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Winnable battles: what is next?

In 2010, the US Centers for Disease Control and Prevention (CDC) initiated its Winnable Battles project. It selected six public health priorities of high concern—tobacco; nutrition, physical activity, obesity, and food safety; health-care-associated infections (HAIs); motor vehicle injuries; teenage pregnancy; and HIV in the USA. Clear targets for each area were set within the timeframe 2010–15 to improve the health and safety of the nation as quickly as possible for as many as possible. On Dec 5, the CDC released the final report assessing the initiative.

The outcomes in the six areas are mixed. Progress in tobacco control and reducing teenage birth rates exceeded 2015 targets. Three of the four goals set to reduce certain types of HAIs and the goal to increase the percentage of people who know their HIV status are expected to be met. But, progress in the other areas was either moderate or small. The programme influenced the way CDC worked by aligning and accelerating intra-agency and inter-agency collaboration, and providing a framework for high burden, high priority public health work.

For the final report on the Winnable Battles project see <https://www.cdc.gov/winnablebattles/report/>

For e-cigarette report of US Surgeon General see <http://e-cigarettes.surgeongeneral.gov/>

Where does Winnable Battles go next? With current CDC director Tom Frieden leaving soon, the agency's future is uncertain. The report says "...the Winnable Battles process as it has been called will enter a new phase after this year..." without a strategy being specified. However, the challenges and obstacles listed in the report card, particularly emerging tobacco products, including e-cigarettes, deserve further attention in the future. E-cigarette use among young people poses a rapidly emerging public health threat, as noted in the report issued by the US Surgeon General on Dec 8. The report was also prepared by the CDC and provides a series of recommendations including: continuing regulation of e-cigarettes, incorporating e-cigarettes into smoke-free policies, sponsoring high-impact media campaigns against e-cigarettes, and expanding research efforts related to e-cigarettes. The idea of Winnable Battles must be retained, and a clear and more ambitious plan is eagerly awaited under the new leadership of America's most important public health agency. ■ *The Lancet*

Predicting pandemics

"The world is ill prepared to respond to a severe influenza pandemic or to any similarly global, sustained and threatening public-health emergency", concluded an investigation into WHO's response to the 2009 H1N1 pandemic. In 2014, this unpreparedness was again exposed when the Ebola virus struck west Africa and claimed more than 11 000 lives. The continuing Zika virus epidemic highlights that lessons still need to be learned.

Most new epidemic infections are zoonotic, but not all are transmissible between humans. In a study published in *Emerging Infectious Diseases* on Dec 7, Mark Woolhouse and colleagues used virus genome sequencing and mathematical modelling to identify 37 viruses that have already shown some ability to spread between people but have not yet been the cause of an epidemic. Of greatest concern, the researchers suggest, are Middle East respiratory syndrome coronavirus (MERS-CoV), Bundibugyo ebola and Sudan ebola viruses, and several mosquito-borne viruses. Woolhouse and colleagues' shortlist of viruses to watch has also included chikungunya, Zika, and Ebola in recent years, showing

For the report on H1N1 see http://apps.who.int/gb/ebwha/pdf_files/WHA64/A64_10-en.pdf

For the study see *Emerg Infect Dis* 2016; 22: 2037–44

For more on WHO's R&D blueprint see <http://www.who.int/csr/research-and-development/en/>

the potential of this approach. Although identification of viruses with human transmissibility adds to knowledge of which types of viruses and which circumstances are most likely to cause a pandemic, several emerging pathogens had not previously been seen in humans at all—severe acute respiratory syndrome, for example.

More can be done to predict the next pandemic threat, but when new outbreaks do occur, there remains a need for a better international response. Promisingly, WHO has launched the R&D Blueprint, which aims for rapid activation of research and development activities during epidemics. To be maximally effective, this strategy will need to work within low resource settings, which will require substantial investment and an understanding of the culture of the setting in which it will be implemented.

Undoubtedly, as the authors conclude, the first line of defence against emerging viruses is effective surveillance. But the international community must be prepared to take rapid and effective action if surveillance is to have value—the question remains, have the recent lessons of the Ebola and Zika viruses been learned? ■ *The Lancet*