"While I relish our warm months, winter forms our character & brings out our best." **Tom Allen**

SAFETY DISPATCH

WINTER 2015

CHECK IT OUT

Yawning is infectious. We know that much of yawning is due to suggestibility & may be related to our empathy for others. You don't need to actually see a person yawn to involuntarily yawn yourself; simply hearing someone yawn or even reading about yawning can cause the same reaction. Chances are you will yawn at least once while reading this poster. It's always nice to share this time of the year.

Yawn...is it Friday yet?

WINTER HIGHLIGHTS

FREE FLU SHOTS available at Rite Aid with your City ID & Medical Insurance Card

CITYFIT EVENTS, city.fit@pittsburghpa.gov or call 255-2383

- Wellness Reward #2 information & activities begin December 1, 2105
- Wellness Gurus will be visiting your worksite early 2016 to help you stay healthy & fit

CHARITABLE EVENTS:

- Help the elderly & disabled; be a snow angel: www.pittsburghpa.gov/servepgh/snow-angels
- **BLOOD DRIVE**, 12/15/15 & 2/23/16. Go to www.centralbloodbank.org to register

TABLE 1. Fatigue Risk Factors

- Sleep deprivation
- Circadian variability
- Time awake
- Health factors (Sleep disorders, medications)
- Workload

Well-rested, alert employees are critical to safe & productive operations. Fatigue plagues us all & can be a result of one or more of the risk factors identified in **Table 1**. Winter can be especially taxing due to holiday preparations, less daylight & the warm bed that is a contrast to the cold weather. **Table 2** shows how injury rates have been associated with the extent of sleep one has. Those who have less than 5 hours of sleep a night are over 3 times more likely to be injured than those getting over 7 hours. Read on to better grasp the causes of fatigue & some solutions to assure we are competent and prepared to *safely* perform the duties required by us as City of Pittsburgh employees serving our population.

TABLE 2. Estimated Annualized Injury Rates/ Hours of Sleep*

	Estimated Annualized Injury Rate / 100 Workers					
Hours of Sleep	<5	5 - 5.9	6 – 6.9	7 – 7.9	8 - 8.9	9 – 9.9
Injury Rates	7.89	5.21	3.62	2.27	2.50	2.22

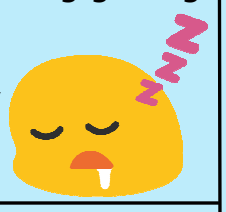
* Adapted from Lombardi it al., 2010

What's The Bottom Line?

Fatigue is especially dangerous when driving. The National Highway Traffic Safety Administration conservatively estimates that 100,000 police-reported crashes are the direct result of driver fatigue each year, resulting in an estimated 1,550 deaths, 71,000 injuries, & $12.5 billion in monetary losses.

Sleep Deprivation & the Amount of Time We are Awake

Fatigue related to not getting enough sleep is common due to family obligations, work schedule & the temptation of late night TV/ video games. Each individual requires a different amount of sleep each day, but 8 hours a day is recommended to reinvigorate our bodies after a busy day. Prioritizing getting enough sleep before a busy day at work can help you avoid performance issues caused by sleep deprivation, potentially saving you from an injury or preventing a distraction which could lead to another person's injury. Sleep well & stay safe...



Sleep Disorders

Biochemical or physical conditions may play a role in you being fatigued. Here are some culprits:

- ***Chronic Fatigue Disorder***: complex medical condition that could be a combination of many underlying health issues.
- ***Sleep Apnea***: characterized by pauses in breathing or instances of shallow or infrequent breathing during sleep. It can be addressed with medical intervention, respiratory equipment or a very patient spouse wearing earplugs to bed.
- ***Pierogie Tummy***: delicious pierogies smothered in butter & onions can create gas, stomach rumbling & irritation that can deprive us of a good night's sleep. Eat in moderation or welcome fatigue.
- ***Playoff Regret***: anxiety associated with short playoff seasons for our beloved franchises can keep us up contemplating what could have been. Remember that we have little control over their fate & there is always next year (or next month) to win it all.

Medications

Many prescription & nonprescription drugs can cause weakness, drowsiness & fatigue. A few examples are antianxiety medicines, antidepressants, high blood pressure medicines & statin medicines for high cholesterol. If you feel these medications may be contributing to debilitating fatigue, **do not** stop taking them for your underlying health condition; talk with your physician first to determine how you may be able to better manage your health condition while eliminating fatigue and its effects.

Workload Fatigue

It is possible that the way you perform the tasks required of you in your position is contributing to workload fatigue. Ergonomics is the study of designing & arranging things people use so that the people & equipment interact most efficiently & safely. Always attempt to keep items you use most frequently within reach, plan ahead so as to assure your task does not exceed your physical limitations & if your job requires you to sit most of the day, be sure to take frequent walks to improve circulation.

City-County Building Portico December 2015

Environmental Factors

The amount of light, noise and the temperature all play a role in fatigue. Light stimulates the body to produce melatonin (hormone that controls sleep cycle) and is an especially important factor for those working evening shifts. Sound can be either sedating (*Yawwnni*) or arousing (Metallica, oh yeah). A colder workspace promotes alertness while warmer environments can lead to drowsiness.

Circadian Rhythm

A person's circadian rhythm is an internal biological clock that regulates a variety of biological processes (*i.e.* our sleep-wake cycle, temperature regulation & endocrine systems) according to an approximate 24-hour period. When working irregular shifts, changing time zones, or accruing evening hours in front of a bright monitor/ TV screen, circadian variability occurs & can lead to fatigue, irritability & a need for caffeinated beverages to imitate our body being in rhythm (hot coffee is a delicious, but temporary remedy).

Combatting Fatigue

While getting to bed on time is the best way to assure you have the energy you desire, it has been shown that eating smaller meals more frequently throughout the day will help steady your blood sugar level & fight fatigue. Drinking more water can help too. Physical exercise & yoga can improve the efficiency of your heart, lungs, & muscle. Energy drinks are not FDA approved & can be harmful, so avoid them. Try fish oil.

Brought to you by the Department of Personnel & Civil Service Commission.
Archived Safety Dispatches can be found at http://pittsburghpa.gov/personnel/safety-dispatch
For comments, suggestions or other safety resources contact David Reed, Safety Manager, 412-255-2403