A ventricular tap is indicated to:

- Drain cerebrospinal fluid in non-communicating hydrocephalus
- Diagnose ventriculitis.
- Administer intraventricular drugs.

A ventricular tap is performed by medical staff deemed competent in the procedure and is a surgical aseptic procedure. It is usually done by the neurosurgeons. Please discuss with the neurosurgeons if an infant requires a ventricular tap.

Prior to a ventricular tap, an ultrasound should be performed to confirm ventriculomegaly and measurements taken to confirm the depth and direction of needle insertion.

Refer to Ventriculoperitoneal (VP) Shunt or CSF Reservoir Insertion guideline for further information on management.

**Equipment**

- Shave pack / Skin prep as per gestation
- Sterile drapes / Dressing pack
- Lumbar puncture needle (size 22G or 23G)
- Specimen bottles - appropriate bottles for specific tests

**Procedure**

The infant must have continuous monitoring and have resuscitation equipment at hand.

- Shave the scalp overlying the lateral angle of the anterior fontanelle taking care not to injure the skin.
- Clean a wide area of the head with appropriate solution.
- Position the infant supine with the top of the infant’s head facing toward the operator.
- With left hand index and thumb, Move skin over point of entry such that when tap done and the needle is removed, the skin moves back to original position and the track of the needle is broken.
- Insert the spinal needle into the lateral angle of the fontanelle and advance it toward the inner angle of the ipsilateral eye. The needle should be inserted smoothly without change of direction to minimise trauma to the brain.
- Once the ventricle has been penetrated, the stylet is removed and the CSF should drip out rather than be aspirated.
- Once the required amount of CSF is obtained the needle should be removed and pressure applied to the area to prevent leakage of CSF.
- Clean the area with chlorhexidine and let dry.
- The infant’s tolerance of the procedure should be noted in the infant’s progress notes.

### Related CAHS internal policies, procedures and guidelines (if required)

**Neonatology Guideline**
- **Ventriculoperitoneal (VP) Shunt or CSF Reservoir Insertion**

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**Reviewer / Team:** Neonatal Coordinating Group

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**Standards Applicable:** NSQHS Standards: 🌈 🌈

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