Childhood vaccination programmes often take up a large share of a country's prevention strategy as they are one of the most effective and cost-effective health policy interventions (Chan et al., 2017[1]). The WHO estimates that vaccines prevent between 2 million and 3 million deaths each year worldwide, and that an additional 1.5 million deaths could be avoided with global vaccination, through direct protection of those vaccinated and prevention of the spread of disease to those unvaccinated. Therefore, vaccination programmes exist in all LAC countries, which include several routine vaccines (i.e. against diseases such polio, diphtheria, tetanus, pertussis, measles) and additional vaccines (i.e. against pneumococcus, rotavirus and human papilloma virus) are included at national or subnational level based on local morbidity, mortality and cost-effectiveness analysis. Coverage of these programmes can be considered as a quality of health care indicators as they effectively reduce burden of vaccine preventable diseases subsequently. As examples, diphtheria, tetanus toxoid and pertussis (DTP), measles and hepatitis B are presented in this section as they represent, in timing and frequency of vaccination, the full spectrum of organisational challenges related to routine vaccination for children.

Despite generally high overall rates, 12 out of the 33 LAC countries fall short of attaining the minimum immunisation levels recommended by the WHO to prevent the spread of DTP (90%) (Figure 7.1) and 21 out of 33 fail to meet this target for measles (95%) in 2018 (Figure 7.2). Furthermore, high national coverage rates may not be sufficient to stop disease spread, as low coverage in local populations or certain geographical areas can lead to outbreaks. On average, only one out of every ten children in the region does not receive one of the two vaccines (90% coverage rate for both vaccines). The majority of countries have rates over 80%, which, although high, is insufficient to ensure interruption of disease transmission and protection of the whole population, as local outbreaks can occur. Two countries in particular had exceptionally low rates of around 60-65%, Haiti and Venezuela.

In 2007, more than 170 countries had adopted the WHO recommendation to incorporate hepatitis B vaccine including birth dose as an integral part of their national infant immunisation programme. Hepatitis B vaccination is recommended for all children worldwide and reaching all children with at least three doses of hepatitis B vaccine should be the standard for all national immunisation programmes (WHO, 2014[2]). Most countries in the LAC region started their hepatitis B vaccination programmes at the end of the 1990s. Data reveals that hepatitis B vaccination across the LAC region has greatly reduced the incidence of hepatitis B, even already having achieved the 2020 WHO goal for the region. The elimination of hepatitis B transmission among children and infants is within reach.

Figure 7.3 shows that the average percentage of children aged one who are vaccinated for hepatitis B is 89%, similar to the average coverage rate than for measles and DTP and just below the 90% target. Rates for most countries are above 80%, with significantly lower rates than average in Mexico, Haiti and Venezuela.

In LAC countries, several barriers to vaccination still exist. 'Individual/group influences' (e.g. beliefs and attitudes, mistrust in the health system, lack of physician recommendation, dearth of official information against misconceptions) were the most frequently reported barrier category. Then, 'contextual influences' (e.g. lower socio-economic and educational status, advanced age, religious and cultural beliefs, fear of adverse events and vaccine misinformation) was the second most relevant group (Guzman-Holst et al., 2019[3]). Eroding public confidence in the safety and efficacy of vaccination, despite the lack of scientific evidence to support this, seems to be an area that LAC countries could address to strengthen vaccination strategies.

### **Definition and comparability**

Vaccination rates reflect the percentage of children at either age one or two that receives the last dose of primary immunisation series by the respective vaccination programme in the recommended timeframe. Childhood vaccination policies differ slightly across countries. Thus, these indicators are based on the actual policy in a given country. Some countries administer combination vaccines (e.g. MR for measles and rubella) while others administer the vaccinations separately. Some countries ascertain vaccinations based on surveys and others based on administrative data, which may influence the results.

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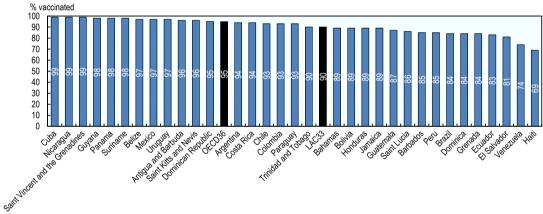
% vaccinated 90 80 70 60 50 40 30 20 Doninless Bedy or John Medit de Conductor 10 Ariidia and Baltyles hallados, , GUYATIA Saint Lidge Pare Olombia

Figure 7.1. Vaccination rates for diphtheria, tetanus toxoid and pertussis (DTP3), children aged around 1, 2018

Source: WHO, Global Health Observatory 2019.

StatLink https://stat.link/dkv6ih

Figure 7.2. Measles-containing-vaccine first-dose (MCV1) immunisation coverage among 1-year-olds (%), 2018



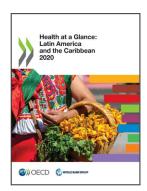
Source: WHO, Global Health Observatory 2019.

StatLink as https://stat.link/iha798

Figure 7.3. Hepatitis B (HepB3) immunisation coverage among 1-year-olds (%), 2018

Source: WHO, Global Health Observatory 2019.

StatLink https://stat.link/zew7jb



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