

LETTER

NPHIs as Focal Points for Leadership in Prevention and Control of Infectious Diseases

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The article by Binder *et al.* (*J Public Health Policy* 2008;29:3–21) and the accompanying editorial and commentaries launch an important discussion on the role of robust national public health institutes (NPHIs). In a landscape of disease-specific funding initiatives, NPHIs emerge as a much-needed governmental focal point for science-based public health leadership, policies, and resource allocation.

As evidenced by efforts to eradicate polio and guinea worm disease; to eliminate leprosy and onchocerciasis as public health problems; and to scale-up treatment for HIV/AIDS, malaria, and tuberculosis in low-resource countries; endeavors directed at specific pathogens and problems have yielded much success. Some leaders and staff among the most visible and well funded of these programs are beginning to recognize the opportunities to use the infrastructure set up by these initiatives to strengthen national, regional, and local public health infrastructure. Examples include using the surveillance and response system developed for polio eradication to detect and respond to other infectious diseases including Marburg hemorrhagic fever and avian influenza (1), and the broadening responsibilities of the community mobilization groups and drug delivery infrastructure set up for onchocerciasis elimination for surveillance and response to yellow fever and meningitis.

The logical focus for support to build on existing systems at the national level is a NPHI – a science-based hub for governmental leadership and coordination in such core “public goods” functions as

laboratory-based disease surveillance, outbreak response, health promotion, and applied research. In the context of infectious disease prevention and control, countries are well served by coordinating their public health expertise and activities through such an institution or network of institutions. The avian influenza threat, emergence of new infectious diseases and multidrug resistance, and implementation requirements of the International Health Regulations all demand strengthened epidemiology and surveillance as core governmental public health functions and competencies.

The outbreak of Severe Acute Respiratory Syndrome (SARS) and other infectious disease events in a globalized world were in part the impetus for the creation of NPHIs in Canada and Hong Kong in order to avoid fragmentation and more efficiently use resources. In developing countries where resources are scarcer, consolidation or close coordination of functions is particularly attractive. How much faster and more efficiently could countries respond to disease outbreaks and emergencies if public health scientists and policy-makers were working together with better coordination? How much more rapidly could new pathogens be recognized and identified if laboratory functions were better coordinated and linked to epidemiologic resources and capacity? How different might the priorities of donors be if a strong, high-level public health voice were available with credible data to identify public health problems worthy of investment and financial integrity and transparency to ensure that funds are spent wisely? How much more beneficial would the investments in well-intentioned but unstudied interventions be if governmental systems were in place to evaluate and promote dissemination of programs that work?

The revised International Health Regulations (IHR 2005) framework is a key driver in the strengthening of national public health infrastructure and capacity (2). Despite the broad goals included in IHR 2005, success will depend on the capacity and performance of national public health systems. A robust NPHI with strong leadership and the ability to coordinate a well-trained workforce in laboratory-based surveillance and epidemiologic capacity could provide the backbone of a public health system equipped to quickly detect health emergencies and respond promptly as required by the IHR. Several long-established and newly created NPHIs are serving in this role as “national focal points” for their countries in IHR

implementation. For example, as the focal point for communications with WHO in the event of a disease outbreak or public health emergency of international concern, the new Public Health Agency of Canada has a key role in Canada's compliance with the new regulations, coordinating national efforts to identify and reduce public health risks and threats, and supporting national readiness to respond to public health emergencies.

As a catalyst for NPHI development and linkages, the International Association of National Public Health Institutes (IANPHI) fills an important need by advocating for and assisting in development of more robust national public health agencies in developing countries. Given the global nature of today's public health threats, it behooves all of us to applaud and support this effort.

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