticks in east China. 3300 questing *H. longicornis* ticks, including 120 larval ticks, 1560 nymphal ticks, and 1620 adult ticks, were collected by flagging over vegetation using a 1 m<sup>2</sup> flannel flag from June to July, 2013, in Jiaonan County in Shandong Province. To extract DNA the ticks were pooled, with each pool containing 40 larval ticks, 20 nymphal ticks, or five adult ticks. The DNA extracted from the ticks was amplified by PCR for *Anaplasma* species genes. The sequences of 16S rRNA, *groEL*, *gltA*, *msp2*, and *msp4* genes were obtained by PCR amplification from one nymphal tick pool (minimum infection rate 0.06%, 1/1560) and seven adult tick pools