



Indiana State Department of Health

“Improving Health Care Quality”

Judith Monroe, M.D.
Indiana State Health Commissioner

Challenges to Health Care Quality



OUR CHALLENGES

PREPAREDNESS:

Plan, Respond and Recover



Following a disaster, vital services like power, communications and even medical care may not be available for hours ... or even days.

The time to prepare is NOW.

Be ready to act on your own.

Do it for yourself and for those you love.



Indiana State
Department of Health

OUR CHALLENGES

Columbus Regional Hospital – June 7, 2008



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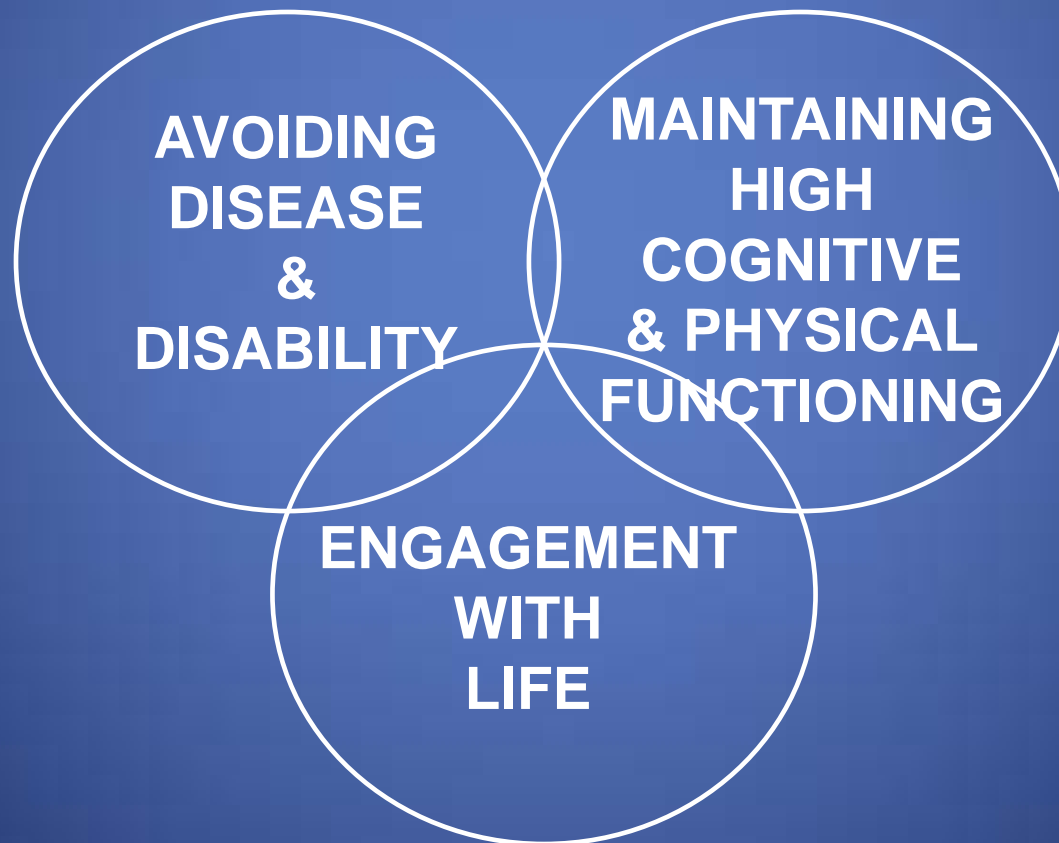
OUR CHALLENGES



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SUCCESSFUL AGING

Rowe & Kahn, 1998



Number of deaths for leading causes of death

- Heart disease: 652,091
- Cancer: 559,312
- Stroke (cerebrovascular diseases): 143,579
- Chronic lower respiratory diseases: 130,933
- Accidents (unintentional injuries): 117,809
- Diabetes: 75,119
- Alzheimer's disease: 71,599
- Influenza/Pneumonia: 63,001
- Nephritis, nephrotic syndrome, and nephrosis: 43,901
- Septicemia: 34,136



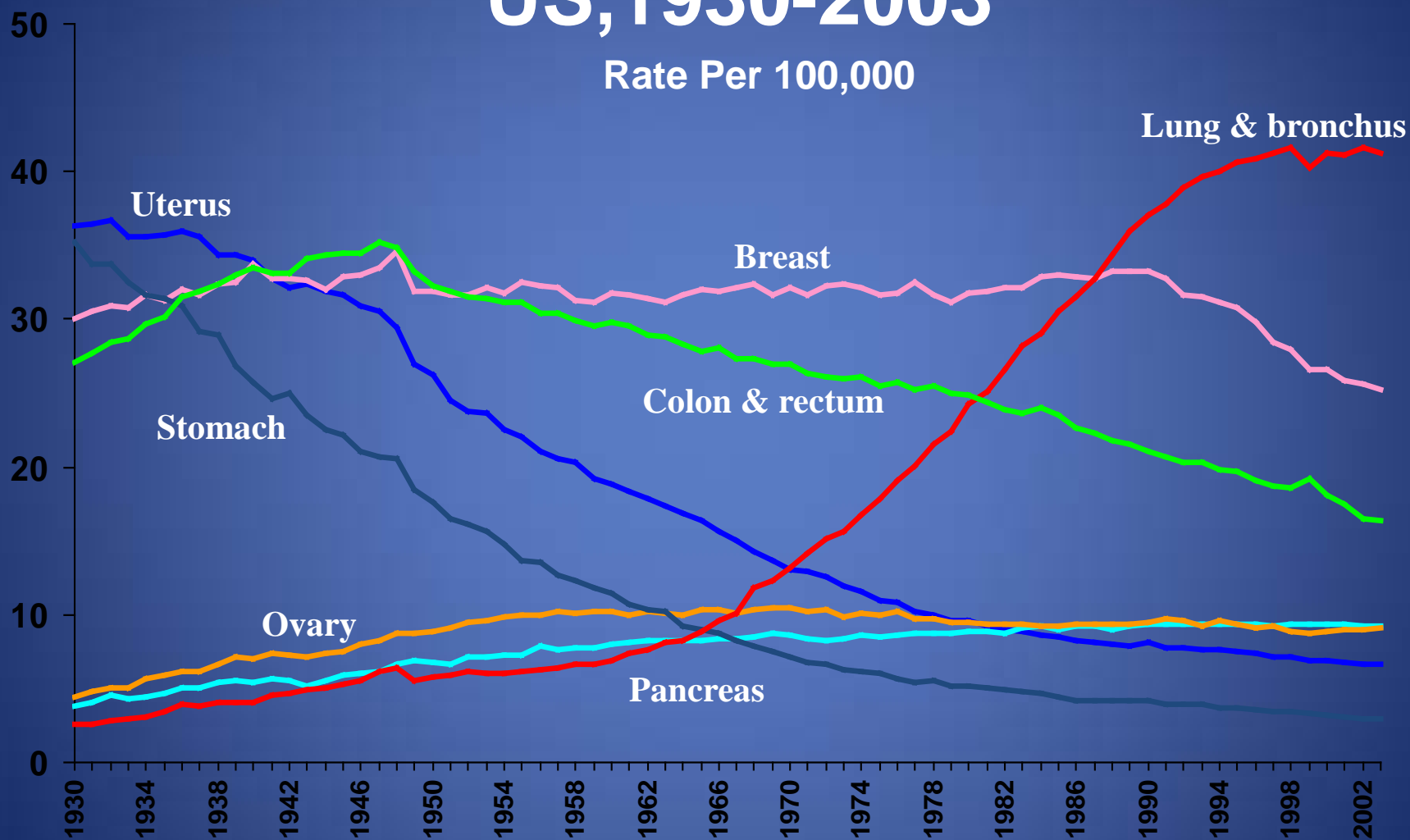
Leading Health Indicators

- Physical Activity
- Overweight and Obesity
- Tobacco Use
- Substance Abuse
- Responsible Sexual Behavior
- Mental Health
- Injury and Violence
- Environmental Quality
- Immunization
- Access to Health Care



Cancer Death Rates*, for Women, US, 1930-2003

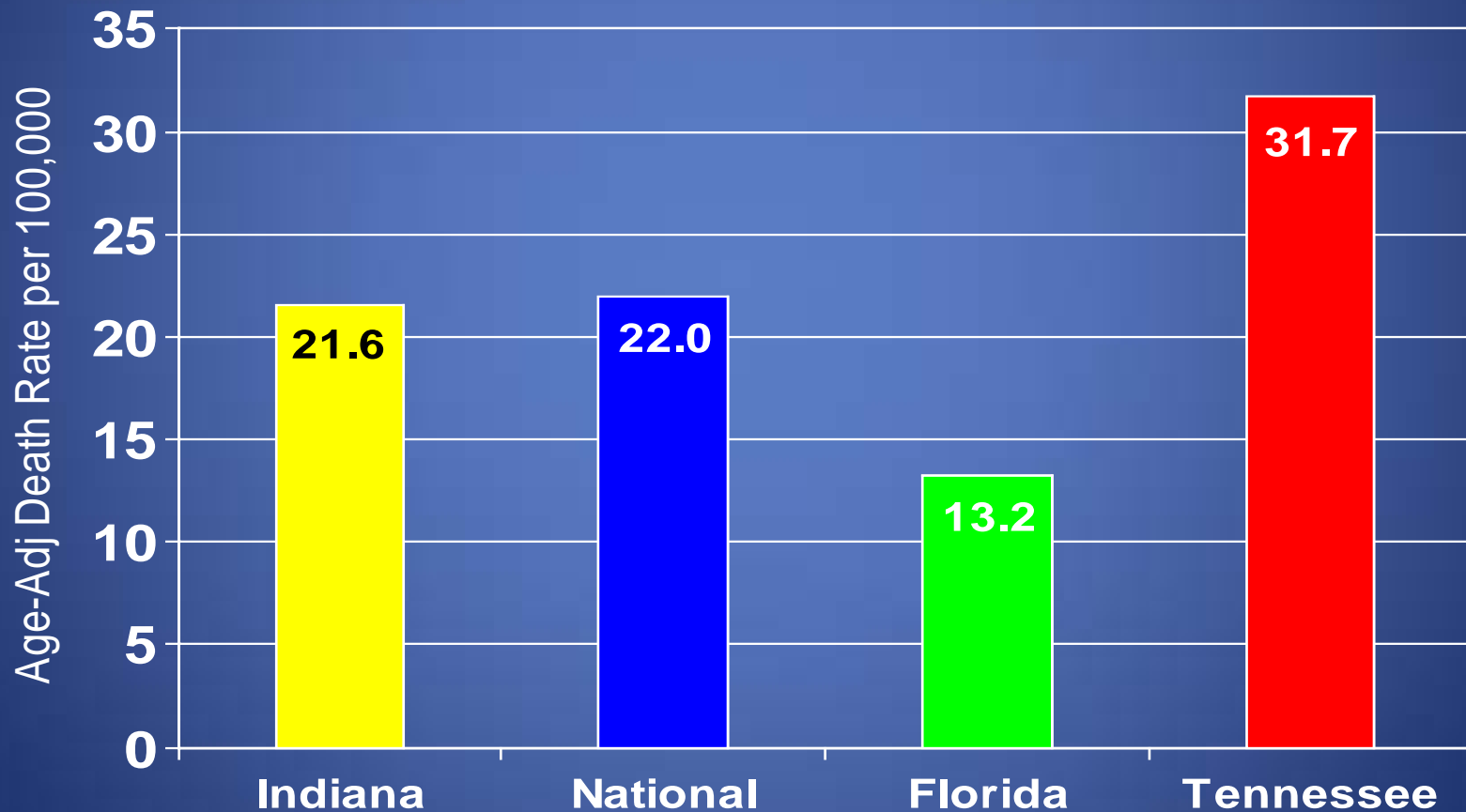
Rate Per 100,000



*Age-adjusted to the 2000 US standard population.

Source: US Mortality Public Use Data Tapes 1960-2003, US Mortality Volumes 1930-1959, National Center for Health Statistics, Centers for Disease Control and Prevention, 2006.

Influenza and Pneumonia Mortality - 2003

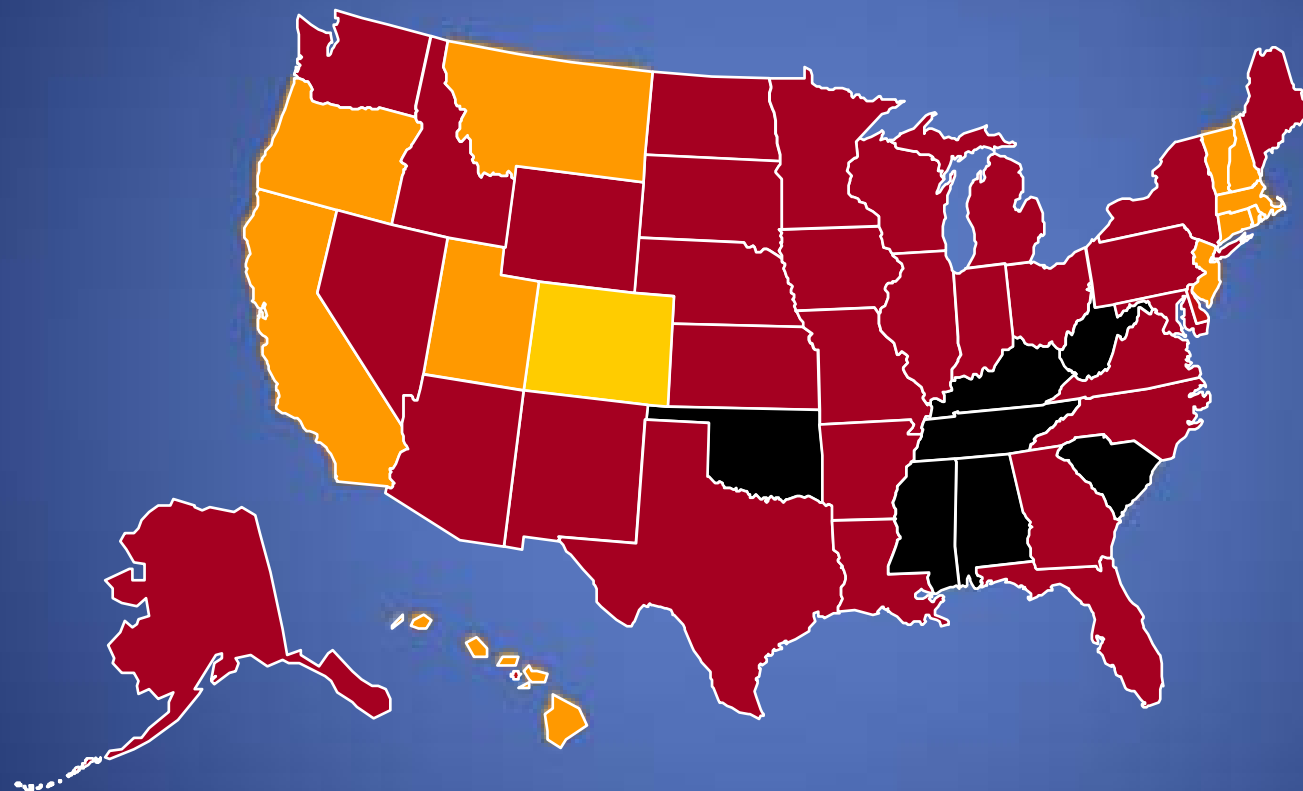




Indiana ranks 29th
Source: NCHS

Obesity Trends* Among U.S. Adults

BRFSS 2008

(BMI ≥ 30.0 - or a person 5 feet 6 inches tall weighing 186 or more pounds*)

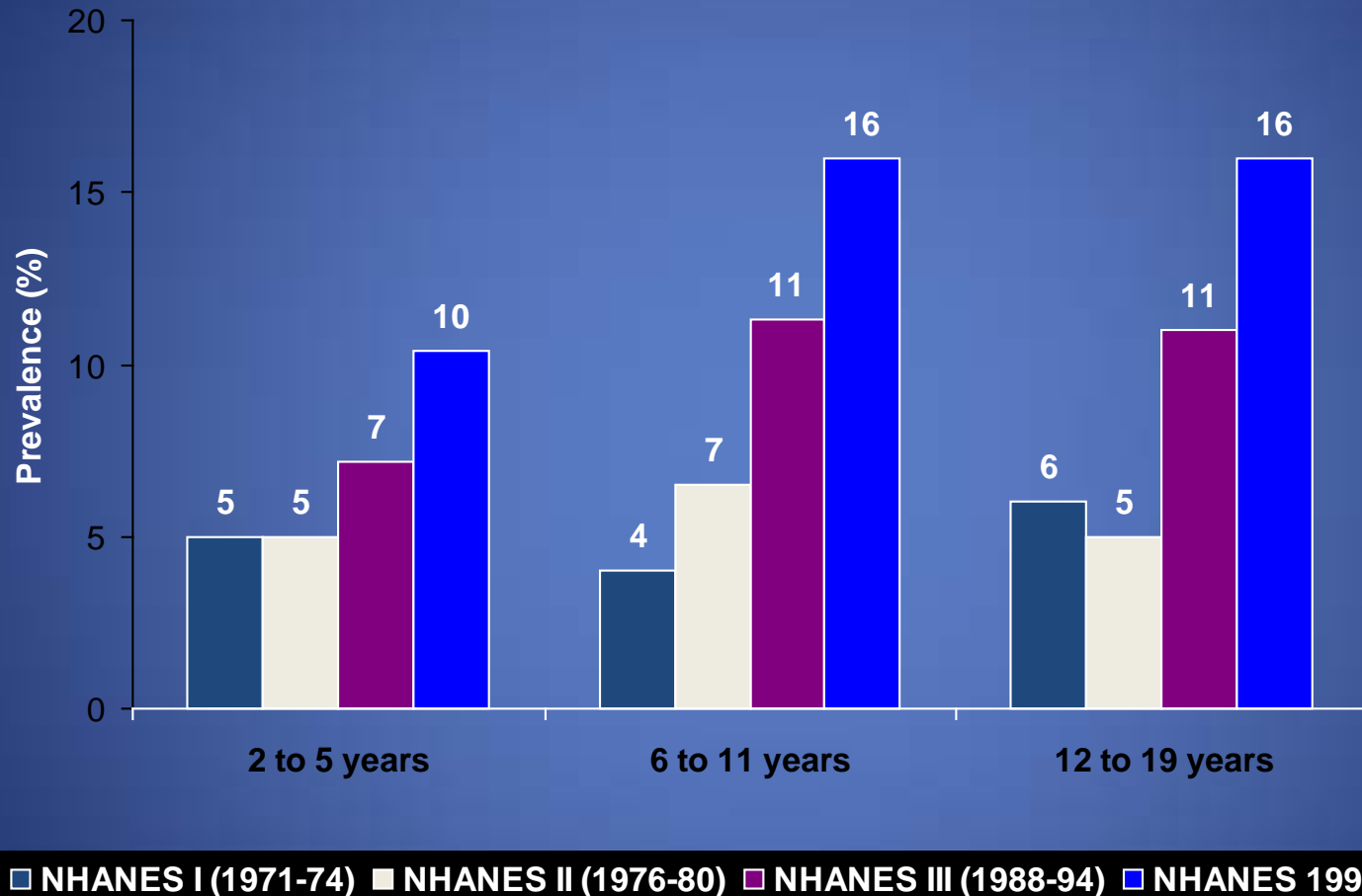


 <10%	 10%–14%	 15%–19%	 20%–24%	 25%–29%	 $\geq 30\%$
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*CDC Adult BMI Calculator

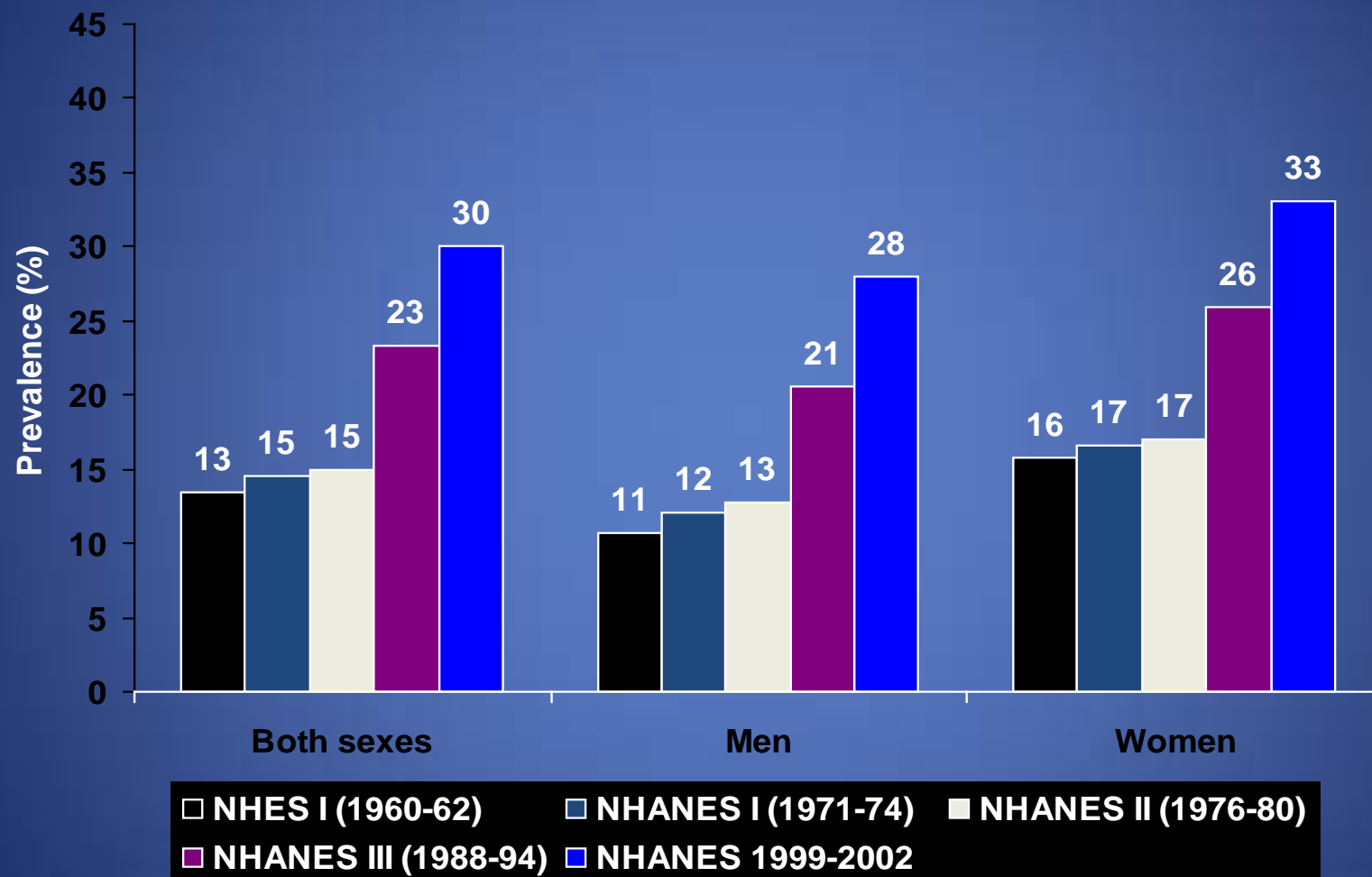
Source: Behavioral Risk Factor Surveillance System, CDC.

Trends in Overweight* Prevalence (%), Children and Adolescents, by Age Group, US, 1971-2002



*Overweight is defined as at or above the 95th percentile for body mass index by age and sex based on reference data.
Source: National Health and Nutrition Examination Survey, 1971-1974, 1976-1980, 1988-1994, 1999-2002, National Center for Health Statistics, Centers for Disease Control and Prevention, 2002, 2004.

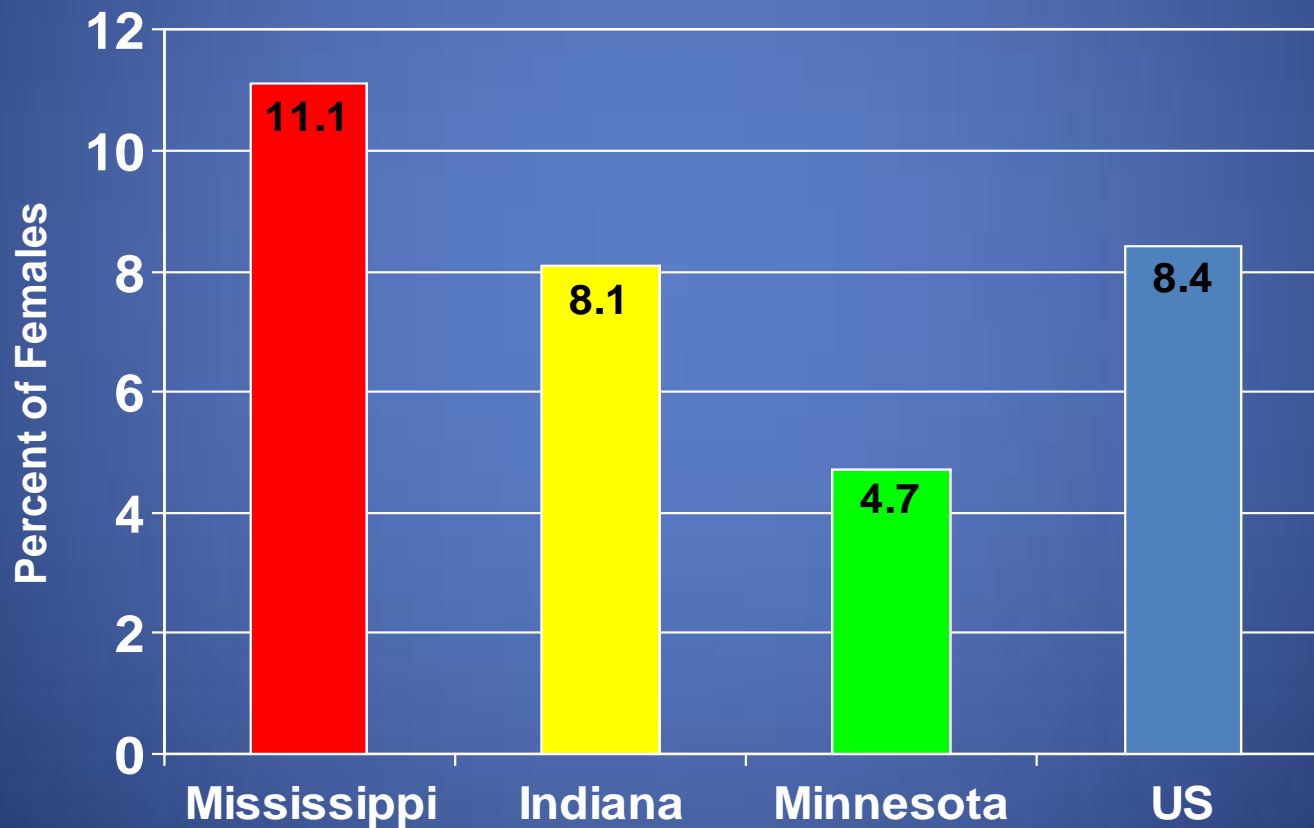
Trends in Obesity* Prevalence (%), By Gender, Adults Aged 20 to 74, US, 1960-2002



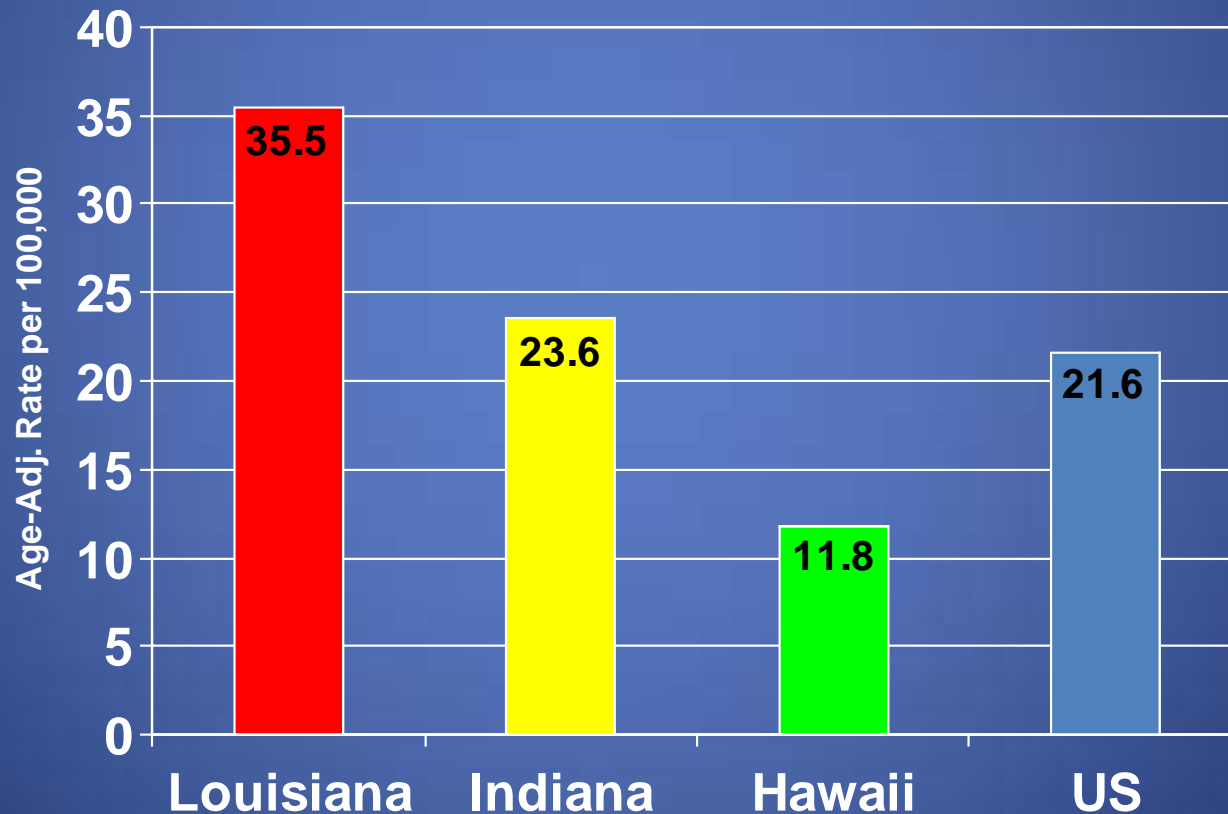
*Obesity is defined as a body mass index of 30 kg/m² or greater.

Source: National Health Examination Survey 1960-1962, National Health and Nutrition Examination Survey, 1971-1974, 1976-1980, 1988-1994, 1999-2002, National Center for Health Statistics, Centers for Disease Control and Prevention, 2002, 2004.

Diabetes Prevalence Females 2007



Death Rates from Diabetes Females 2005



World's 65 and older population is expected to triple by mid-century

Currently, less than 8% of the world's population is 65 and older

By 2030, that population is expected to reach 12%

By 2050, that share is expected to reach 16%

In the United States, the 65 and over population will more than double by 2050

[Source: U.S. Census Bureau]



The Pressure Ulcer Challenge

- Pressure ulcers are a significant health problem in Indiana
- The aging population along with health trends suggests potential for even greater numbers of pressure ulcers
- Health problems are often also risk or contributing factors for pressure ulcers



Licensing and Certification Surveys of Nursing Homes

- Cited pressure ulcers as a deficiency (F314) 186 times in 2008
- Citations were generally for failure to assess for pressure ulcers or failure to identify an existing pressure ulcer



Centers for Medicare and Medicaid Services (CMS) GPRA Data

4th Quarter – 2005

- 8.6%: Indiana's nursing home pressure ulcer rate
- Indiana had the highest rate in Region V

1st Quarter – 2007

- 8.7%: Indiana's nursing home pressure ulcer rate
- Indiana continued to have highest rate in Region V



Indiana Medical Error Reporting System

Top Reported Event for Three Consecutive Years:
Stage three or four pressure ulcer acquired after
admission to a hospital

2006: 26 reported events

2007: 27 reported events

2008: 33 reported events



Indiana's Response to the Pressure Ulcer Challenge



Step One: Indiana Health Care Leadership Conference - October 30, 2007

- Initiative kickoff conference to increase awareness and focus on the problem of pressure ulcers
- 1,024 attendees from nursing homes, hospitals, state surveyors, and health care organizations
- Speakers provided best practices that have successfully contributed to the reduction of pressure ulcers
- Education and training materials were provided



Step Two: Resources

- Identified problem: Long term care facilities generally lease pressure reducing mattresses which may result in devices not being immediately available upon admission
- Solution: The ISDH purchased one high-end pressure reducing mattress for every nursing home to ensure their availability to the facility at all times
- Training was provided by the vendor on the proper use of the mattress



Step Three: Indiana Pressure Ulcer Initiative

Goals of Initiative

- Improve the assessment and identification of pressure ulcers
- Reduce the number of pressure ulcers
- Improve care coordination



OUR APPROACH



Improving the System



Indiana State
Department of Health

Management by Objective

- Specific
- Measurable
- Achievable
- Relevant
- Time-based



Indiana Pressure Ulcer Initiative

OUTCOMES



Expected Cycle of Initiative

- Learning Curve: Initial constant numbers
- Heightened Awareness and Assessment: Increased number of pressure ulcers identified
- Implementation of Systems: Decrease in number of pressure ulcers



Preliminary Outcomes

Calculated based on the peak number of pressure ulcers compared to the number of pressure ulcers in June 2009 for reporting facilities.

The number of reporting facilities and corresponding census varies between reporting periods. We expect the percents to decline slightly when additional providers report.

Nosocomial pressure ulcers are defined as pressure ulcers acquired while under the care of a facility or agency.



Combined Initiative Outcome
for Participating Facilities and Agencies

Nosocomial Pressure Ulcers Reduced
by 38%

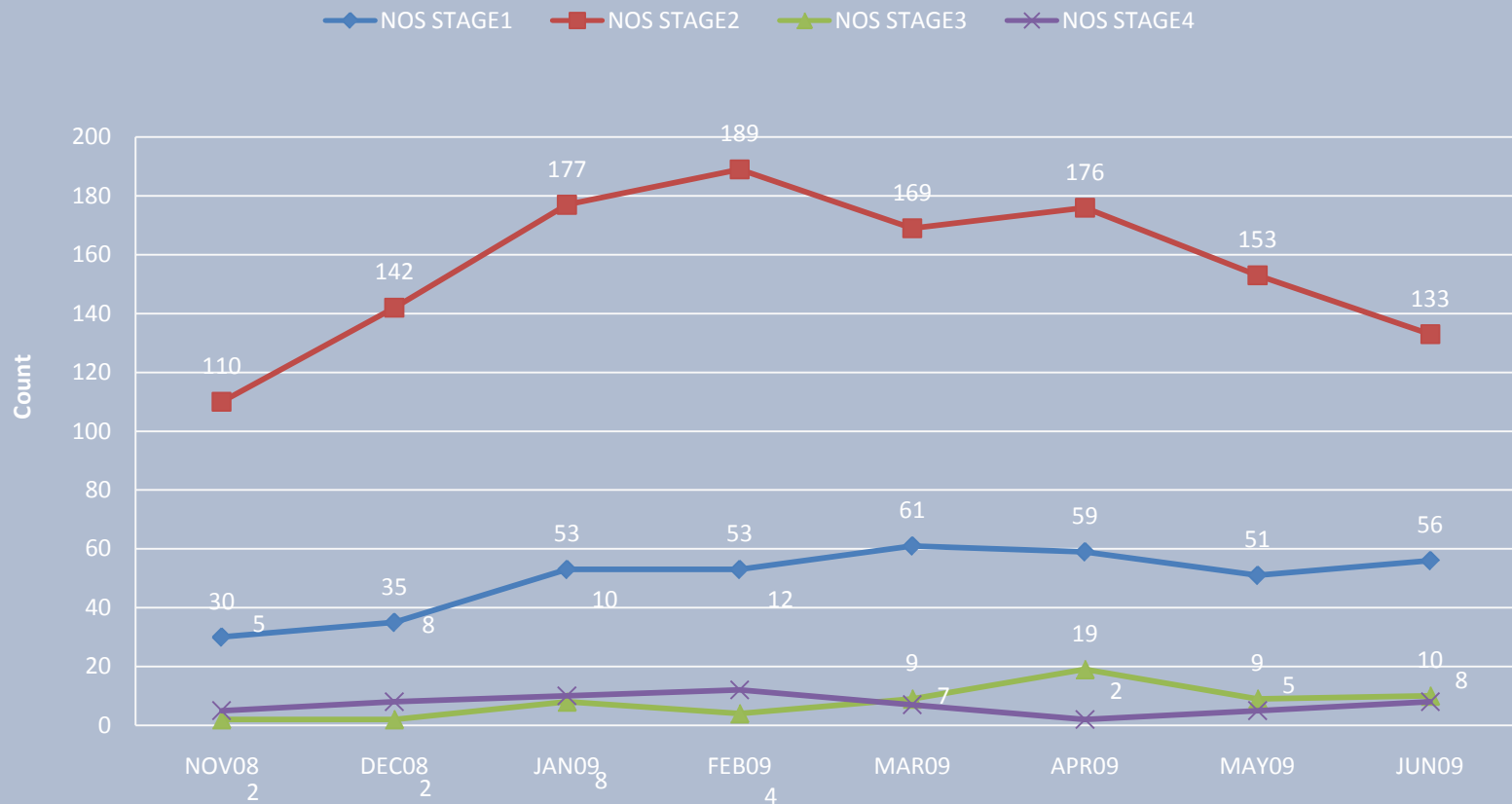
Pressure Ulcers Present on Admission
Reduced by 30%

Total Pressure Ulcer Reduction 32%



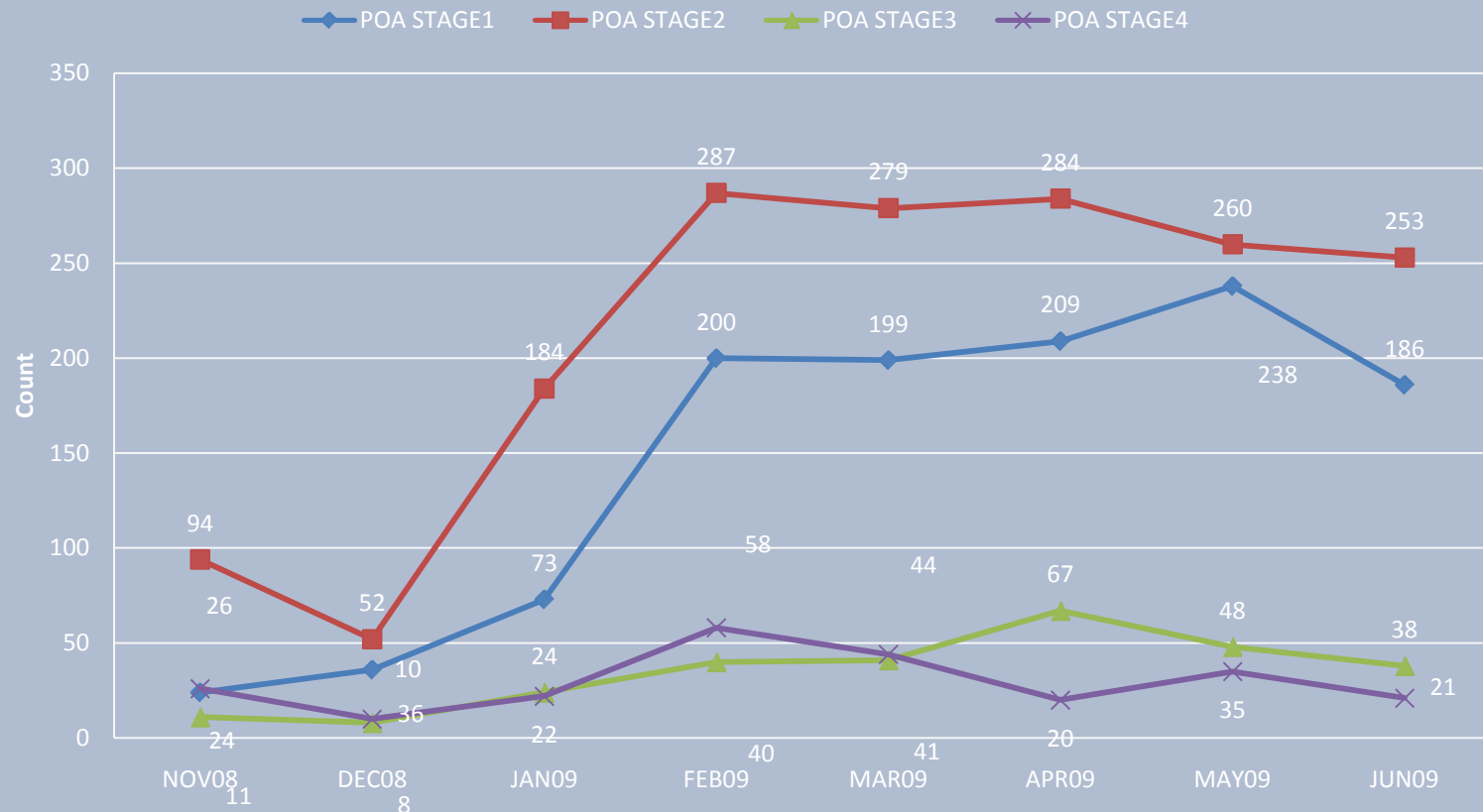
Indiana Pressure Ulcer Initiative

PRESSURE ULCERS REPORTED All Participants - Nosocomial by Stage



Indiana Pressure Ulcer Initiative

PRESSURE ULCERS REPORTED All Participants - Present on Admission by Stage



Outcome for Participating Nursing Homes

Nosocomial Pressure Ulcers Reduced
by 39%

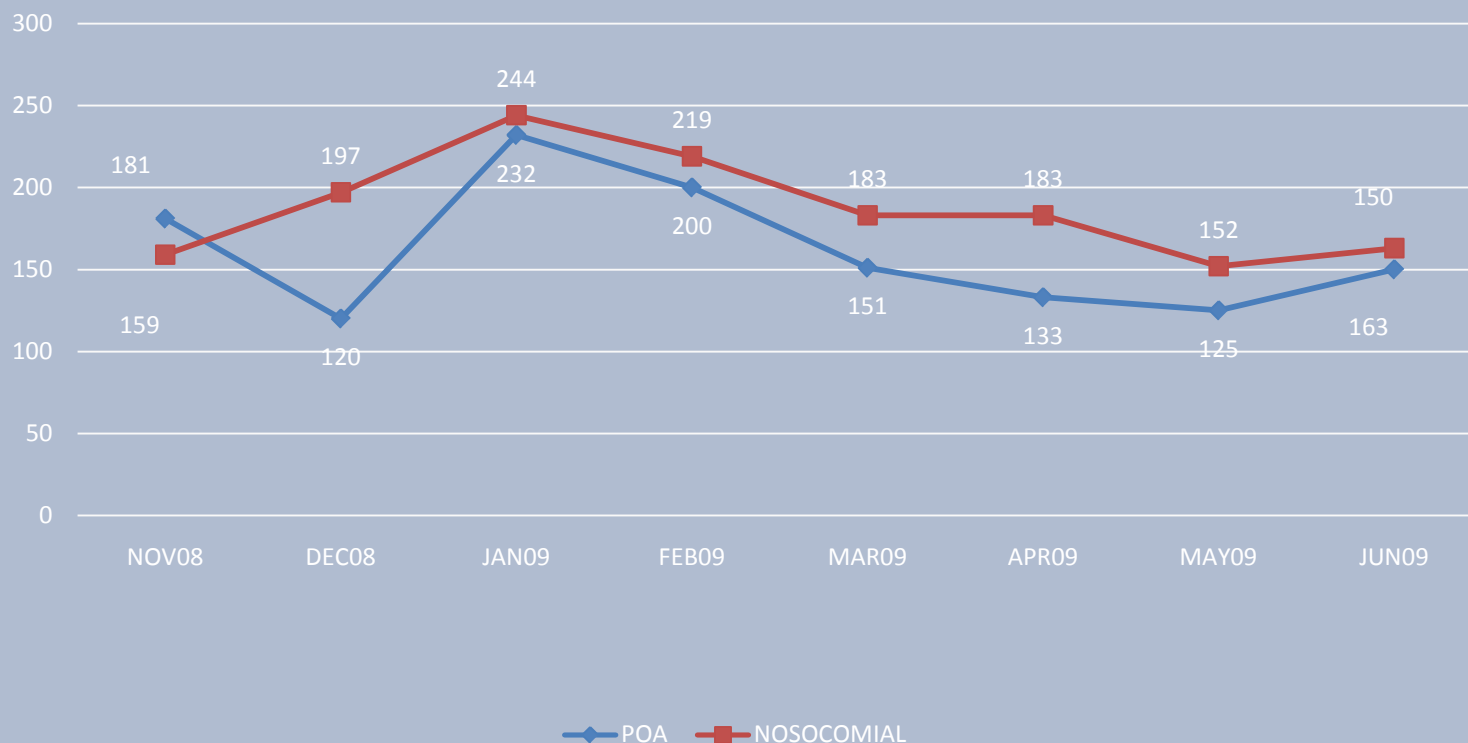
Pressure Ulcers Present on Admission
Reduced by 30%

Total Pressure Ulcer Reduction of 34%



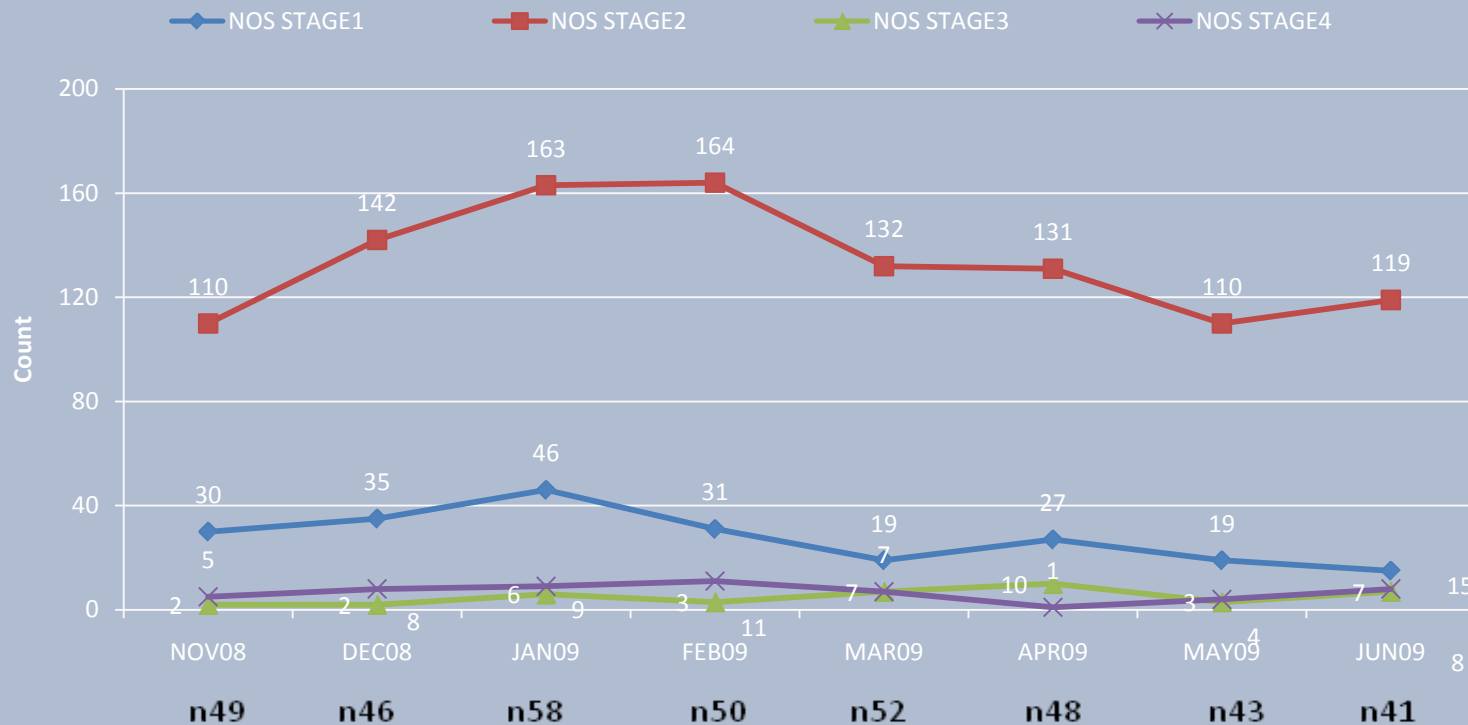
Indiana Pressure Ulcer Initiative

TOTAL PRESSURE ULCERS REPORTED Participating Long Term Care Facilities (LTC)



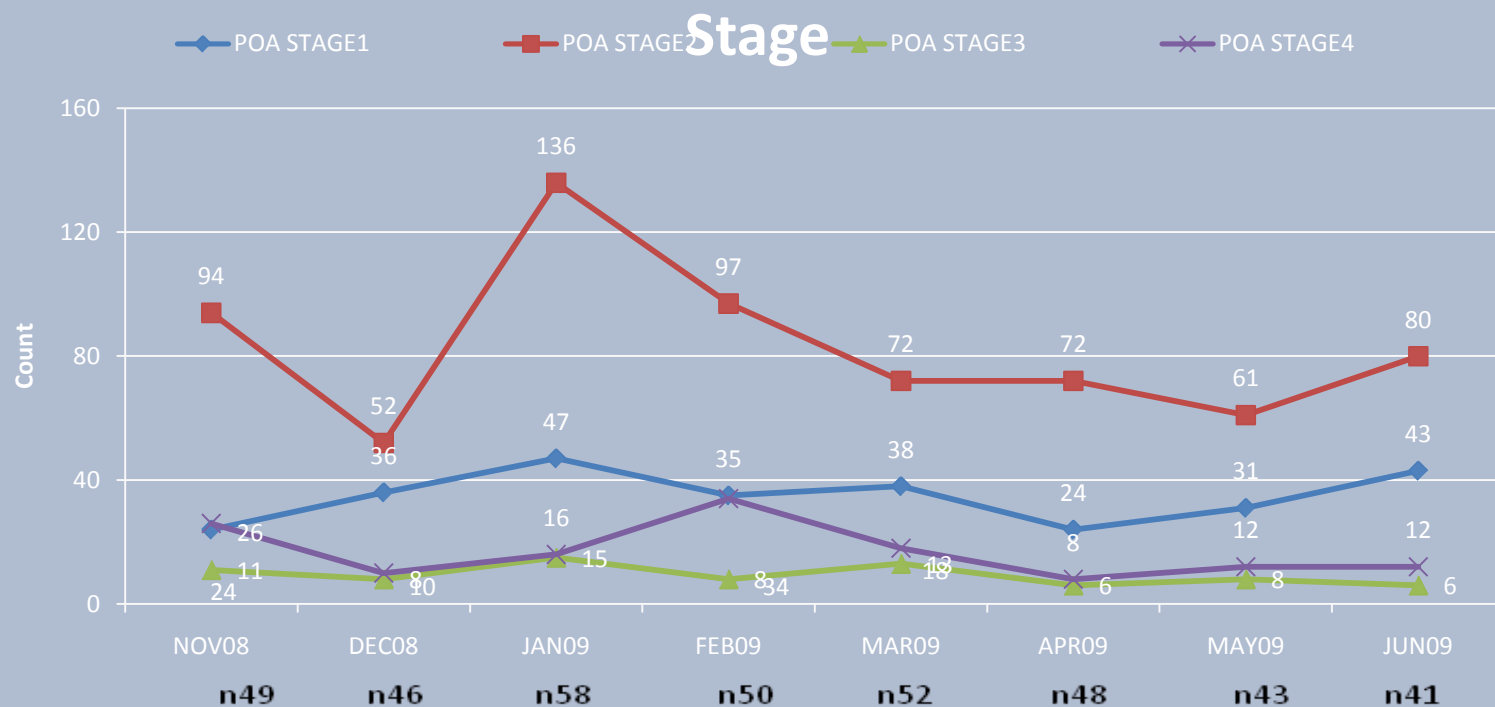
Indiana Pressure Ulcer Initiative

PRESSURE ULCERS REPORTED Long Term Care - Nosocomial by Stage



Indiana Pressure Ulcer Initiative

PRESSURE ULCERS REPORTED Long Term Care - Present on Admission by



Outcome for Participating Home Health and Hospice Agencies

Nosocomial Pressure Ulcers
Reduced by 28%

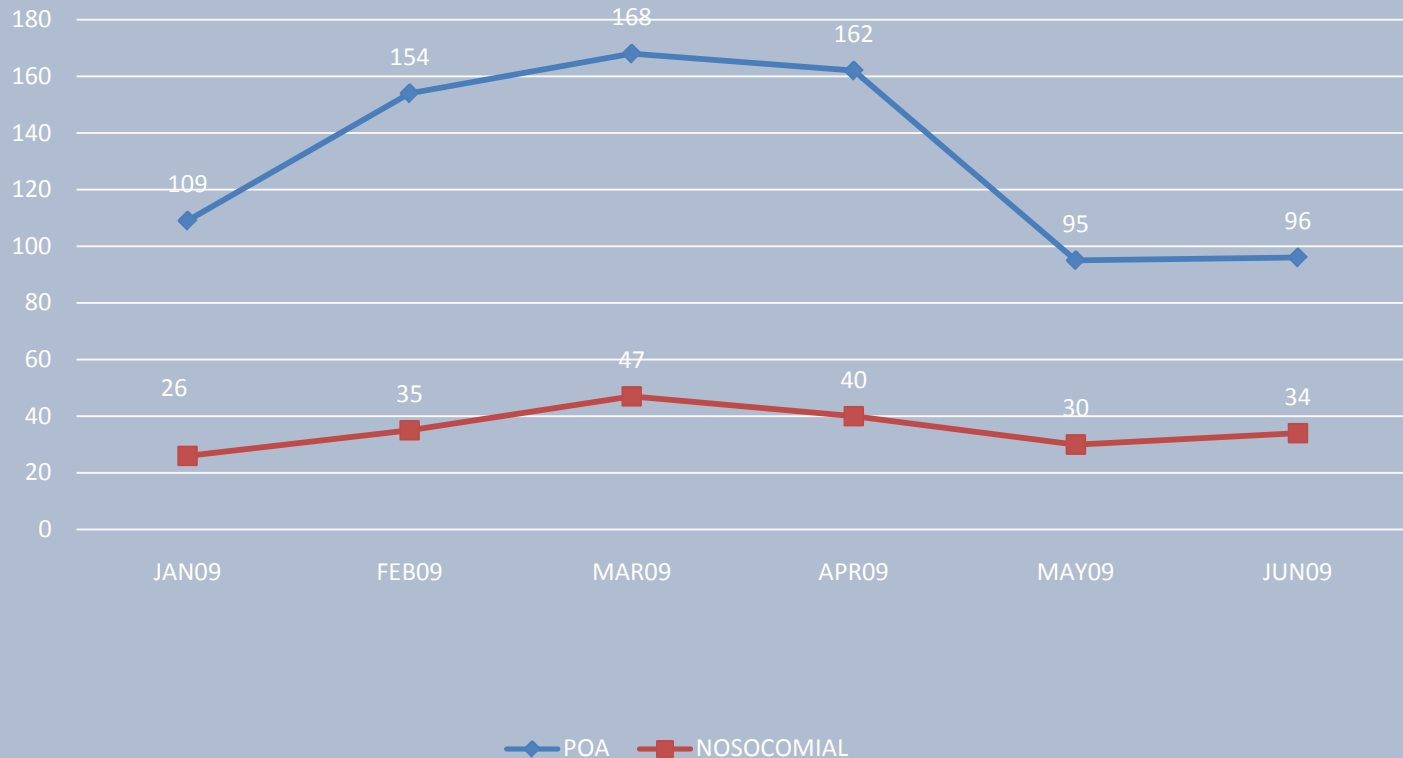
Pressure Ulcers Present on
Admission Reduced by 43%

Total Pressure Ulcer Reduction 40%



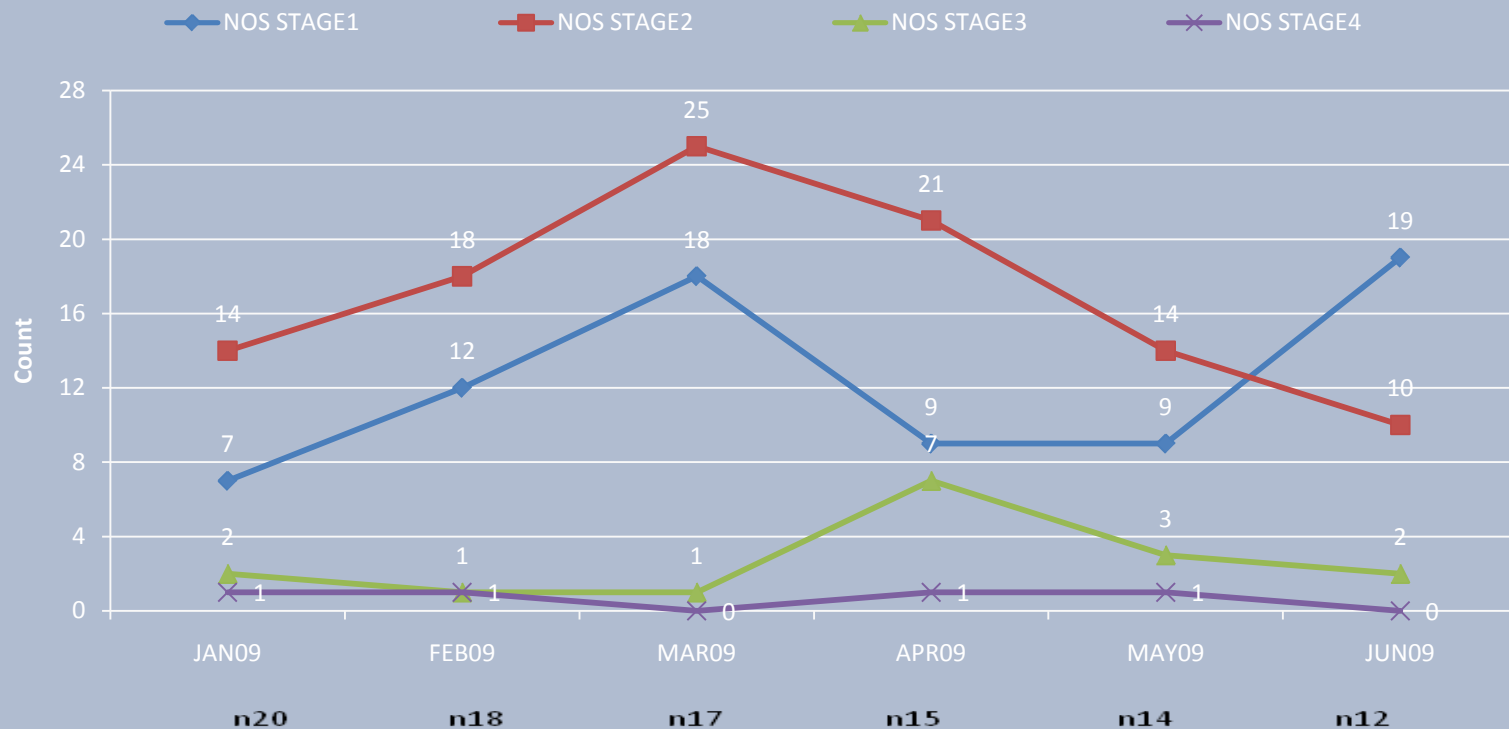
Indiana Pressure Ulcer Initiative

TOTAL PRESSURE ULCERS REPORTED Participating Home Health Agencies



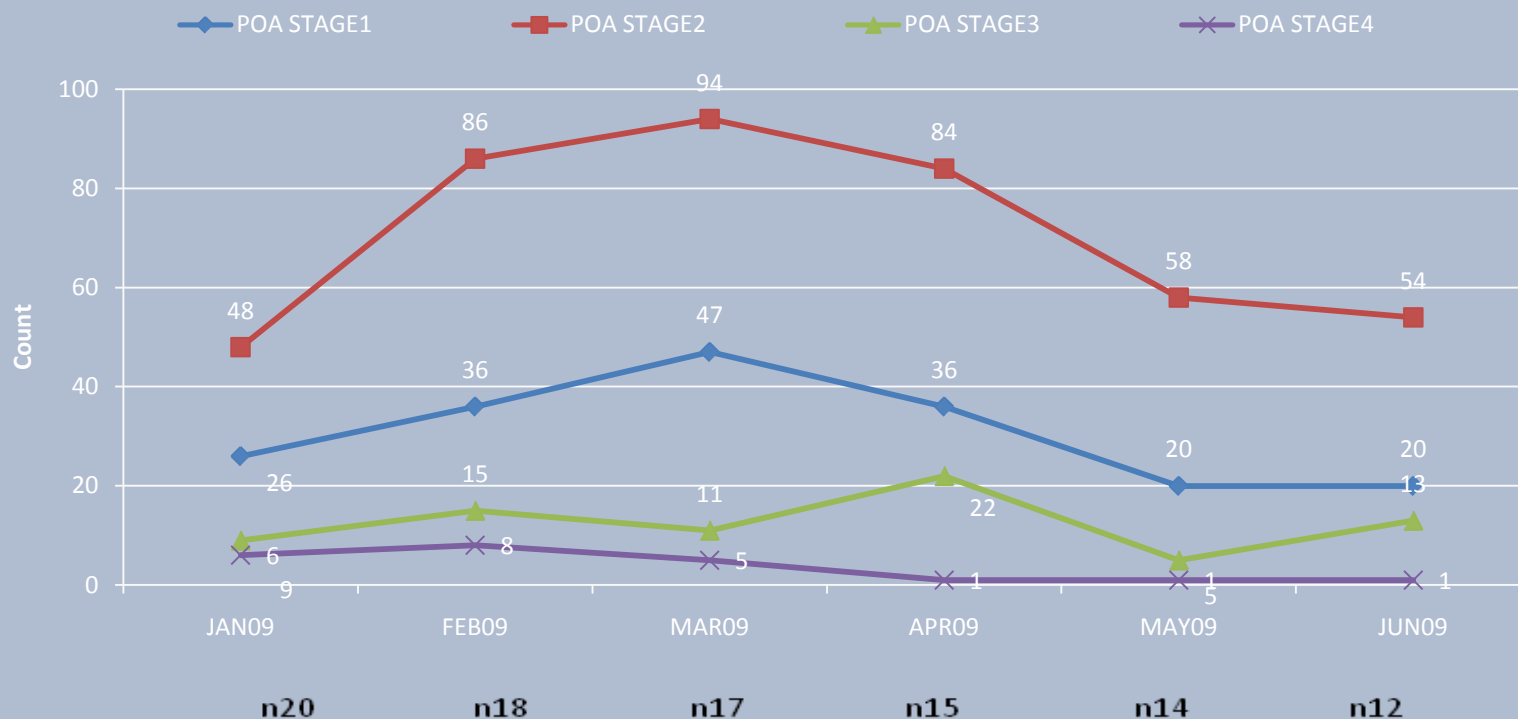
Indiana Pressure Ulcer Initiative

PRESSURE ULCERS REPORTED Home Health - Nosocomial by Stage



Indiana Pressure Ulcer Initiative

PRESSURE ULCERS REPORTED Home Health - Present on Admission by Stage



Outcome for Participating Hospitals

Nosocomial Pressure Ulcers
Reduced by 44%

Pressure Ulcers Present on
Admission Reduced by 26%

Total Pressure Ulcer Reduction 28%



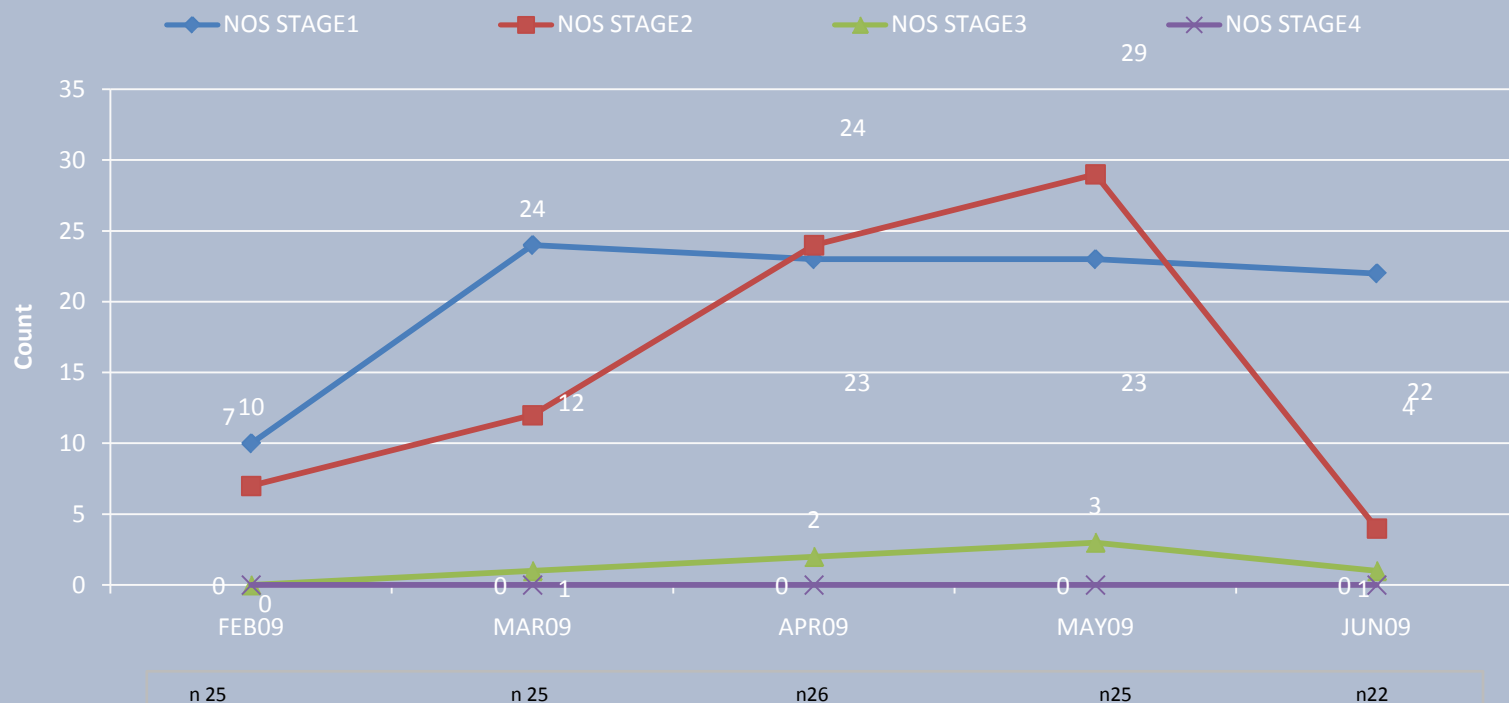
Indiana Pressure Ulcer Initiative

TOTAL PRESSURE ULCERS REPORTED Participating Hospitals



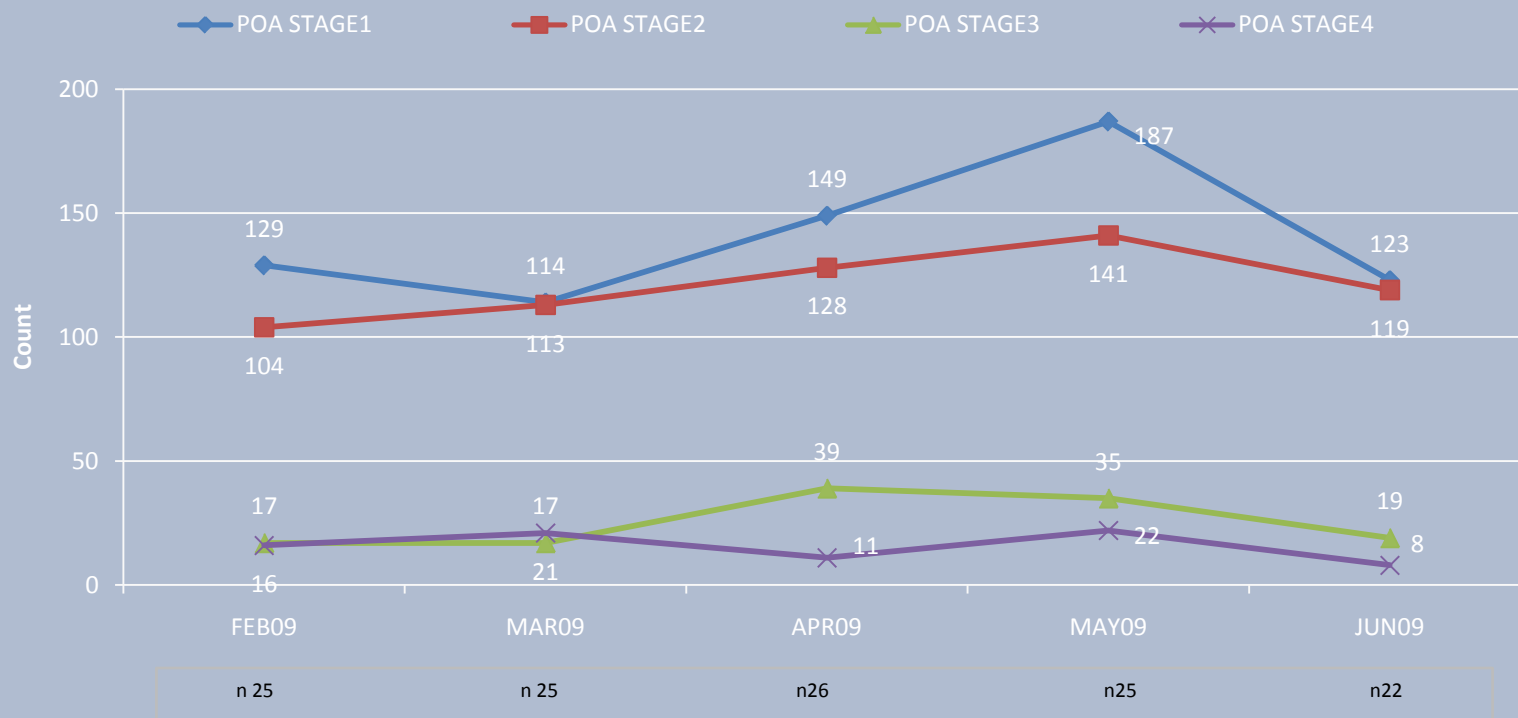
Indiana Pressure Ulcer Initiative

PRESSURE ULCERS REPORTED Hospitals - Nosocomial by Stage



Indiana Pressure Ulcer Initiative

PRESSURE ULCERS REPORTED Hospitals - Present on Admission by Stage



Health Care Cost Savings

Pressure ulcers cost from \$10,000 to over \$40,000 to cure.

GPRA data from Q4 2008 to Q1 2009 shows a 171 pressure ulcer decline. At \$20,000 per ulcer, the cost savings would be \$3,420,000.



Number of Patients and Residents Touched by Initiative in Average Month

Nursing homes	– 7,000
Home health and hospice	– 4,700
Hospitals	– 600

Total per Month:	12,300
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Indiana State Department of Health

Congratulations on your
accomplishments to date and
thank you for improving health
care quality!