Experience and Lessons sharing such as the IPC in the Occurrence and Control of measles in Japan

Disease Control and Prevention Center
National Center for Global Health and Medicine
(WHO Collaboration Center)
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RAPID COMMUNICATION

Transmission potential of modified measles during an outbreak, Japan, March–May 2018

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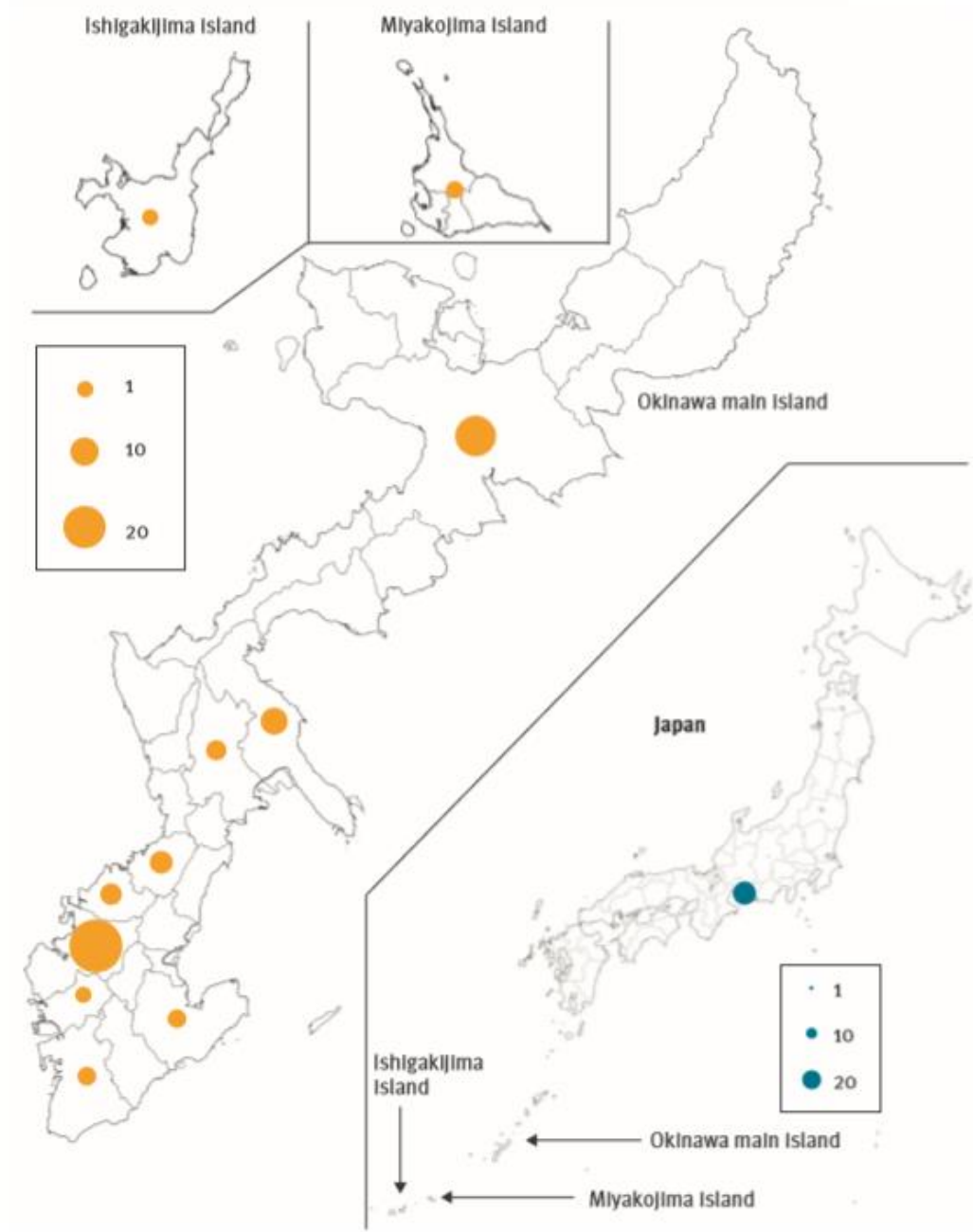
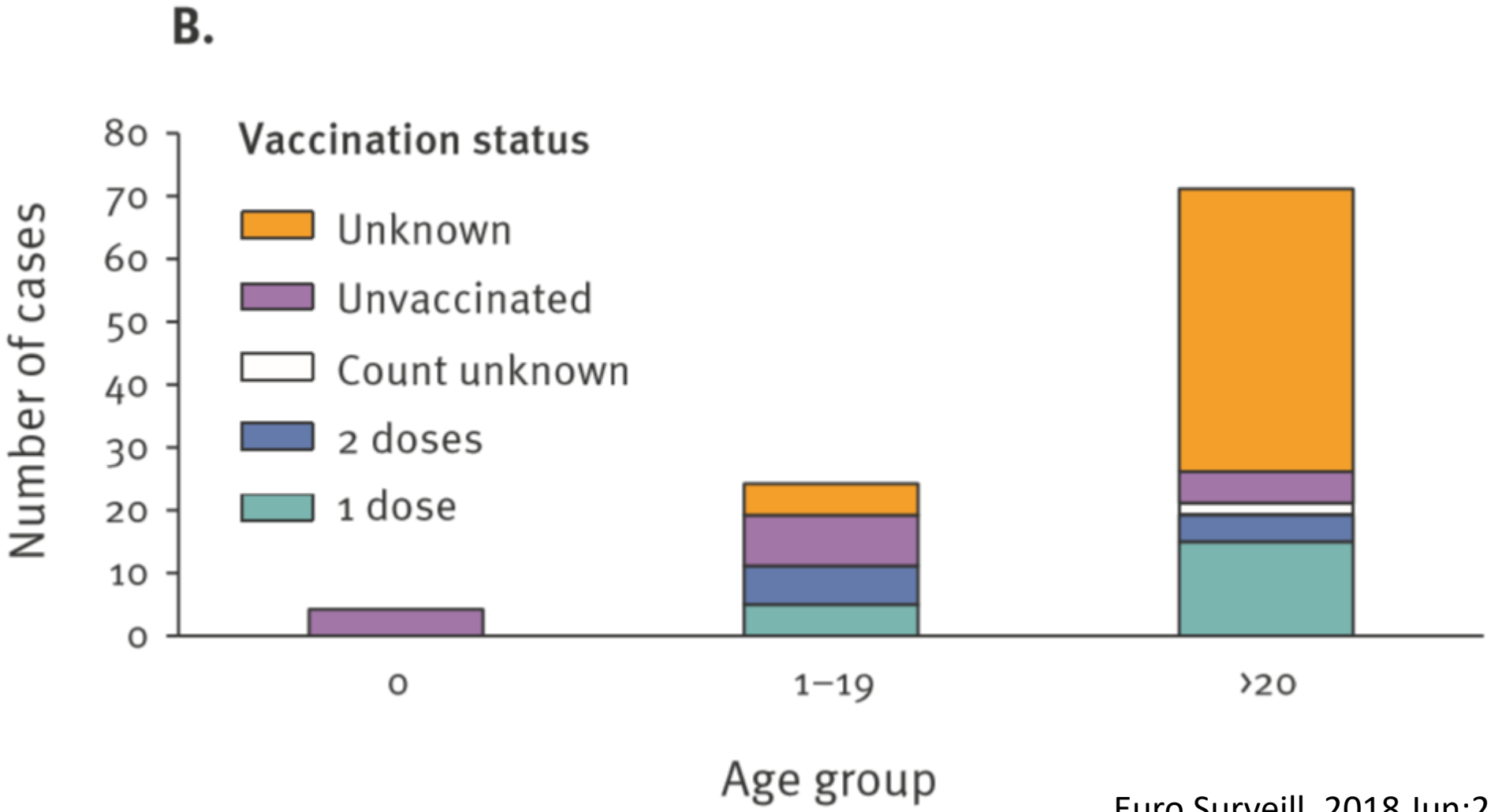
FIGURE 1

Geographical distribution of measles cases across districts of Okinawa Prefecture main island, Ishigaki island and Miyakojima island, Japan, 14 March–10 May, 2018 (n = 99)



Euro Surveill. 2018 Jun;23(24).

Ninety percent of cases had inappropriate vaccination status for measles.



Euro Surveill. 2018 Jun;23(24).

Measles vaccination rate in Okinawa

89.8% (worst in Japan)

Euro Surveill. 2018 Jun;23(24).

Why measles outbreak occurred?

- ✓ Rapid initial outbreak response
- ✓ 89.8% of vaccination rate

Measles is highly contagious.

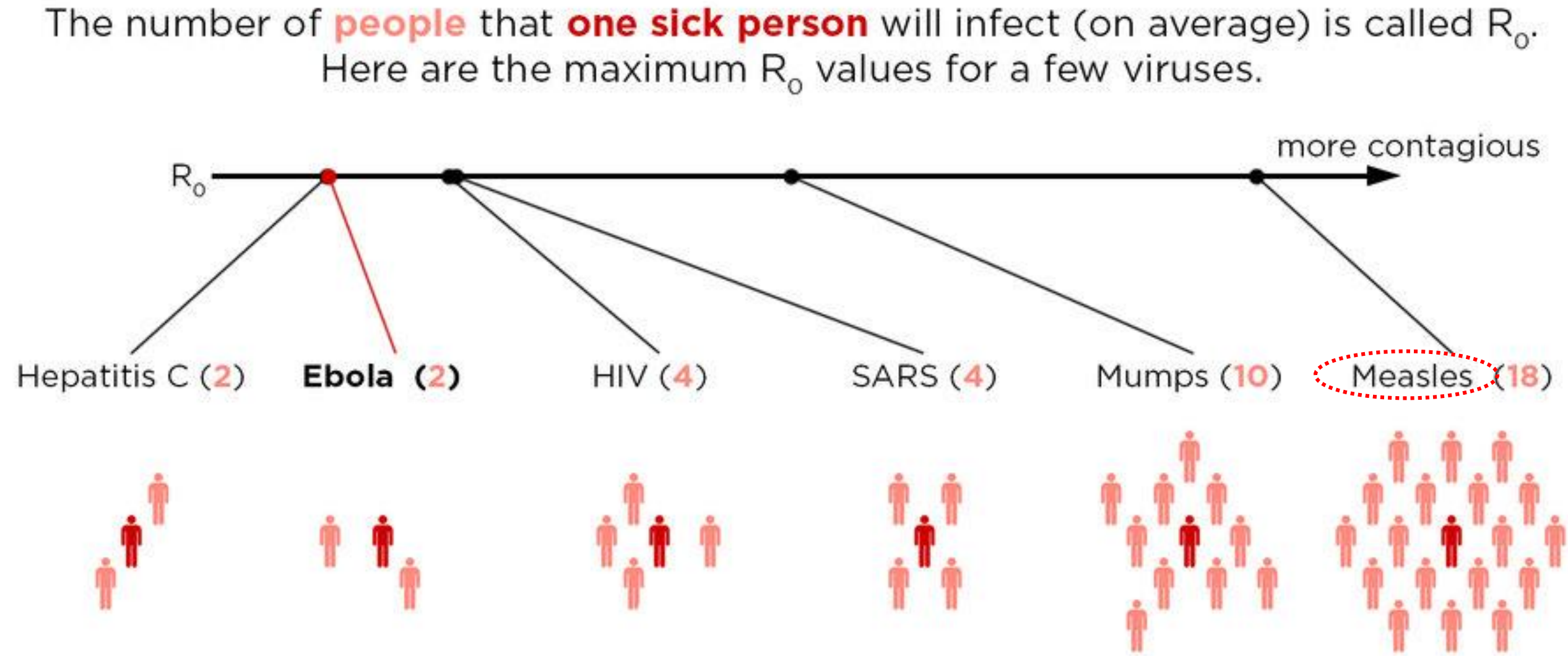


Table 1. Comparison of 20th century annual morbidity and current estimates vaccine-preventable diseases

Disease	20th Century annual morbidity (2)	2016 Reported cases (3)	Percent decrease (%)
Smallpox	29,005	0	100
Diphtheria	21,053	0	100
Measles	530,217	69	>99
Mumps	162,344	5,311	97
Pertussis	200,752	15,737	92
Polio (paralytic)	16,316	0	100
Rubella	47,745	5	>99
Congenital rubella syndrome	152	1	99
Tetanus	580	33	94
Haemophilus influenzae	20,000	22*	>99

**Haemophilus influenzae* type b (Hib) < 5 y of age.

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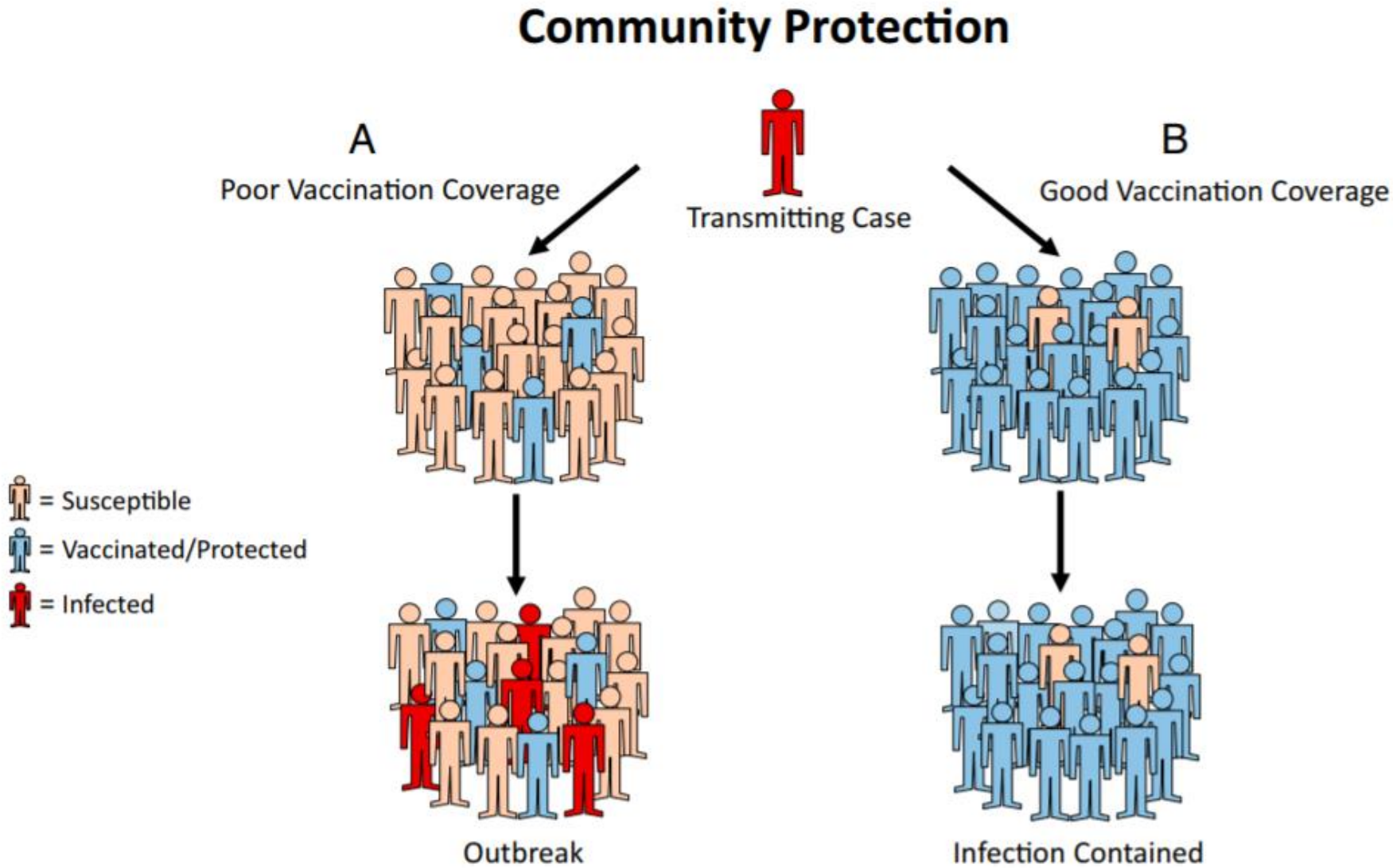

Fig. 1. (*A*) A highly susceptible population in which a transmitting case is likely to come in contact with a susceptible person leading to a chain of person-to-person transmission. (*B*) A highly immune population in which a transmitting case is unlikely to come in contact with a susceptible person, thereby breaking the chain of transmission and achieving indirect protection of remaining susceptibles because they are not exposed.

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Open discussions