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Human to human transmission of H7N9
Limited transmission between humans is not surprising

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Since the new avian influenza virus, H7N9, first emerged in China, a primary concern has been whether it might spread between humans. The vast majority of the 133 confirmed cases reported so far seem to be epidemiologically unconnected, with many patients reporting a recent history of exposure to live poultry, which are suspected to be a main reservoir for the virus. Although an earlier study did report two family clusters of H7N9 cases, it was unclear whether these clusters resulted from person to person transmission or simply from exposure to a common animal source of infection. The upside of this is that the incidence of human infections, and therefore opportunities for H7N9 to adapt to humans or to re-assort through mixed influenza infections, could be much greater than for other bird flu viruses such as H5N1. The flipside is that the mortality rate among H7N9 cases is likely to be substantially lower than that observed among confirmed cases. Thus, while the paper by Qi and colleagues[^1] comes close on the heels of studies showing airborne transmissibility of H7N9 between ferrets in the laboratory, a mammalian model, it is now well documented that owing to its non-lethality in birds, H7N9 can spread undetected through avian populations. In addition, Chinese surveillance data suggest that the number of confirmed human cases is just the tip of the iceberg—many mild cases are likely to have passed undetected. The upside of this is that the actual fatality rate among H7N9 cases is likely to be substantially lower than that observed among confirmed cases.

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