

SUNDOWN: Sun exposure early in life is related to rising skin cancer rates—but try telling that to an adolescent. Actually, DMS's Dr. Ardis Olson has done so, with measurable success, through a program called SunSafe in the Middle School Years.



JOHN GILBERT FOX

Modlin is worried about a viral threat.

and paralysis may soon follow. Early symptoms of enterovirus 71 can include hand-foot-mouth syndrome. Common to other enteroviruses, too, the syndrome causes a fever; sore throat; and painful red bumps on the hands and feet, inside the mouth, and sometimes on the buttocks. As in polio, if neurologic illness does develop, enterovirus 71 begins to invade the ventral brain stem, cerebellum, and spinal cord; this can cause a number of serious neuromotor problems, such as paralysis of one or more extremities, as well as acute pulmonary edema, or fluid in the lungs.

Vaccine: There is now no vaccine for the virus, but the Soviet Union developed one in the 1970s when Bulgaria had a large outbreak. But the outbreak subsided and the vaccine was never used, so it's unknown whether it would have been effective.

Yet "it should be technically feasible to produce a vaccine," Modlin feels. For a [WEB EXTRA](http://dartmed.dartmouth.edu/summer07/html/vs_virus_we.php) with Modlin, see dartmed.dartmouth.edu/summer07/html/vs_virus_we.php.

Laura Stephenson Carter

Who would import RICE to Vietnam?

You'd think bringing RICE to Vietnam would be like importing maple syrup to New England. Except this RICE is an acronym for "remote interaction, consultation, and epidemiology," a DMS project to transform the Vietnamese health-care system using cellular smartphones.

If people in Vietnam need more than routine health care, they often bypass their local clinic and go directly to a central hospital, where they feel the care is better. RICE is building a system that will enable central hospitals to share expertise and resources with rural areas.

Link: In March, the director of DMS's biomedical libraries, William Garrity, and other Dartmouth volunteers spent 13 days in Vietnam on a RICE pilot project. They tested a smartphone link between the National Hospital of Pediatrics (NHP), located in Hanoi, and rural clinics and regional hospitals. Smartphones have tiny keyboards, internet and e-mail access, and basic productivity software. A lot of Vietnamese clinicians already use them, Garrity says. "Nobody uses landlines out there. Everyone has a mobile."

Smartphones can be used for consultations between physicians, as well as to transmit educational information, share the NHP's digital library holdings, convey information on patient transfers, track disease incidence, and provide access to rudimentary medical records. With more information, physicians at remote facilities can be more ef-

fective, says Garrity. And if patients can get appropriate care at local clinics, they may be less likely to rush to the overcrowded central hospitals. The situation there is similar to what would happen "if everybody with the sniffles in the Upper Valley came to DHMC and didn't go to their closer facility"—not an efficient way to run a health-care system, says Garrity.

Since rural Vietnam is a potential nidus for pandemic flu or SARS, if sick people travel from rural areas to major cities they may spread infection along the way. But if they seek care locally, a pandemic could be contained early. Further, clinics could use smartphones to quickly report outbreaks.

During the trip, Garrity gave presentations to NHP librarians

and physicians on information technology. He also accompanied the team on visits to rural clinics to help identify their informational needs.

Key: Garrity's expertise as an information specialist is key to the project, says DMS plastic surgeon Dr. Joseph Rosen. Rosen organized RICE in 2005; got funding for it from Microsoft, with help from Dr. Eliot Grigg, a 2001 Dartmouth College graduate; and led the March trip.

RICE's long-term goal is "to identify, secure, and deploy PC- and smartphone-based clinical decision-support tools" to foster better and more integrated health care, says Garrity. He hopes in the near future that an NHP librarian can visit DMS and another DMS librarian can visit Hanoi—bringing maple syrup, perhaps?

Kelley Meck

If sick people seek care locally, a pandemic could be contained early.

WILLIAM GARRITY



This rural Vietnamese village was one of several the DMS team visited. For a [WEB EXTRA](http://dartmed.dartmouth.edu/summer07/html/vs_hanoi_we.php) slide show, see dartmed.dartmouth.edu/summer07/html/vs_hanoi_we.php.