Blast Injuries take home points.

Herb Parking lecture April 22

1. There are 5 possible mechanisms of injury with a blast injury

**Primary** (unique to blast): caused by blast wave and blast wind.

Blast lung

Ruptured TM

Abdominal hemorrhage and perforation

Eye rupture

TBI

**Secondary:**  caused by flying objects from the blast, fragmentation Can cause both penetrating and blunt trauma to any body part For example penetrating chest or abdominal injury, TBI, penetrating **Tertiary**: caused by the body being thrown through space or being crushed **Quaternary**: burns or toxic fire gas injury **Quinary:** Ilnesses or diseases caused by chemical, biological or radiological substances

1. Explosions can be suprasonic (Blasts) or subsonic.
2. Explosions /Blasts can be
3. Natural: i.e. meteorite impact

Volcano

Lightening

1. Man made:
2. Civilian (intentional or accidental (ie a BLEVE)
3. Military
4. Terrorism
5. The force of an explosion is increased with
6. Size of the bomb or explosive device
7. If inside or against an enclosed space
8. If in a higher density medium

1. The mechanism of injury in a blast wave is:
2. Implosion
3. Spalling
4. Acceleration / Decelleration
5. Pressure differentials