Catching outbreaks wherever they occur

A new organization in the Middle East shows how common goals can overcome political differences when it comes to fighting disease and quelling outbreaks. Dale Gavlak reports.

Communicable diseases have no respect for boundaries. As pandemic influenza A (H1N1) swept the globe this year, WHO's Member States could take comfort in the legal requirements of the International Health Regulations (IHR), which were updated in 2005 to require countries to report certain disease outbreaks to the World Health Organization (WHO).

But not all parts of the world are or may be parties to the IHR, and where there is a gap in surveillance there is always the possibility that an outbreak can slip through the net. For example, the West Bank and the Gaza Strip – though not party to the IHR – are covered by the Middle East Consortium on Infectious Disease Surveillance (MECIDS). This coordination mechanism of Israeli, Jordanian and Palestinian health officials shares information and takes coordinated action to help detect and respond to infectious disease outbreaks.

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>
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It is one example of how regional disease surveillance can be achieved in difficult political environments, and also of how such cooperation works to implement the requirements of the IHR.

"When WHO declared Phase 6 of the A (H1N1) virus in June, we found we needed an urgent meeting," says Dr Bassam al-Hijawi, head of the Disease Control Directorate at Jordan's Ministry of Health.

Increasing the capabilities of laboratories in the region posed one challenge for which it was necessary to hold face-to-face talks, even if it meant travelling to a third location because of political tensions between the sides. "But we succeeded in going to Jerusalem to discuss it," says al-Hijawi, an epidemiologist, who serves on the executive board of MECIDS. "We started [working according to] the same rules together, even though Israel reported the first A (H1N1) case. This was in compliance with the International Health Regulations," he says.

MECIDS was established in 2003, when nongovernmental organizations Search for Common Ground and Washington-based Nuclear Threat Initiative began facilitating regional cooperation in public health. MECIDS was established as part of those efforts, in which the Ministry of Health of Israel, the Palestinian Authority, and Jordan were initially sharing data on food-borne disease outbreaks. Since then, data sharing has expanded to other disease areas, including vector-borne diseases and pandemic influenza.

MECIDS partners have protocols for cross-border collaboration for investigating infectious disease outbreaks, including a bird culling radius across the borders, an automatic system for notifying each other, and tested collaboration for general preparedness for pandemic influenza.

Harmonizing diagnostic and reporting methodologies, sharing training programmes and facilitating cross-border communication between laboratory technicians and public health officials are other important activities. "It's just not a talking organization. This is a direct action organization," says Terence Taylor, who is vice-president of Global Health and Security, at the Nuclear Threat Initiative, that is helping MECIDS implement its plans.

"The idea behind MECIDS is that everybody is equal," says Dr Alex Leventhal, the director of Israel's Health Ministry Department of International Relations and the consortium's first chair.

Leventhal is joined by Dr Adel Belbesi, assistant secretary-general for primary health care at Jordan's Ministry of Health. Dr Assad Ramlawi, the Palestinian Authority Ministry of Health's director of primary care and public health, is the third principal and currently holds the year-long rotating post. The three principals are the heads of their respective delegations to MECIDS and they take turns in occupying the rotating chair.

"We have to exchange information and support each other," Ramlawi says of the need for health professionals to protect their respective

MECIDS Executive Board. Sitting down (MECIDS principals) left to right, Dr Alex Leventhal (Israel), Dr Adel Belbesi (Jordan), Dr Assad Ramlawi (Gaza and West Bank). Standing, G Mohammad Shyyiab (CMC), Dr Bassam Hijawi (Jordan), Professor Dani Cohen (Israel), Mr Terry Taylor (NTI).

communities from the outbreak of infectious diseases. "We have to be aware of what is going on in each country because disease and bacteria know no borders."

"Political tensions are one issue and disease intervention is another," he added, preferring not to be drawn into a discussion about the often tense situation between Israel and the Palestinian Authority.

Global Health and Security's Taylor says the secret to MECIDS's success is the trust between the partners. "It's the three principals that really make this work," Taylor says, referring to Belbesi, Leventhal and Ramlawi.

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Al-Hijawi believes MECIDS cooperation would be stronger if it were not for tensions between Israel and the Palestinians. "There was tension during the Gaza military incursion. We didn't meet for several months. This is very bad because we are dealing with health issues," he says. "But all MECIDS members have decided that it is very important and there must be strengthening."

"But even in the case of Gaza, they know who to call. They have principals who are senior enough in their administration to carry this thing forward. That's part of the trick," Taylor says.

Mahmoud Daher, a WHO officer working in Gaza, says that cooperation between Israel and the Palestinian Authority was "very crucial" to implement the IHR because Israel controls the borders and surveillance.

WHO's mediating role between Israel and Palestinian health authorities has become even more critical due to the tensions between the two. "WHO brings supplies, notifies about disease and advocates for the need of the health authorities in Gaza," he added. Despite the political divide, there have been extraordinary cases of cooperation between Israel and the health authorities in the Gaza Strip with WHO assistance. With the outbreak of avian flu in the Gaza Strip three years ago, WHO initiated contact with the Israeli authorities to coordinate intervention activities and the provision of equipment and anti-viral drugs for the coastal strip. "We managed to hold a meeting between senior professionals from Gaza and Israel to talk about surveillance. They understand that communicable diseases don't respect borders and they work in accordance with the situation," Daher says.

Dr Guenael Rodier, who heads IHR coordination at WHO headquarters in Geneva, says that in the IHR, "public health sometimes overlaps with national security", adding: that "implementing the IHR in the area means that you must also take into account the numerous operational constraints due to security issues as well as the physical separation" between Israel, the West Bank and Gaza.

"MECIDS was formed to discuss all of these practical issues. People know each other well and this is a key issue for success in time of emergencies," he says. "There is a lot of good sense of common purpose."

The influenza pandemic drills in September 2008 are a practical example of their cooperation. Political tensions meant that the partners decided to hold a regional "tabletop" simulation exercise for pandemic influenza in Istanbul, Turkey. MECIDS members discussed their plans for a possible pandemic, including steps to be taken at each stage, including cross-border collaboration. The exercise was preceded by local exercises.

Little did they know they had already laid the important groundwork to respond quickly and efficiently to the A (H1N1) outbreak just a few months later.

"This has paid dividends because here we are in the middle of a pandemic," Taylor says. "It's not just a health issue. It's also about agriculture, immigration, foreign affairs and security." ∎