

## Chronic Cerebrospinal Fluid (CSF) Leak

Recommended vaccines for those with chronic cerebrospinal fluid (CSF) leak <sup>A</sup>	
All routine vaccines	Immunize according to routine schedule.
Pneumococcal vaccine	Polysaccharide and/or conjugate vaccine depending on age.

Individuals with a CSF leak (usually from a congenital malformation, skull fracture or neurologic procedure) are at increased risk for pneumococcal infection.

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<sup>A</sup> For specific vaccine schedule information, refer to [Part 4 - Biological Products](#).