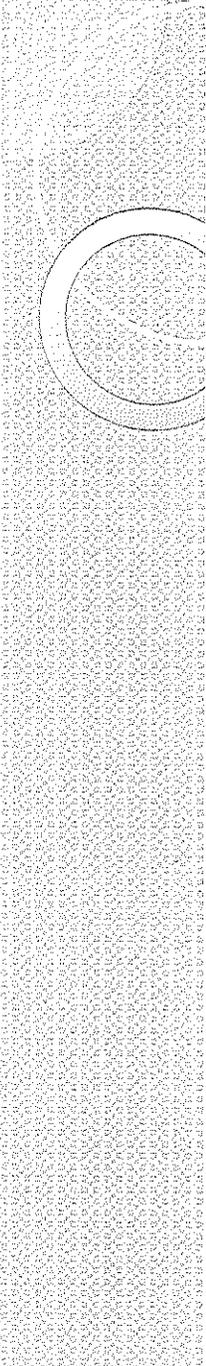


# Changing Time

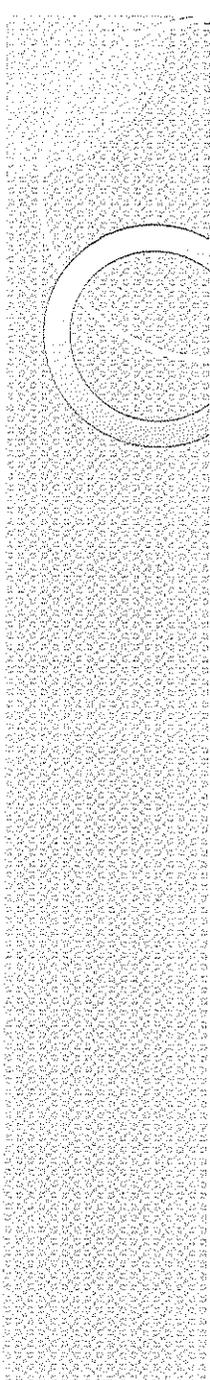
A presentation on Daylight Saving Time

Mark Bryant, LC, President, BNA Consulting, Inc.



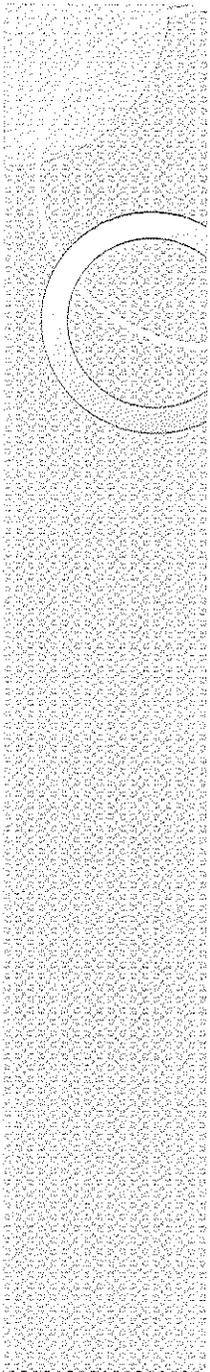
# Introduction

- Mark Bryant, LC, President of BNA Consulting, Inc.
- Been in the industry since 1978.
- Studied the eye for 25 years.
- Raised on a ranch



# How important is light?

- Light is the most powerful time cue for resetting and ensuring correct synchronization of the internal clock.
- Hospital health.
  - Patients
  - Health Care Providers

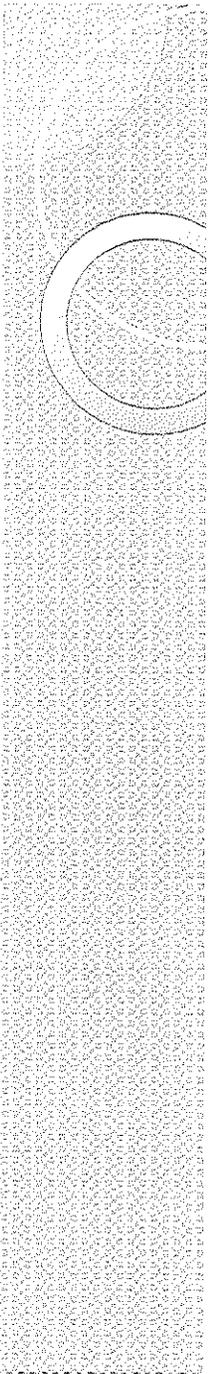


# Circadian Disruption and Health in Humans

- The human biological clock is very sensitive.
- Disruption of this clock causes long term medical problems.
- Study of shift workers show an increase in cancer cases. Up to 79% in some types of cancer. 4% increase in stroke for every 5 years on shift duty.
- Sleep related issues cost companies \$434 million per year.

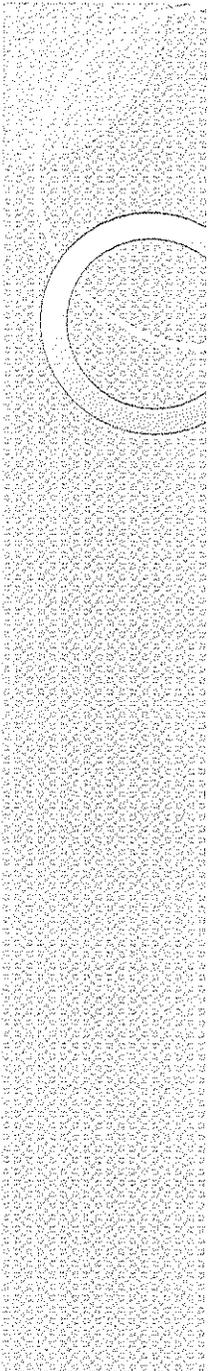
Eva S. Schernhammer, MD, PhD, Medicine Channing Laboratory

BusinessNews



# Have we experienced Circadian Disruption?

- Jet Lag

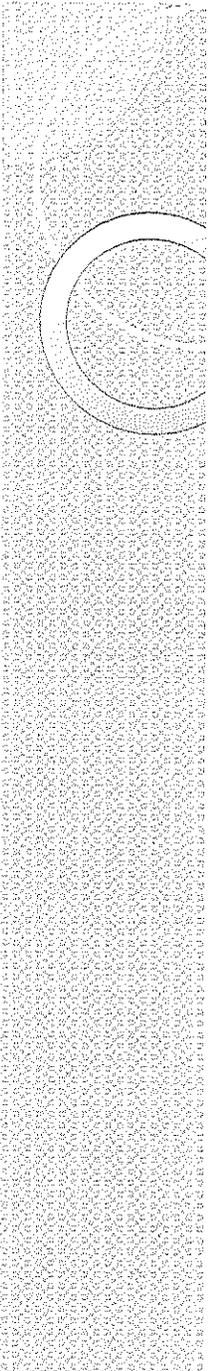


# Springing Forward

## When we spring forward, what happens?

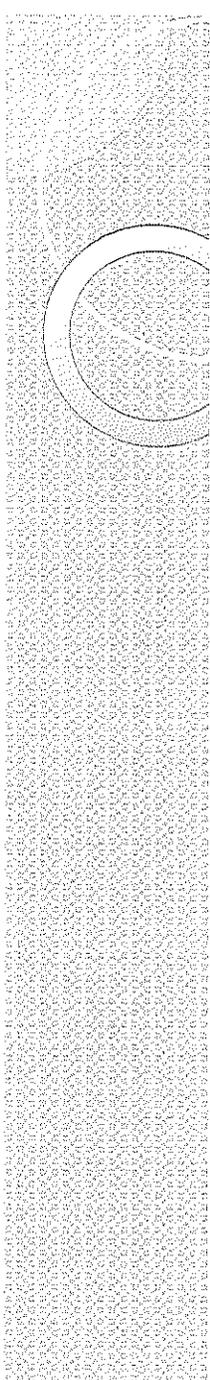
- 6 – 17% increase in motor vehicle accidents.
- Including 17% increase in fatal crashes.
- 5% increase in heart attacks

- Charles Czeisler M.D. Ph.D – Harvard Medical School



# Leaving it the same

- **Decrease in deaths from traffic accidents.**  
Journal of Accident Analysis & Prevention
- **Increase in work productivity. Less accidents at work.** Journal of Applied Psychology 2009
- **Increase in SAT scores of 2%.** Journal of Neuroscience, Psychology, and Economics
- **Decrease in Heart Attacks**

A vertical decorative bar on the left side of the slide, featuring a circular graphic with a crescent shape inside, set against a textured background.

# Summary

- Leave time alone.
  - Stay on standard time, or daylight saving time year round.