

There are some infectious diseases, like polio and tetanus, that many of us will never have seen in this country. Measles (and mumps and rubella) should have been in that list, but these preventable diseases are becoming more prevalent.

A warning from the UK Health Security Agency suggests that London is at risk of a major measles outbreak due to poor measles vaccination coverage.¹ This seems like a massive step backwards from 2016, when the World Health Organization (WHO) declared that the UK had eliminated measles, a status that the UK lost in 2019 due to a resurgence of cases of this highly infectious disease.²

HERD IMMUNITY

The measles vaccine was introduced in 1968, and estimates suggest that 20 million cases and 4500 deaths attributable to measles have since been averted in the UK.² The WHO recommends that measles vaccine uptake, in the form of the measles, mumps, and rubella (MMR) immunisation programme, needs to reach at least 95% uptake of two doses to maintain herd immunity and disease elimination.

A bit like Voldemort, it's the study that shall not be named, but that discredited and fully retracted article published by Andrew Wakefield and his colleagues that linked MMR vaccination to autism and appeared in the *Lancet* in 1998 led to a huge drop in MMR vaccination rates. Between 2006 and 2009,

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the percentage of children vaccinated by their second birthday was only around 85%, but immunisation campaigns boosted these rates back up to over 90% by 2011/2012. Vaccination rates have again dropped in recent years, with uptake in the UK back below 90% and, crucially, below the 95% target needed to sustain herd immunity.³

MMR vaccine uptake is hugely variable across the UK and remains lowest in London compared to the rest of the UK, with coverage as low as 65.4% in Hackney and the City of London for the first MMR jab by age 2. The interactive childhood vaccination coverage map by NHS Digital is fascinating to peruse and begs the question, why is there such wide geographical variation in MMR uptake? Just compare the low rates in London with coverage of 97.7% in South Tyneside.⁴

WHY IS THERE VACCINE AVOIDANCE?

Different groups have different reasons, at different times, for not getting vaccinated.

Geographic variation can be explained in part by ethnicity, religious background, and deprivation, which are known to play a part in parental perceptions and understanding of immunisation schedules, and the cultural acceptability of vaccines.⁵ Some groups are more likely to actively reject vaccination, but some others, such as those on low incomes, are more likely to face access issues and system barriers.⁶

Recent events haven't helped the vaccine coverage situation across the UK. The COVID-19 pandemic and the 'stay at home' message played a part in views and experiences of availability of routine childhood vaccinations, with a lack of clarity about whether vaccination programmes were still running among patients and practice staff, and confusion and difficulty around booking vaccination appointments, with marked disparity in awareness of routine vaccination policy differentially affecting ethnic and socioeconomic groups.⁷

THE RIGHT APPROACH FOR THE RIGHT POPULATION

What does all this mean for general practice? Access to vaccines remains a main barrier and is an area for practice-level improvement initiatives. Common structural barriers in general practice to getting children vaccinated include the timing and availability of appointments and not being able to attend appointments due to childcare duties.

The National Institute for Health and Care Excellence recommends offering extended hours and family friendly vaccination clinics, and considering using sites outside of healthcare settings, such as children centres or community and faith centres, to address local barriers to vaccine uptake. More active but simple interventions, such as telephone, letter, and text reminders, and call/recall invitations, are effective at



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increasing vaccine uptake.⁸ And if we know which groups are facing differential access to vaccination, we can target these groups through locally designed interventions. We can harness learning from work done addressing COVID-19 vaccine hesitancy through community participation, engaging local champions and faith leaders, and refocusing these strategies towards childhood immunisation programmes.⁹

There is reason to be optimistic. Although the factors affecting vaccine uptake are complex with interplaying individual, societal, and structural determinants, achieving MMR vaccination rates of 95% is possible in ethnically diverse and deprived populations through multi-pronged primary care-led initiatives.¹⁰

Although we may feel a way off the 95% target needed to eliminate measles from the UK, we have achieved this target before and we have the tools to achieve this again to make this a disease for the history books.

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This article was first posted on *BJGP Life* on 27 Jul 2023; <https://bjgplife.com/measles>

DOI: <https://doi.org/10.3399/bjgp23X734805>

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