

# nature REVIEWS

## NATURE REVIEWS MICROBIOLOGY

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Around this time every year, high-risk groups, such as elderly and immunocompromised individuals, are advised to get themselves vaccinated against 'flu. This year, however, the influenza virus isn't the only respiratory virus that clinicians are on the lookout for.

Although the pandemic of severe acute respiratory syndrome (SARS) was brought under control in the summer, there is a fear that the SARS virus could re-emerge this winter. In their review on page 209, Hans-Dieter Klenk, Rino Rappuoli and colleagues discuss our present understanding of the SARS coronavirus and the prospects for developing effective therapies.

Estimates of the economic costs of the SARS pandemic range from \$30 billion to \$100 billion, and SARS, of course, is just one of the many new and 're-emerging' infectious diseases that have come to light in the past decade. One way to try and limit the devastating effects of these diseases on global health and the economy is by developing an effective disease early warning system. On page 233, David Rogers and Sarah Randolph discuss how the latest geographical information systems that incorporate remotely sensed data about the environment can be used to track the spread of a disease and predict the likelihood of a new disease spreading to a particular area.

Whether or not the SARS virus is maintained in populations more efficiently during the cooler temperatures of winter compared with summer remains a controversial area. One family of microorganisms that definitely do love the cold are the psychrophiles. On page 200, Georges Feller and Charles Gerday review the adaptations in the enzymes found in this specialized group that allow survival at low temperatures.



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