

Shift Work

Recently there have been reports of incidents in the air transportation industry related to people falling asleep while required to perform critical jobs:

- On Mar. 22, 2011, two airplanes landed at Reagan National Airport, Washington, DC, around midnight without control tower clearance because the air traffic controller was asleep.
- On Feb. 19, 2011, an air traffic controller working the midnight shift was tired and unable to remain awake, forcing his colleague to do multiple jobs, in violation of procedures.

Most process industry plants operate 24 hours a day, and operators are required to work through the night, and to work rotating shift schedules. A disrupted sleep schedule resulting from shift work can cause sleepiness for many people, with potential for dangerous operating errors. Operating personnel must be alert and able to respond to potential problems at any time of the day or night!

There are things you can do to keep awake and alert when working at night. You should recognize the problem and take responsibility for getting enough quality sleep during the hours you are away from the plant. Your management also has a critical role to play in making sure that work schedules allow you the opportunity to get the sleep you need.



▲ Deepwater Horizon explosion



▲ 14th century German painting, "The Seven Sleepers"

Did You Know?

Major process incidents can occur at any time of the day or night. Shift workers must always be alert and able to effectively respond to potential process incidents. Here are some examples of process incidents that occurred at night:

- The 1984 Bhopal, India, toxic gas release that killed thousands of people occurred shortly after midnight.
- The 1986 Chernobyl nuclear disaster started with loss of control and an explosion at about 1 a.m.
- The 1989 Exxon Valdez oil tanker grounding and oil spill occurred shortly after midnight.
- The 2010 Deepwater Horizon explosion (top picture), which killed 11 people and caused the largest marine oil spill in history, occurred at about 10 p.m.

What Can You Do?

People are not designed for irregular sleep patterns. Shift workers face frequent sleep disturbances, which can cause excessive sleepiness. You can minimize the effects. Some examples:

- Make sure you get enough quality sleep while you are away from work.
- Make sure you have a good place to sleep during the day – dark, quiet, without disturbances.
- Take a nap immediately before you go to work.
- Work with others to help keep you alert.
- Be active – take walks and move around as much as possible.
- Don't plan tedious or difficult tasks when you are likely to be most tired. Studies show that night shift workers are most sleepy around 4–5 a.m.
- If you are having problems staying awake, consult a doctor. You may have a sleep condition that can be remedied.
- Search the Internet for more ideas on keeping alert while working at night and rotating shifts.

Make sure you get enough good quality sleep when working rotating shifts!

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