The meninges form chemical and mechanical boundaries, which have important properties; electrolytes, large molecules, and drugs have differing ability to cross this 'Blood/Brain barrier'. They act to contain infection in a compartment (e.g. epidural abscess and bacterial meningitis) and they can act as a barrier for certain tumors. Also, there are diseases that have a preference for different layers.

The meninges are also important for investigations and therapy. The sub-arachnoid space can be used for the administration of anesthetics and chemotherapy agents, as well as for instilling radio-opaque contrast (myelography). The epidural space can also be used for the administration of anesthesia and anti-inflammatory agents.