1 Traumatic Brain Injury
   Dept. of Speech Pathology
   College of Health Professions

2 Definition
   - Self-defining – injury to the brain as a result of trauma.
   - Definition by etiology
   - TBI current terminology: old= H.I., C.H.I.

3 Incidence
   - 7 million per year
   - 2/3 MVA
   - Risk factors

4 Pathophysiology
   - Two types
   - Penetrating- open head injury: open head trauma.

5 Penetrating B.I.
   - Penetrating B.I.
   - Injury that result is establishing opening to brain tissue
   - Common events
   - Infrequent; high mortality
   - Injury focal

6 Nonpenetrating
   - Two types:
     - Acceleration
     - Nonacceleration

7 Acceleration
   - Moving head injury- unrestrained head hit by moving object or moving head strikes stationary object (MVA; shaken baby syndrome).
   - Brookshire- 2 categories- linear and angular
   - Brain and brainstem may be injured; quite devasting

8 Nonacceleration
   - Stable head hit by moving object
Impression trauma
Less devastating than acceleration

9 📜 Secondary
- Traumatic hemorrhage
- Cerebral edema - increased intracranial pressure
- Traumatic hydrocephalus
- Hypoxia/ischemia
- Cerebral vasospasm

10 📜 Recovery
- Primaryprognostic indicator: alterations of consciousness
- Deeper, longer = poorer prognosis
- Other: age, abuse, patient related variable

11 📜 Measures of Consciousness
- Glasgow coma scale