GRAVITY
The force caused by the attraction of all other masses to the mass of the earth.
Top 4 Means of Injury

- Struck by (e.g., hit by an object dropped from height)
- Falling from a height of two meters or more
- Exposure to electrical
- Motor vehicle crash

Opportunity!
The Cone of Exposure
A Definition

The cone usually gets bigger the higher the load.
The Cone of Exposure
A Definition

Winds, slopes, load weight, and load center of gravity will affect the shape of the cone.
The Cone of Exposure
An Example

If this load fell, where would it fall? Could it roll? Tip over?
The Cone of Exposure
An Example

Are these people safe if the rigging fails?

Where is he going?
The Cone of Exposure
An Example

If this load fell, where would it fall? Could it roll? Why is the load already twisting?
Safe behaviors include feet in safe spot, eyes on load, good body position, and good use of tag line.
Stop and Discuss
The Cone of Exposure – Significant Hazards

- Unclear communication and being out of crane operator line of sight increases the risk of accidentally entering the cone
- Pipes & cylinders are statistically much more likely to become a dropped object
  - Special consideration should be given to where they can twist & rotate & fall
- Improper rigging may cause dropped loads
- Equipment over-loading, over-extension and over-turning can result from lifting device malfunction, operator error, heavy winds, or miscalculations
- Equipment strikes can increase the risk of a load being dropped
- Loads that can shift or move increase the size of the cone
- Congested work areas can limit rigger escape from the cone
Achieving an ALWAYS Culture

We Need a New Level of Commitment:

- Consider the ‘Cone of Exposure’ before undertaking every lift – being sure to recognize where severe injuries or incidents could result if the load fell

Leave Today’s Engagement Committed to:

- Perform every lift, the right way, every time, and
- ALWAYS protect yourself, your co-workers, and your family by staying outside the ‘Cone of Exposure’