Patients with chronic liver disease are at an increased risk for pneumococcal disease and its complications.

- Pneumococcal disease causes serious illnesses like pneumonia, meningitis, and sepsis.
- Patients with chronic liver disease have an increased risk of death from pneumococcal bacteremia.
- Chronic liver disease is one of the greatest risk factors for pulmonary complications in patients with community-acquired pneumococcal pneumonia and also increases the risk of death from pneumococcal sepsis.
- Pneumococcal disease is serious and deadly. In the US, pneumococcal pneumonia, meningitis, and sepsis kill tens of thousands each year.
- Pneumococcal disease survivors may suffer hearing loss, seizures, blindness, or paralysis.
- Pneumococcal vaccination is recommended for all adults with liver disease.

**Adults with LIVER DISEASE Are Among Those Who Need Pneumococcal Vaccination**

There are two types of pneumococcal vaccine recommended for US adults: a pneumococcal conjugate vaccine (PCV13) and a pneumococcal polysaccharide vaccine (PPSV23).

Adults 65 and older, and adults age 19 to 64 years with any of the following need to receive both vaccines: immunocompromising conditions or treatments (e.g., HIV/AIDS, leukemia, lymphoma, Hodgkin disease, radiation therapy); a damaged or missing spleen; cochlear implants; or cerebrospinal fluid leaks.

Other adults for whom pneumococcal vaccination is recommended only need PPSV23, but may need more than one dose and will need PCV13 when they, too, reach age 65. Please refer to the Adult Pneumococcal Vaccination Guide or visit cdc.gov/vaccines/vpd-vac/pneumo/ for details on timing of vaccine doses.

*For more information and resources to educate patients about pneumococcal disease, visit adultvaccination.org/professional-resources/pneumo*