

# Why Shift Length Matters

**Healthy Officers are Safer Officers:**  
*The Nexus Between Performance and Health*  
**A Harvard Kennedy School Webinar about**  
**NIJ's Officer Safety and Wellness Research Portfolio**

**Karen L. Amendola, PhD**  
Police Foundation  
*September 18, 2012*

*With researchers:*  
**Weisburd, Hamilton, Jones, Slipka,**  
**Heitmann, Shane, & Ortiz**



# Survey and Experiment

## Random Survey of U.S. Police Agencies' Current Shift Practices at the end of 2005 & 2009

- 300 randomly selected agencies (50 or more sworn).
- 96% response rate in 2005, 100% in 2009.

### Findings

- There has been a significant reduction in routinely rotating shifts; 72% now operate on fixed shifts (up from 54% in 2005).
- Agencies are moving away from traditional 8-hour schedules and trying shifts between 9 and 13 hours.
- Small agencies favor 8-hour and 12-hour shifts; Large agencies favor 10-hour shifts.

## Randomized Field Experiment in Two Cities (Detroit, Michigan and Arlington, Texas)

### Purpose

- To assess whether shift length has an impact on safety, health, fatigue, performance, or other critical factors

# Sample & Measures

326 officers were randomly assigned to either 8-, 10-, or 12-hr shifts, and 275 participated (84%)

Measures consisted of surveys, departmental data, logs of sleep and alertness, and laboratory simulations:



Driving simulator



Reaction time measure



Shooting simulator



Pupillometer



Video vignettes



# Results

**10-hr shifts had advantages over 8-hr shifts**

- Officers got ½ hour more sleep per night (3.5 hrs/week)
- Officers liked the shifts better
- Officers worked significantly less overtime

**12-hr shifts did not have these advantages, AND  
officers on these shifts were sleepier and less alert**

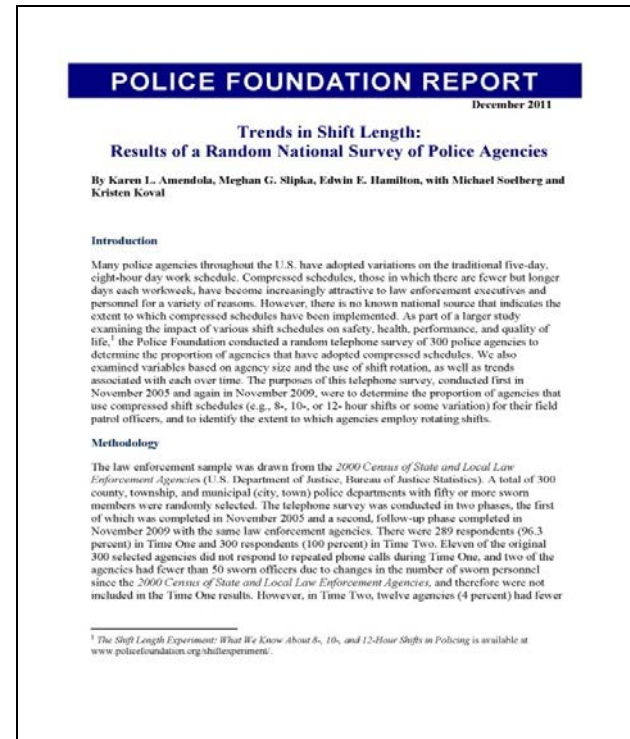
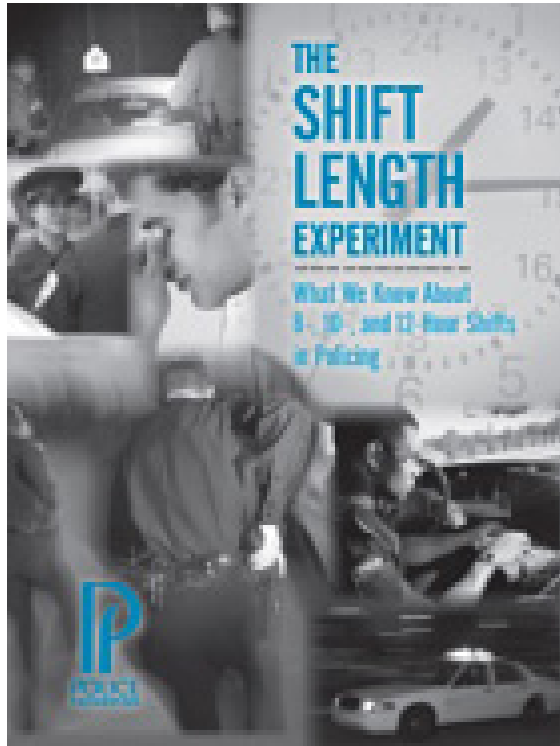
**8-hr shifts were associated with 5 times more overtime  
than those on 10s, and 3 times more than those on 12s**

# Implications

- Agencies wishing to adopt 10- or 12-hr shifts should not be too concerned about performance problems.
- However, agencies wishing to adopt 12-hr shifts should proceed with caution because
  - 12-hr officers were more sleepy and less alert
  - Past research suggests increased safety hazards, particularly when combining them with more than 48 hrs of work per week
- Agencies moving to 12-hr shifts should consider
  - Restricting or more closely monitoring overtime and off-duty
  - Establishing policies on sleep and fatigue
- Cost savings related to overtime may be realized by agencies using 10- or 12-hour shifts.

# Questions?

- For additional copies of these and other reports, go to:  
<http://policefoundation.org/indexShiftExperiment.html>



Karen L. Amendola, PhD  
[kamendola@policefoundation.org](mailto:kamendola@policefoundation.org)  
(202) 833-1460