of carriage may reflect a nationwide change (*8*).

Furthermore, testing within the first week of term meant that recovered strains were predominately brought into the university. Serogroup Y carriage rates for incoming students (2.9%) were significantly higher than rates detected by identical genotyping methods during 1999–2001 (1.7%–1.8% [*4*]; χ^2 = 4.6%–6.4%, 1 df; $p<0.05$), suggesting that meningococcal carriage by young adults, particularly of serogroup Y strains, has increased across the United Kingdom. The major increase in serogroup Y strains among first-year students during 2009–10 probably resulted from spread of clones within dormitories, as observed in the 2008–9 study (*5*) and may be facilitated by characteristics of the organism, lack of immunity, or a combination of these factors.

The high prevalence of serogroup Y strains in carriers may help explain the recent increased incidence of serogroup Y disease in the United Kingdom: from 20 to 62 laboratory-confirmed cases in England and Wales from 2003 through 2009 (*9*). In the United States during the late 1990s, a similar increase in serogroup Y carriage was linked to a concomitant increase in serogroup Y disease (*10*).

In conclusion, in a representative UK student cohort we detected high rates of carriage and elevated prevalence of serogroup Y strains of meningococci. Any further significant increase in serogroup Y disease should lead to prompt reconsideration of the current vaccine policy in the United Kingdom.

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Pandemic (H1N1) 2009 in Neonates, Japan

To the Editor: In 2009 in Japan, a medical response to pandemic (H1N1) 2009 infection in neonates was proposed by the Japan Pediatric Society (JPS) (*1*). Few such cases have been reported (*2*–*7*). Because the effects of pandemic (H1N1) 2009 in neonates are unknown, the JPS Committee of Neonatal Medicine conducted a nationwide survey during 2009. Surveys were mailed to neonatal care units in 522 facilities certified by JPS as teaching hospitals, which included almost all tertiary neonatal intensive care units in Japan. The survey asked whether during April 2009–March 2010 any neonates had been born to

mothers with pandemic (H1N1) 2009 onset from 7 days before delivery until obstetric discharge and whether pandemic (H1N1) 2009 developed in any neonates <28 days of age before hospital discharge. The study was approved by the Bioethics Committee and Board of Directors of JPS.

Of the 522 facilities, 327 (62.6%) responded. During the period in question, 52,774 neonates had been hospitalized for any cause except routine care. Pandemic (H1N1) 2009 infection of the mother was reported by 47 (16.1%) facilities. From the 37 of these facilities, detailed information was available for ≈42 mothers with pandemic (H1N1) 2009 infection who gave birth to 43 neonates (29 full-term and 14 preterm births). Of these 42 mothers, a diagnosis of influenza A was made by rapid influenza diagnostic kit for 33 (78.6%) and for pandemic (H1N1) 2009 by reverse transcription PCR (RT-PCR) for 5 (11.9%). Only 1 case of pandemic (H1N1) 2009 in a mother was reported in May 2009, when influenza subtype H3 was dominant in Japan. This infection was confirmed by RT-PCR, and the mother was included in the study.

During the study period, except April and May 2009, almost all influenza A infections were caused by pandemic (H1N1) 2009 virus. Delivery on the day after symptom onset was most frequent (14 [32.6%] births), followed by delivery on the same day as symptom onset (8 [18.6%] births). A similar trend was observed for preterm births. Of the 42 mothers, 40 (95.2%) received antiviral medications. Mixed feeding of breast and formula milk was most common, and 8 neonates were breast-fed only.

Among the 43 neonates, pandemic (H1N1) 2009 infection developed in only 1 (male, gestational age 37 weeks, birthweight 2,665 g). His mother had high fever, and pandemic (H1N1) 2009 was diagnosed by RT-PCR; she received oseltamivir and delivered her son 2 days after illness onset. The neonate became lethargic at 4 days of age, and pandemic (H1N1) 2009 infection was confirmed by a rapid-antigen detection kit. The neonate received oseltamivir and recovered the next day. He received oseltamivir for 5 days and was discharged at 12 days of age with no subsequent medical problems. Because onset occurred 4 days after birth, the possibility of horizontal infection from the mother cannot be excluded. Except for this 1 neonate, prophylactic antiviral drugs were not given to the other 42 neonates, none of whom became infected.

With respect to nosocomial pandemic (H1N1) 2009 infection in hospital wards caring for neonates, no cases of onset within 28 days after birth were reported. However, pandemic (H1N1) 2009 infection before discharge but after 28 days of age was reported for 6 neonates. These diagnoses were made by rapid diagnostic kit, specific RT-PCR, or both. Of these 6 neonates, 1 was born at 29 weeks of gestation and had a low birthweight (1,026 g); symptom onset at 32 days of age; and complications of respiratory distress, pneumothorax, and systemic inflammatory response syndrome. Oseltamivir was given to 5 of these 6 neonates, none had adverse effects and all 6 recovered.

Pandemic (H1N1) 2009 infection may have caused preterm labor. According to our findings, the virus does not seem to be transmitted during breast-feeding, and antiviral drugs, if given to the mothers, may not always be needed by neonates. However, because of the limitations of this observational study, these findings need further support. Dulyachai et al. confirmed vertical transmission of pandemic (H1N1) 2009 virus at 31 weeks of gestation (*5*). Jajoo and Gupta reported a 32-week-old preterm patient with pandemic (H1N1) 2009 who died of pneumonia and multiorgan failure (*6*). Maternal pandemic (H1N1) 2009 infection associated with preterm labor may adversely affect the fetus or neonate (*2*,*3*,*5*,*6*).

Our results show that pandemic (H1N1) 2009 virus infection in mothers seldom occurred in their neonates, i.e., vertical transmission was rare. This finding is consistent with the fact that few such cases have been reported (*8*,*9*). On the basis of the results of this survey, JPS published Guideline for Management of Influenza (including Pandemic [H1N1] 2009) in Neonates during the Early Postnatal Period in 2010–2011 Season (*10*).

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Social Network as Outbreak Investigation Tool

To the Editor: The recent article by Oh et al. (*1*) discussed the utility of email surveys for the investigation of outbreaks. After they have been created, digital surveys require less time to administer than paper-based or telephone surveys and can produce high-quality and timely data. During an outbreak in Illinois, we used email and a social networking site to distribute a link to a confidential Inquisit (www.millisecond.com) survey and compared characteristics of the groups that responded to each.

In December 2010, the Illinois Department of Public Health received a report of an outbreak of gastrointestinal illness among guests at a wedding reception. Health department staff converted a standard foodborne outbreak questionnaire to a digital format. The survey link was then distributed to guests by 2 methods: email from the reception hosts and the note function on the host's Facebook page. Facebook has 500 million active users, 50% of whom check their Facebook pages every day (*2*). The Facebook note function is a blogging feature through which users can publish content visible to linked friends.

A total of 14 persons responded to the email-distributed survey link and 41 to the Facebook-distributed survey link. For each survey, data quality was high and response rates for questions were >90%. Facebook respondents were younger than email respondents (mean ages 29.8 and 37.4 years, respectively). Information provided by Facebook respondents covered persons 11 months to 80 years of age and by email respondents 1–67 years of age. Parents were asked to complete surveys for any children unable to answer the questions independently. The Facebook-distributed survey had a higher percentage of male respondents (41.5%) than did the email-distributed survey (21.4%).

Facebook-distributed surveys were answered significantly faster than email-distributed surveys ($p<0.05$). The mean number of hours from distribution to response was 42.3 for the email survey and 8.7 for the Facebook survey. The Facebook survey link was distributed at 6:00 PM on a Thursday evening; 34 (82.9%) surveys were completed by 9:00 AM on Friday morning. On the basis of these responses, health department staff were able to identify the implicated foods the day after the questionnaires were distributed.

Distributing foodborne outbreak questionnaires through Facebook generated data that were complete and timely. Facebook-distributed surveys captured a wide range of respondent age groups and more male respondents than did email-distributed surveys. Previous studies of online survey response rates found rates to be significantly higher for women than for men (*3*). In addition to low cost and significantly improved survey response times, social networking distribution holds other advantages for health departments. Recall errors are reduced by distributing the survey to persons simultaneously and immediately. Posting of surveys through a health department's social networking accounts could also enable participation of persons for whom the health department does not have contact information. Given these advantages and the widespread use of social networking, use of these tools should be considered as an option for survey distribution during outbreak investigations.

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