

Fig. 1.

Center required measles IgG tests for all HCWs born in and after 1967 for point-prevalence surveillance. In addition, we have routinely performed measles antibody test for new HCWs since 2014. In 2018, antibody tests were administered to HCWs who were born before 1967 or who had taken a leave of absence in 2014. We provided MMR vaccination to all HCWs whose antibody tests yielded negative results. **Results:** In total, 7,411 HCWs (89%) underwent measles antibody tests from 2014 to 2018. The overall seropositivity was 73% (95% CI, 72%–74%); seroprevalence was 73% in HCWs born in of after 1967, whereas the seroprevalence in HCWs born before 1967 was 98%. The seroprevalence sharply decreased from 85% in the 1986 birth cohort to 42% in the 1995 birth cohort. **Conclusions:** In conclusion, the proportion of measles-susceptible individuals was substantially high in HCWs, especially in young adults. Because the impact of measles outbreak in healthcare facilities would be critical, a policy regarding routine serologic screening followed by measles vaccination or routine measles vaccination in healthcare facilities should be considered, especially for young Korean HCWs.

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Poster Presentation

Seroprevalence of Mumps in Healthcare Workers in South Korea

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Background: Mumps, a contagious disease, is transmissible by respiratory droplet particles and is preventable by vaccination. In South Korea, mandatory vaccination against mumps has markedly reduced its incidence. However, both the incidence and the number of reported cases of mumps have persistently increased in South Korea since 2007. Despite high vaccination rates, mumps outbreaks continue to occur, and many studies have been conducted on mumps seroprevalence in children and adolescents. In comparison, few reports have been published regarding mumps seroprevalence in healthcare workers (HCWs) in South Korea. **Objective:** We investigated the seroprevalence of HCWs in South Korea. **Methods:** This study was conducted at Asan Medical Center, a 2,705-bed tertiary-care hospital in Seoul, South Korea, with 8,329 HCWs. In 2018, we performed mumps antibody testing for HCWs. We administered MMR vaccination to all HCWs whose antibody test yielded equivocal or negative results. However, we did not repeat mumps antibody testing after MMR vaccination. **Results:** In total, 6,055 HCWs (73%) underwent mumps antibody testing. The overall mumps seropositivity rate was 87% (95% CI, 86%–87%). Seropositivity rates of all birth cohorts ranged from 72% to 92%. Mumps seropositivity rates were 88% in HCWs born before 1970, 87% in those born between 1970 and 1989, and 88% in those born between 1990 and 1995 ($P = .59$). Mumps seropositivity rates for both women and men HCWs were 87% (3,770 of 4,311 women and 1,517 of 1,744 men); the difference was not statistically significant ($P = .62$). The overall mumps seropositivity rate was 87%, which was above the herd immunity threshold of 75%–86%. **Conclusions:** Our results revealed that the overall mumps seropositivity rate in South Korean HCWs was above the herd immunity threshold. On the basis of this

Seroprevalence of mumps IgG antibodies in healthcare workers in 2018. The circles denote the mean seropositivity rate (%) and error bars denote 95% confidence intervals (CI), and the dashed line denotes 75% and 86% seropositivity rates.

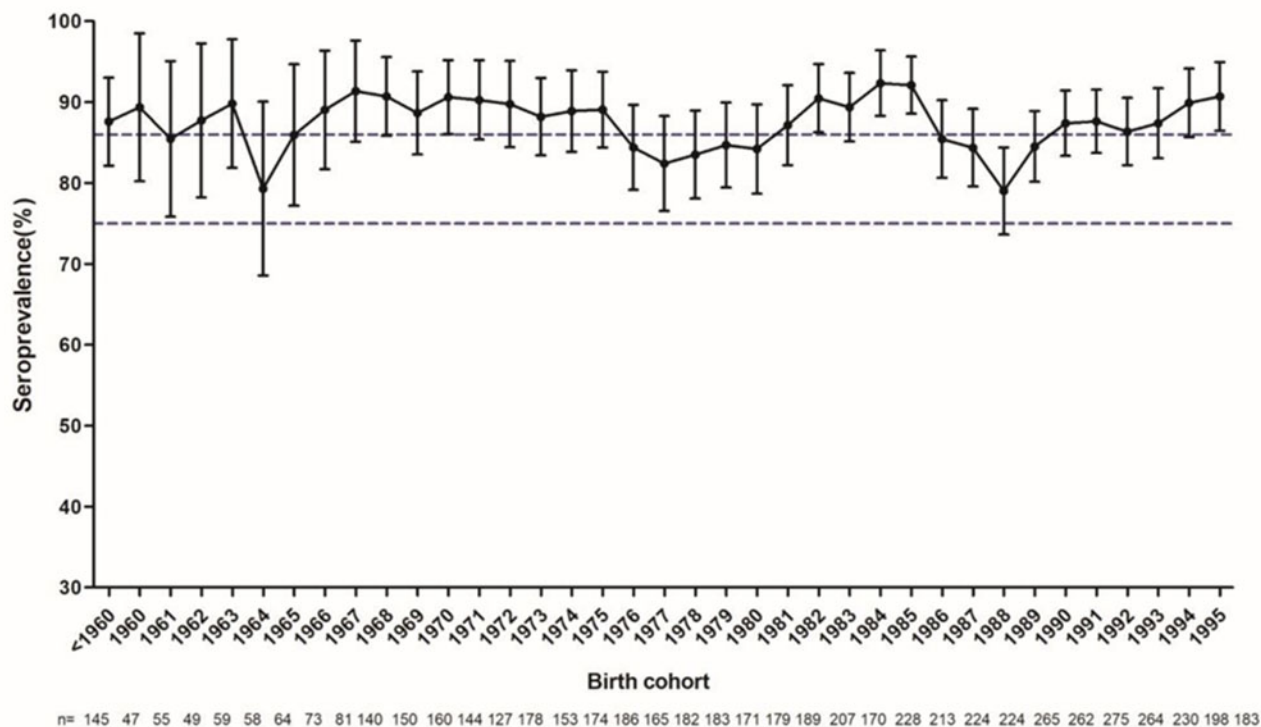


Fig. 1.

finding, we recommend that MMR vaccination after serologic testing may be a more reasonable approach than universal MMR vaccination alone in Korea.

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Sherlock Holmes: Whose Tissue Is It Anyway?

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Background: The medical device reprocessing department (MDRD) is a crucial patient safety area with checkpoints to ensure appropriate reprocessing. **Objective:** We report the application of molecular pathology in the investigation of potential blood and body fluid exposure (BBFE) during endoscopy. **Methods:** When there is a potential BBFE from a medical device, our hospital

has a systematic process whereby the clinical area involves the MDRD and the infection prevention control (IPC) team. The MDRD provides reprocessing documentation, including detailed information regarding the prior use of the devices. The clinician and the IPC physician discuss the risk of BBFE. If patient disclosure occurs, the IPC physician provides follow-up as appropriate. This report illustrates the collaboration of clinicians, the IPC team, the MDRD, pathologists, and molecular pathologists in investigating the possibility of residual human tissue and BBFE during endoscopy. **Case reports:** Two independent but similar events occurred in September 2016 and September 2019 in the pediatric endoscopy suite at our site, a tertiary-care pediatric hospital with 163 beds in Edmonton, Canada. During both endoscopies, the pediatric gastroenterologists observed a piece of tissue ejected from the gastro-scope into the intestinal lumen when the biopsy forceps were pushed out of the channel for the first time. This observation raised concerns of possible gaps in the reprocessing of the endoscope and residual tissue remaining in the working channel after its last use. Both gastroenterologists were able to retrieve the presumed foreign tissue; however, both patients had possible BBFE because the mucosal surface was breached by the biopsy forceps. The MDRD reprocessing of both endoscopes was reviewed, and no gap was identified. In discussion with the pathologists and molecular pathologists, human identity testing using genetic markers was performed on the biopsy blocks of the previous patient on whom the endoscope was used, the potentially exposed patient, and the presumed foreign tissue for each event. The test results indicated that the presumed foreign tissue was in fact from the potentially exposed patient and therefore there was no BBFE. It is presumed that the working channel itself captured a small amount of the