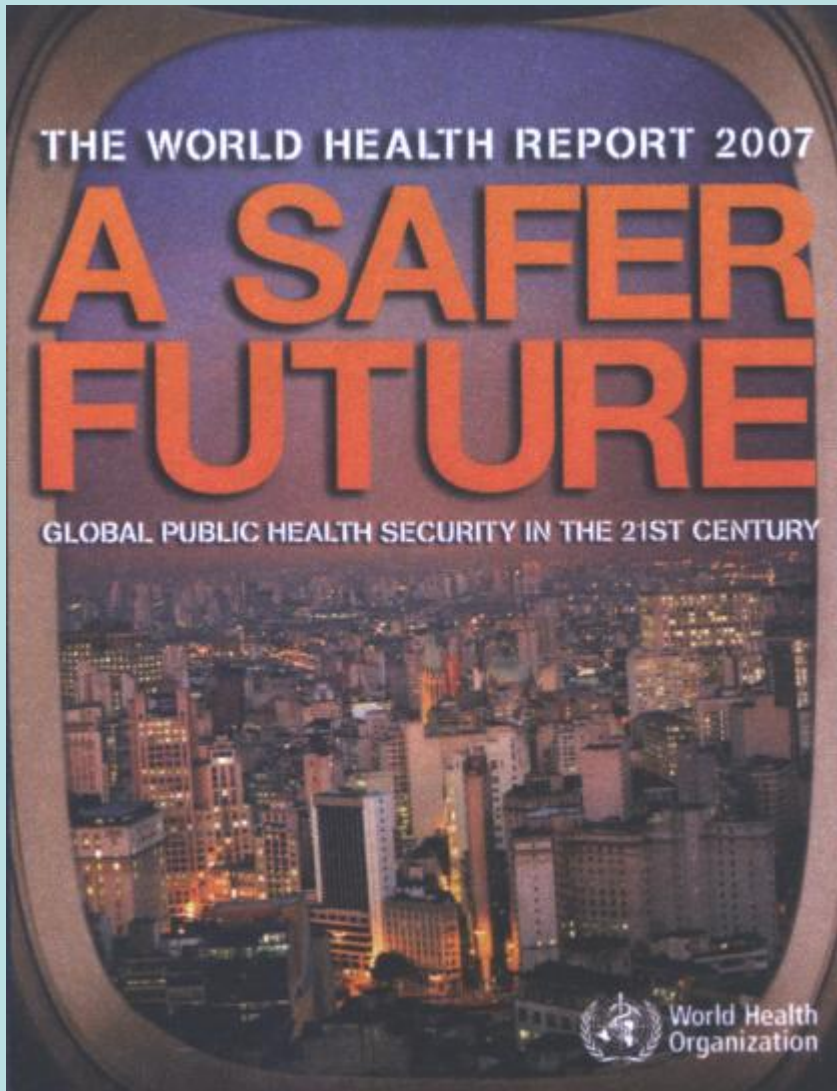




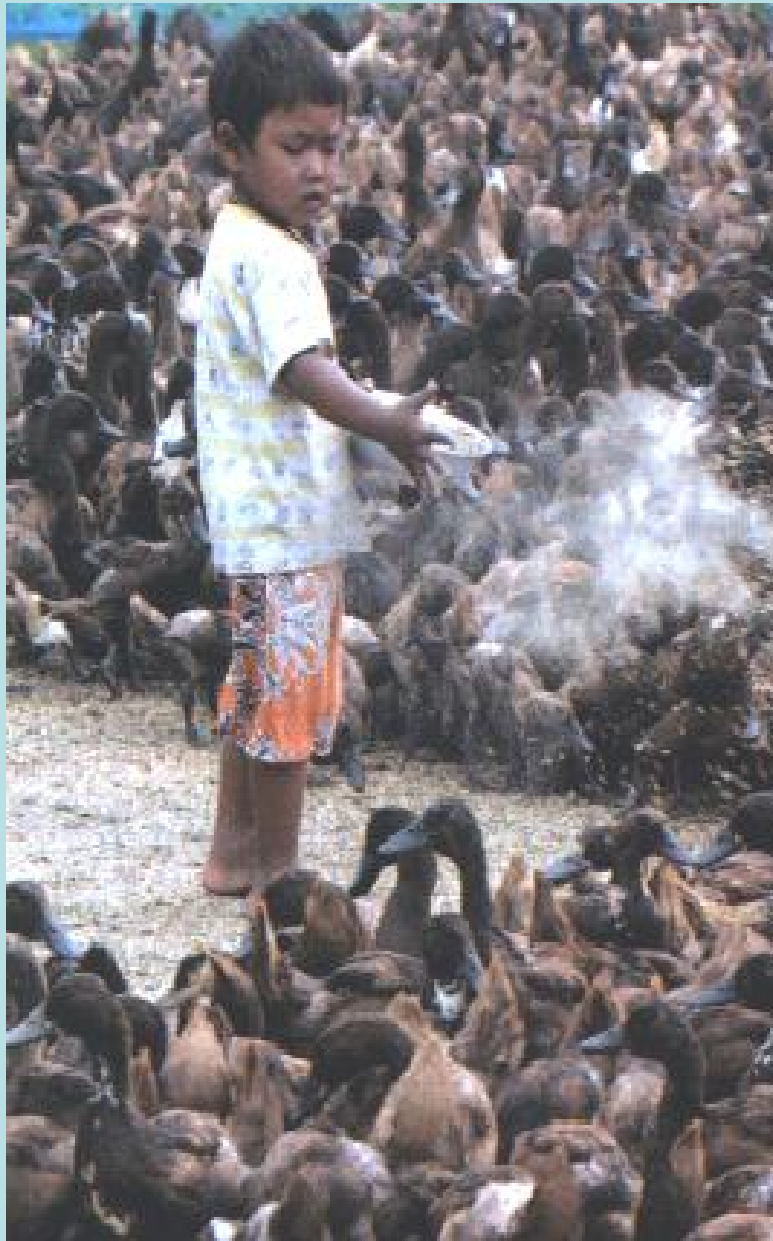
**World Health
Organization**





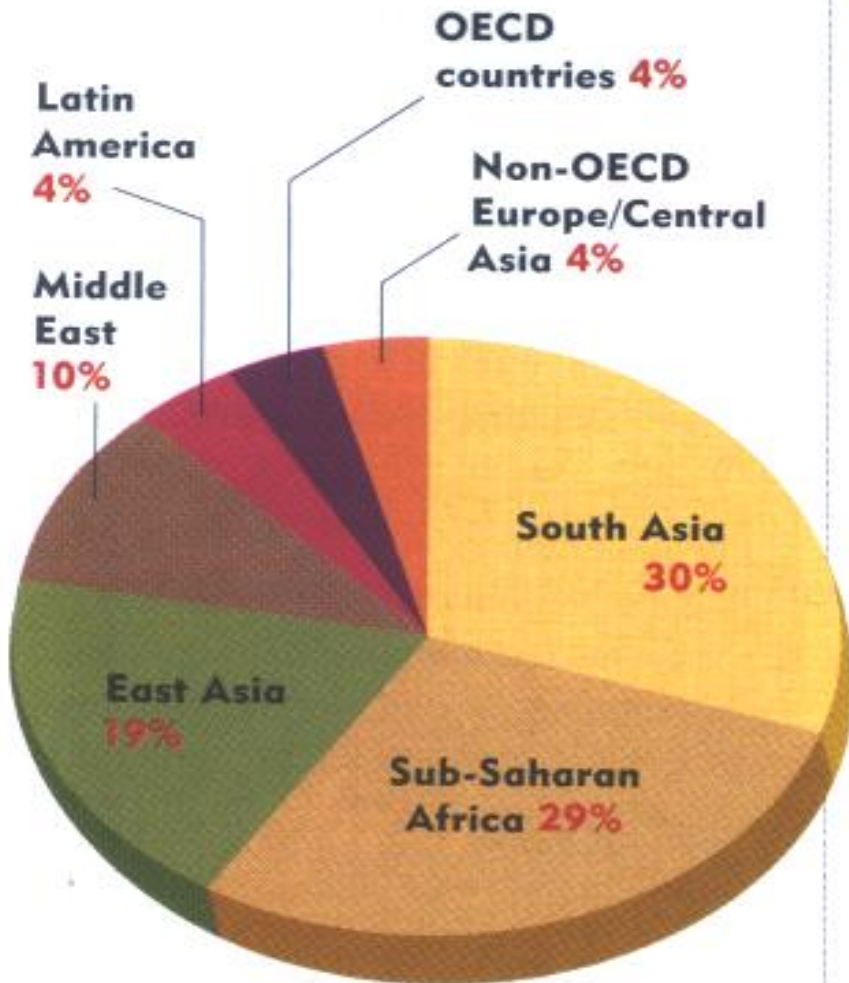
World Health Report

2007



If a Flu Pandemic Strikes ...

Projected distribution of deaths



Murray et al, Lancet 2006, 368, 2211-8

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Public Health, Innovation and Intellectual Property

[WHO](#) > [Programmes and projects](#)

Public Health, Innovation and Intellectual Property



Despite enormous progress in the prevention, diagnosis and treatment of disease, developing countries still remain largely excluded from the benefits of modern science. Caught in a cycle of poverty and disease, people in the hardest-hit countries are facing shorter life expectancies and economic decline.

The issue of better access to healthcare products for poor populations has been the subject of many World Health Assembly resolutions. In May 2006, Member States asked WHO to establish an Intergovernmental Working Group on Public Health, Innovation and Intellectual Property (IGWG).

The Working Group's mandate is to prepare a global strategy and plan of action on essential health research to address conditions affecting developing countries disproportionately. The resulting global plan of action will be presented to the World Health Assembly in mid-2008.

The Secretariat for Public Health, Innovation and Intellectual Property

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**Inter-Governmental
Working Group**

Elements of Draft Global Strategy

- Prioritizing R&D needs
- Promoting R&D
- Building and improving innovative capacity
- Transfer of technology
- Application and management of intellectual property to contribute to innovation and promote public health
- Improving delivery and access
- Promoting sustainable financing mechanisms
- Establishing monitoring and reporting systems

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Nicolas Perillat

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River Blindness: A Success Story under Threat?

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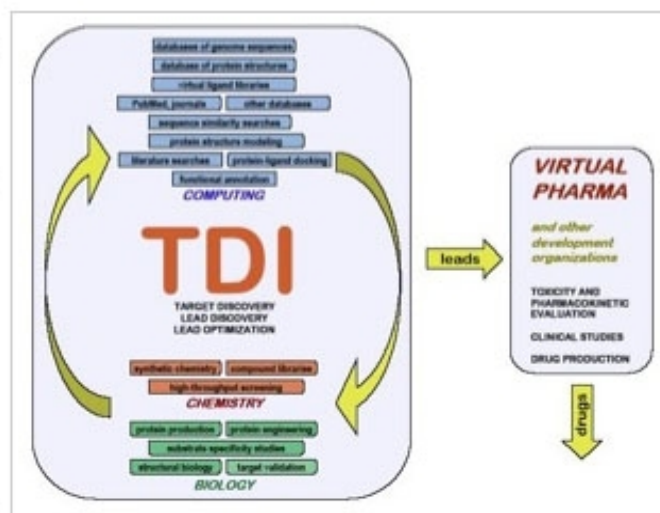
[Malaria](#) [Schistosomiasis](#) [Leishmaniasis](#) [Chagas](#) [Tuberculosis](#) [Dengue](#)

Tropical Disease Initiative

Only about 1% of newly developed drugs are for tropical diseases, such as African sleeping sickness, dengue fever, and leishmaniasis. While patent incentives and commercial pharmaceutical houses have made Western health care the envy of the world, the commercial model only works if companies can sell enough patented products to cover their research and development (R&D) costs. The model fails in the developing world, where few patients can afford to pay patented prices for drugs.

It is easy (and correct) to say that Western governments could solve this problem by paying existing institutions to focus on cures for tropical diseases. But sadly, there is not enough political will for this to happen. In any case, grants and patent incentives were never designed with tropical diseases in mind.

Two main kinds of proposals have been suggested for tackling the problem. The first is to ask sponsors governments and charities to subsidize developing-country purchases at a guaranteed price. In the second approach, charities create nonprofit venture-capital firms (Virtual Pharmas), which look for promising drug candidates and then push drug development through contracts with corporate partners. In this article, we discussed the problems with these two approaches and suggest a third, open source, approach to drug development, called the Tropical Diseases Initiative (TDI). We envisage TDI as a decentralized, Web-based, community-wide





BioForge



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enabling innovation

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BioForge: a new community for biological innovation

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The BioForge is a prototype for an open source platform which contains tools to allow scientists and other innovators in diverse locations to work together, and with those who can apply and use their research.

BioForge is also intended to serve as a portal to a [dynamic protected commons](#) of new enabling technologies, available to everyone for improvement and to use in new innovations, both commercial and non-commercial.

BioForge is part of [CAMBIA's BIOS Initiative](#), which also includes the [Patent Lens™](#), an integrated informatics tool to survey, render transparent and to navigate the complex thickets of patents and rights that can both aid and inhibit problem solving in society.

A new version of the BioForge is currently under construction. When you return to this website in the future, you will see a new look and enjoy enhanced features for easier use.

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Cheap cervical cancer vaccine for poor nations

 jiangyun submitted, created one 1 day 5 hours (www.discover8.com)

Cervical cancer rates are soaring as more women than ever are surviving into middle age in poor countries. Now two companies that make vaccines against the human papillomavirus (HPV) - the cause of the majority of cases - have pledged to provide vaccine at a reduced cost to poorer countries. [Read More](#)

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Microbes can survive 'deep freeze' for 100,000 years

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Microbes can survive trapped inside ice crystals, under 3 kilometres of snow, for more than 100,000 years, a new study suggests. The study bolsters the case that life may exist on distant, icy worlds in our own solar system. [Read More](#)

2 comments | [Blog It](#) | [Email It](#) | [Keywords](#): Microbes ice crystals extreme conditions



Impaired glutathione synthesis in schizophrenia: Convergent genetic and functional evidence

 jimmy submitted, created one 1 day 22 hours (www.discover8.com)

Schizophrenia is a complex multifactorial brain disorder with a genetic component. Convergent evidence has implicated oxidative stress and glutathione (GSH) deficits in the pathogenesis of this disease. The aim of the present

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Indonesia's avian flu holdout

Indonesia sent a chill through the World Health Organization recently when it refused to supply any more samples of the avian flu virus that has killed scores of its people. The move, which seemed aimed at gaining access to vaccines at an affordable price, threatens the global effort to track the virus and develop vaccines. But Indonesia has raised a valid point that needs to be addressed: if a pandemic should strike, poor countries would be left without protection.

The WHO relies on a global network of laboratories to provide virus samples so experts can determine which are most likely to spread. These strains are then used to develop the seed stocks that are given — at no cost — to manufacturers to use in making vaccines.

operating with the WHO and started negotiations to send future samples to another vaccine maker in return for technology that would allow Indonesia to make its own vaccine.

That may be good for Indonesia but could be harmful to global health — especially if other countries follow. Clearly Indonesia, which is in discussion with WHO officials, needs to rejoin the global network. Unfortunately, the organization has no good answer to the inequities Indonesia has spotlighted.

If a pandemic struck, the current vaccine makers could produce only 500 million doses of vaccine per year if they ran 24 hours a day. That is far short of what would be needed to vaccinate all 6.7 billion people in the world. Thus there seems no doubt that in a crisis, the countries that are

**We are sending out our virus
to rich countries to produce
vaccines. And when the
pandemic occurs, they
survive and we die**



Dr Suwit Wibulpolprasert,
Head of Thai delegation,
WHO Executive Board
January 2007

Isolated. Indonesia has had the world's greatest number of H5N1 deaths, even while the country flip-flops on sharing flu samples with the World Health Organization.



AVIAN INFLUENZA

More Bumps on the Road to Global Sharing of H5N1 Samples

A battle between Indonesia and the World Health Organization (WHO) is escalating. Indonesia's health minister, Siti Fadilah Supari, has claimed that WHO is refusing to

This is for the sake of our country's sovereignty," the newspaper quoted Supari as saying. Health ministry officials could not be reached to confirm the report. Heymann

Science, Nov 23, 2007

Outbreak Investigation and Response Training

Short courses that build skills for investigating and responding to disease outbreaks may enhance response to potential epidemics in resource-limited settings.

Andres G. Lescano,^{1*} Gabriela Salmon-Mulanovich,¹ Elena Pedroni,² David L. Blazes¹

The resurgence of poliomyelitis and cholera (1, 2) and the advance of avian influenza (3) highlight the need for prompt and accurate response to disease outbreaks. Epidemic events often arise in the developing world (4) where countries are less prepared to respond. The World Health Organization's 2007 World Health Report identifies global outbreak response as one of its highest priorities (4). Field Epidemiology Training Programs (FETPs) sponsored by the U.S. Centers for Disease Control and

and postcourse outbreak reports. To the co-diseases o settings a to various [supportin p. 19]. Course from the province-participa

COURSE OUTCOMES

	Peru	Other Countries	Total
No. of courses			
All	13	20	33
Duration (5-day/2-day/half-day)	4/8/1	16/2/2	20/10/3
Spanish/English	12/1	17/3	29/4
Organized by graduates (with NMRCO/independent)	2/2	8/7	10/9
No. of graduates			
All	430	913	1343
Foreign	12	39	51
Trainee performance			
No. of outbreak reports	95	191	286
Students reporting outbreaks* (%)	34.0	44.0	40.9
Attendance (% of enrolled)	91.8	97.7	94.9
Mean overall satisfaction†	4.68	4.70	4.69

*From participants in NMRCO 5-day courses. †Post-course anonymous student ratings (1-to-5 scale, where 5 is best).

Science,
Oct 26, 2007

ations

2

WHAT

NOW?



Conclusions

- Current interest in global health security and development of a **global framework** and **governance of R&D**
- Innovation, access, transparency, equity, capacity building, benefit sharing and **ownership**
(= responsibility for safety & security)

Conclusions

- Current interest in global health security and development of a global framework and governance of R&D
- Innovation, access, transparency, equity, capacity building, benefit sharing and ownership (= responsibility for safety & security)
- **Take advantage, be opportunistic, place biosecurity on a larger platform**
- **International collaboration to achieve the above-why WHO?**

"WHO is uniquely placed as the only organization where the voice of Bhutan has the same weight as the voice of the USA"

Participant, WHO Research Strategy Dialogue
Manila, Nov 19, 2007



MISSION

The attainment by **all peoples** of the highest possible level of health