Taming the Black Swan

ASSP

March 6, 2019
By Lisa Rollans, CPEA
Manager – Process Safety & Risk Management

AERA
A ‘black swan event’ is an occurrence that deviates beyond what is normally expected and is extremely difficult to predict based on likelihood.
Wall Street - 1929
Union Carbide – Bhopal India - 1984
Space Shuttle Columbia - 2003
Deepwater Horizon - 2010
How do you plan for the unpredictable?

Heed weak signals and never get complacent
Wall Street crash – preceded by London stock market crash one month prior.
Union Carbide – Bhopal India - 1984

1981 worker died during chemical release and 1982 25 workers sent to the hospital following a chemical release.
Prior to Space Shuttle Columbia launch, several previous shuttle launches had seen damage ranging from minor to nearly catastrophic from foam strikes.
Well tests on the day of the tragedy showed that something was not right, but work continued.
How do you identify weak signals?

- Start with existing data
  - near miss reports
  - minor injury/illness/MVA
  - equipment break-downs
  - root cause and incident investigation results
  - alarm data

- Listen to what workers say and ask follow-up questions
  - dig deeper and look for trends

Culture is key!
Questions?