lines had failed to control the spread of SARS, these would have been altered as needed. In fact, these guidelines led to the worldwide interruption of SARS transmission within 4 months of the first WHO SARS alert, issued on Mar. 12, 2003.

The authors suggest that many Amoy Garden patients did not initially present with findings consistent with the WHO case definition and therefore there was the potential for disease spread if emergency physicians had released these patients in the community without appropriate follow-up. However, they fail to acknowledge the ongoing actions of Hong Kong public health authorities in managing the Amoy Garden outbreak at the time these patients presented, which could have had a significant impact on the study results. These actions, as described in the report of the Hong Kong SARS Expert Committee,[3] included daily visits to the Amoy Garden by Hong Kong Department of Health staff with reports of the first SARS cases from Amoy Garden, referral of residents for daily screening at SARS clinics, and quarantine of residents. In particular, the referral of residents for screening daily would have meant many of those who ultimately developed SARS would have initially had few, if any, symptoms on initial assessments. Public health officials recommended chest x-ray as part of the screening, which may in part explain the high rate of x-rays ordered by the emergency physicians in this study, despite minimal respiratory symptoms in these patients. The information and recommendations of Hong Kong public health authorities therefore likely served to enhance physician judgement in this study and is a major source of bias that the authors fail to acknowledge.

Follow-up and quarantine of close contacts of SARS cases, or those who had contact with an identified SARS transmission setting, like the Amoy Garden, was a recommendation of the WHO, and was part of the protocol of Hong Kong public health authorities and all public health authorities managing SARS outbreaks around the world. Under these protocols, follow-up and quarantine of contacts did not depend on a diagnosis of SARS by emergency doctors, as suggested by the authors, but was part of routine public health management.

While emergency physicians may rightly feel concerned that re-emergence of SARS, if it occurs, may lead to new outbreaks if initial cases present with atypical findings and are missed, the answer is not to establish public health case definitions that can encompass every possible presentation. The answer is to establish appropriate infection control guidelines in acute care settings so that any patient presenting with a potential communicable disease is appropriately isolated until a diagnosis is established. Adherence to appropriate infection control will prevent spread while allowing time for clinical assessment and laboratory investigation.

Finally, I would like to correct one error in the Discussion by Wong Wing Nam and colleagues pertaining to a July 2003 outbreak of upper respiratory tract illness in a long-term care facility in British Columbia, Canada (see p. 390). The authors suggest that residents were suspected of having SARS and that a rapid SARS-CoV (SARS-associated coronavirus [CoV]) test helped to identify a virus similar to SARS-CoV, which may represent a new, less virulent variant of CoV. In fact, patients in this outbreak had symptoms consistent with the common cold and were not suspected of having SARS. SARS testing was included in a panel of tests by a reference laboratory where specimens were sent to look for other viruses. SARS PCR (polymerase chain reaction) and serological testing was falsely positive on a few of the patients, leading to unnecessary anxiety and unwarranted public health actions. The virus was subsequently found not to be related to the SARS-CoV but rather to be consistent with previously identified human coronaviruses known to cause upper respiratory infections. Contrary to the authors' conclusions, this episode highlighted the importance of interpreting newly developed but unvalidated SARS-CoV rapid tests with caution, and prompted the WHO to recommend that all positive SARS-CoV rapid tests should be confirmed by a second, external laboratory.[4]

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[The lead author responds:]

To the editor: We appreciate the read-

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ers' comments about our recent article.[1] Although we concluded that the WHO case definition criteria are not accurate when applied as screening criteria in the ED, our intent not to criticize the work of the WHO, and we recognize that diagnostic criteria and public health case definitions have different purposes. Nevertheless, the WHO case definition has been advocated and used worldwide in EDs and other primary health care settings as the basis for ED screening decisions, and to guide patient disposition and management. Since the outbreak in the spring of 2003, other authors[2,3] have also identified this concern and concluded that the use of these criteria for early screening will result in over- and under-diagnosis, which is potentially disastrous for our patients and our health care system.

We agree with Dr. Daly that public health officials play a crucial role in containing and limiting the spread of SARS, but this does not reduce the need for emergency physicians to make difficult decisions based on inadequate information. We also agree with Dr. Ovens that the WHO criteria are not appropriate for ED screening decisions and that ED physicians need to develop the rights tools for the right job. In our follow-up study (see page 12),[4] we identified clinical and laboratory parameters, present during the initial ED visit, which will help emergency physicians make better screening decisions.

Our suggestion that the WHO case definition requires revision is supported by the fact that virology testing has become the gold standard for SARS diagnosis and has been incorporated as a component of the US Centers for Disease Control and Prevention (CDC) SARS case definition since July 2003.[5] It is particularly important to develop a rapid SARS-CoV virological assay and deploy this in EDs to facilitate early confirmation. The costs of the SARS outbreak, both in terms of lives and in dollars, demonstrate the need to urgently upgrade the ED response and to develop comprehensive national standards as recommended in the recent Canadian Association of Emergency Physicians position statement.[6]

Finally, in response to Dr. Daly's comments, I want to clarify that only the Amoy Garden residents in Block E where the index case lived were quarantined, and only those with definite close contact were monitored daily by our colleagues in the Hong Kong Department of Health, as described in the Report of the Hong Kong SARS Expert Committee.[7] Unlike the confined outbreaks in Canada and Singapore, SARS spread widely in our Hong Kong community, and we could not afford to apply intensive public health measures to ALL potential contacts and low-risk suspected cases. This left primary care providers and emergency physicians to make critical early disposition and management decisions that undoubtedly had a major impact on the subsequent course of the outbreak.

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Case definition versus screening tool for SARS

To the Editor: In the November issue of *CJEM*, Wong Wing Nam and colleagues published an excellent study in which they compared physician judgement to the WHO case definition and concluded that the latter is an ineffective screening tool for SARS.[1] Other researchers[2,3] have made similar criticisms, which may be unfair. The WHO criteria were not meant to be a triage screening tool. Rather, they were intended to "describe the epidemiology of SARS and to monitor the magnitude and spread of this disease, in order to provide advice on spread and control."[4] It may therefore be inappropriate to apply these criteria in the ED.

In a subsequent study (see page 12), which was also published as an early online release, these authors identified clinical predictors helpful in the diagnosis of SARS.[5] Not surprisingly, chest radiography was the strongest of these. Given that emergency physicians were able to use chest radiography in their di-

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