

Current major event

Upsurge of Chickenpox in Pakistan

Pakistan is facing an upsurge of Chickenpox (Varicella) which started in April 2017. As of 21st April 2018 (Epi-Week 16), a cumulative total of 15,727 cases of Chickenpox and 21 associated deaths (CFR: 0.1%) have been reported.

Editorial note

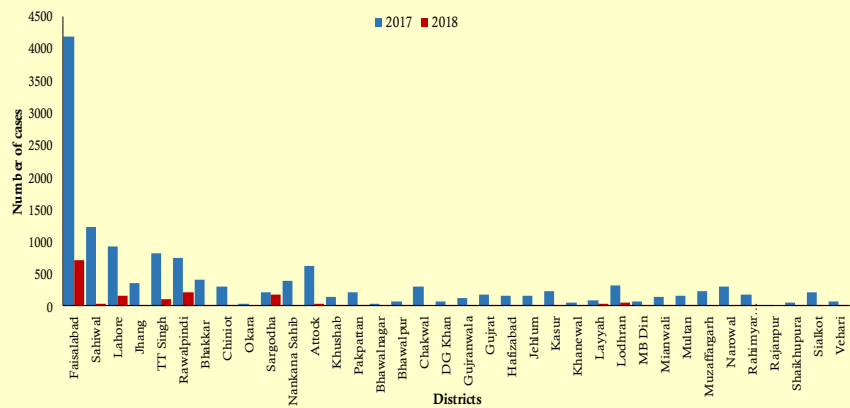
Chickenpox (Varicella) is caused by the varicella zoster virus (VZV), a herpes virus belonging to the subfamily of Alphaherpesviridae. Transmission occurs via direct contact through droplets, aerosol, or indirectly by touching freshly soiled contaminated items. Patients are usually contagious from few days before onset of the rash until the rash has crusted over.

In Pakistan, the currently ongoing surge of Chickenpox cases has mainly been concentrated in Punjab province. Cases began to appear in Faisalabad district in January 2017 and has since spread to almost all the 36 districts in the province. Faisalabad district has been the most affected district with a cumulative total of 4,100 cases followed by Sahiwal district with a cumulative total of 1260 cases and Lahore district with 1078 cases (*see graph*) reported so far between January 2017 to April 2018.

General trend of the disease shows that the cases peaked between the months of May and June 2017 followed by a general decline up to December 2017. However, there has been a steady increase in new cases since the beginning of 2018. The most affected age group is below 15 years which accounts for 79% of the total cases reported in 2018. (*see table*) A cumulative total of 1,481 cases of the disease, and no deaths due to the disease, have been reported as of 21st April 2018 (Epi-Week 16), compared to a cumulative total of 14,246 cases and 21 deaths that were reported in 2017.

In response to this increase in reported cases, the Department of Health Punjab province has strengthened the surveillance for varicella infection to ensure that all cases are captured by the existing system (to better understand the magnitude of the surge), geographic expansion of the disease is identified by detecting new cases early, and for effective monitoring

Chickenpox cases reported from Punjab, Pakistan, Jan 2017– April 2018



Chickenpox cases by age groups January to April, 2018, Punjab

Age groups (years)	Cases
0-4	368
5-9	544
10-14	255
15-19	108
20-24	75
25-29	37
30-34	31
≥35	63
Total	1481

of the efficacy of ongoing public health measures to contain the surge. A mop up health education campaigns in the affected areas are being conducted to interrupt transmission of the disease and to bring the upsurge under control.

The possible aggravating factors for increased transmission of varicella infection include overcrowding, poor hygiene conditions and status of the immunity of the affected population. Preventive measures involve organizing scaled up personal and household hygiene measures through community sessions, developing and disseminating structured risk communication messages using both print and electronic media. Preventive measures should ideally target the high risk groups with low immunity and those with extreme age groups such as elderly and children which should be isolated from the infected cases. Furthermore, cases of the disease should be managed optimally through the appropriate use of antivirals and immunoglobulins when indicated, especially in management of severe cases, in order to minimize mortality. Mass vaccination campaigns to address immunity gaps among populations at risk may also be considered.

Update on outbreaks in the Eastern Mediterranean Region

MERS in Saudi Arabia; **cholera** in Somalia; **cholera** in Yemen; **dengue** in Sudan.

Current public health events of international concern

[cumulative N° of cases (deaths), CFR %]

Avian influenza: 2006-2017

Egypt (A/H5N1)	[359 (122), 34%]
Egypt (A/H9N2)	[4 (0)]

Avian influenza A (H7N9): 2013-2017

China	[1,565 (612), 39.1%]
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Chikungunya: 2016-2018

Pakistan	[8,521 (0)]
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Cholera: 2017-2018

Somalia	[2,460 (11), 0.4%]
Yemen	[1,091,288 (2,275), 0.2%]

Diphtheria: 2018

Yemen	[1,633 (88), 5.3%]
Bangladesh	[6,780 (42), 0.6%]

Dengue fever: 2017-2018

Sudan	[233 (3), 1.2%]
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MERS: 2012-2018

Saudi Arabia	[1,830 (712), 38.9%]
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Wild poliovirus: 2018

Afghanistan	[7 (0)]
Pakistan	[1 (0)]

Yellow Fever: 2017-2018

Brazil	[1,157 (342)] 29.5%
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