



# **Update on Lessons Learned after Hurricane Katrina**

## **Continued Challenges and Opportunities**

by

Kevin U. Stephens, Sr., MD, JD

Director

New Orleans Health Department

November 5, 2007

# 1. Our Health Challenges: A Legacy of Health Disparities Pre/Post Katrina

City of New Orleans Health Department



CITY OF NEW ORLEANS

C. Ray Nagin, Mayor

# Health Report Cards

2006

Determinants	Data	Rank
Prevalence of Obesity (Percent of Population)	30.8%	48th
Premature Death (Years lost before age 75 per 100,000 population)	10,530	49th
Cancer deaths (per 100,000)	223.3	48th
Infant Mortality (Deaths per 1,000 live births)	9.9	49th
Children in Poverty (Percent of persons under age 18)	24.7%	47th
Occupational fatalities (deaths per 100,000 workers)	11.7	46th
Lack of health insurance (Percent without Insurance)	18.8%	44th

Source: United Health Foundation, America's Health Ranking 2006

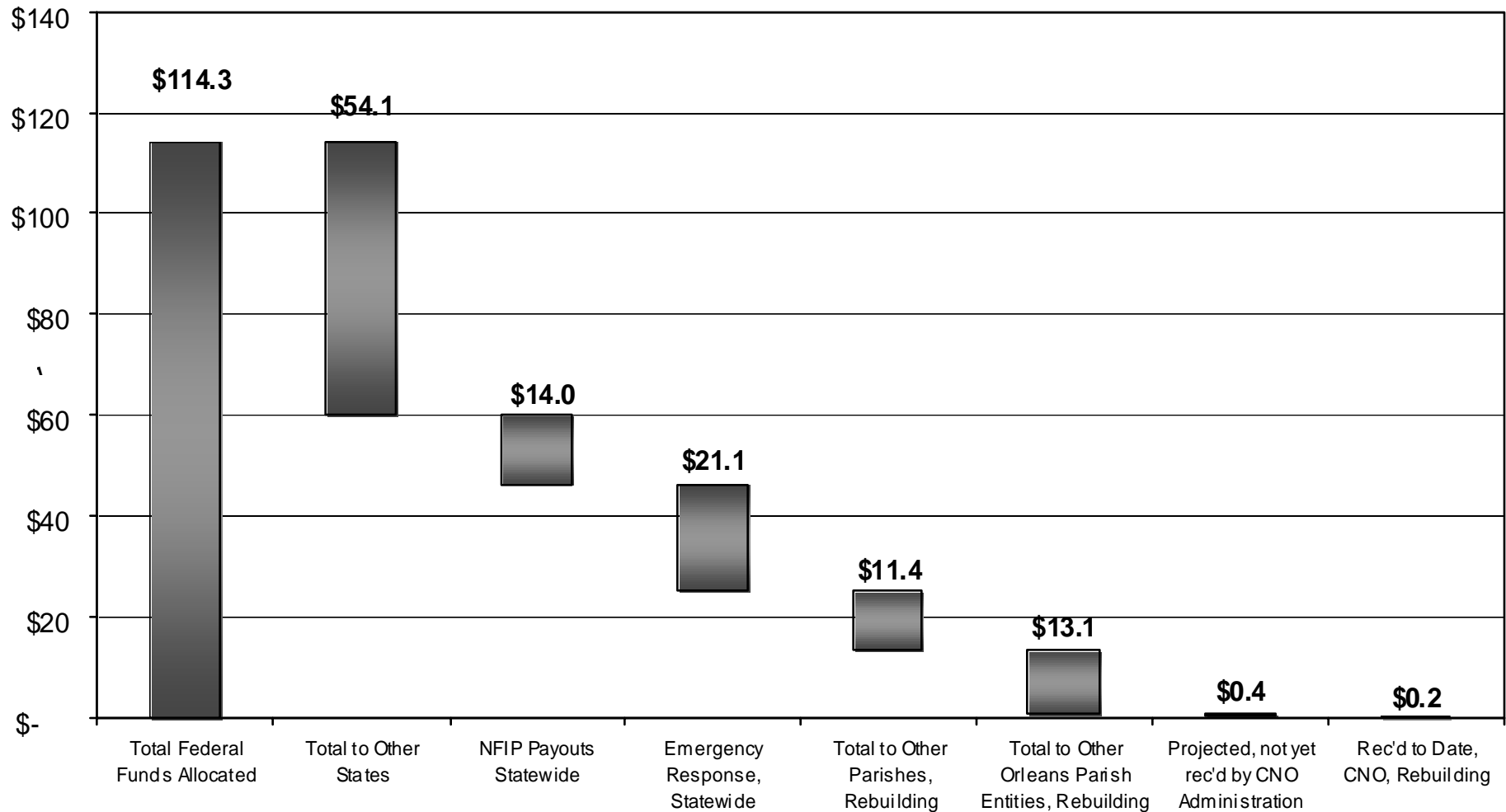
City of New Orleans Health Department



CITY OF NEW ORLEANS

C. Ray Nagin, Mayor

### Distribution of Federal Funds Following Hurricanes Katrina & Rita



City of New Orleans Health Department



CITY OF NEW ORLEANS

C. Ray Nagin, Mayor

# Rebuilding Efforts

## Tourism and Airport are Rebounding

- 3.6 million people visited New Orleans in first six months of 2007; 3.7 million people visited for all of 2006
- Visitors are projected to spend \$4.5 billion in New Orleans this year. The record was set in 2004 at \$4.9 billion
- This month the airport will reach 132 daily flights with 15,663 seats -- 81.5 percent of flights and 75.8 percent of seats offered Pre-Katrina.
- Free wireless service now available throughout the terminal
- Upgrade to airport security system underway

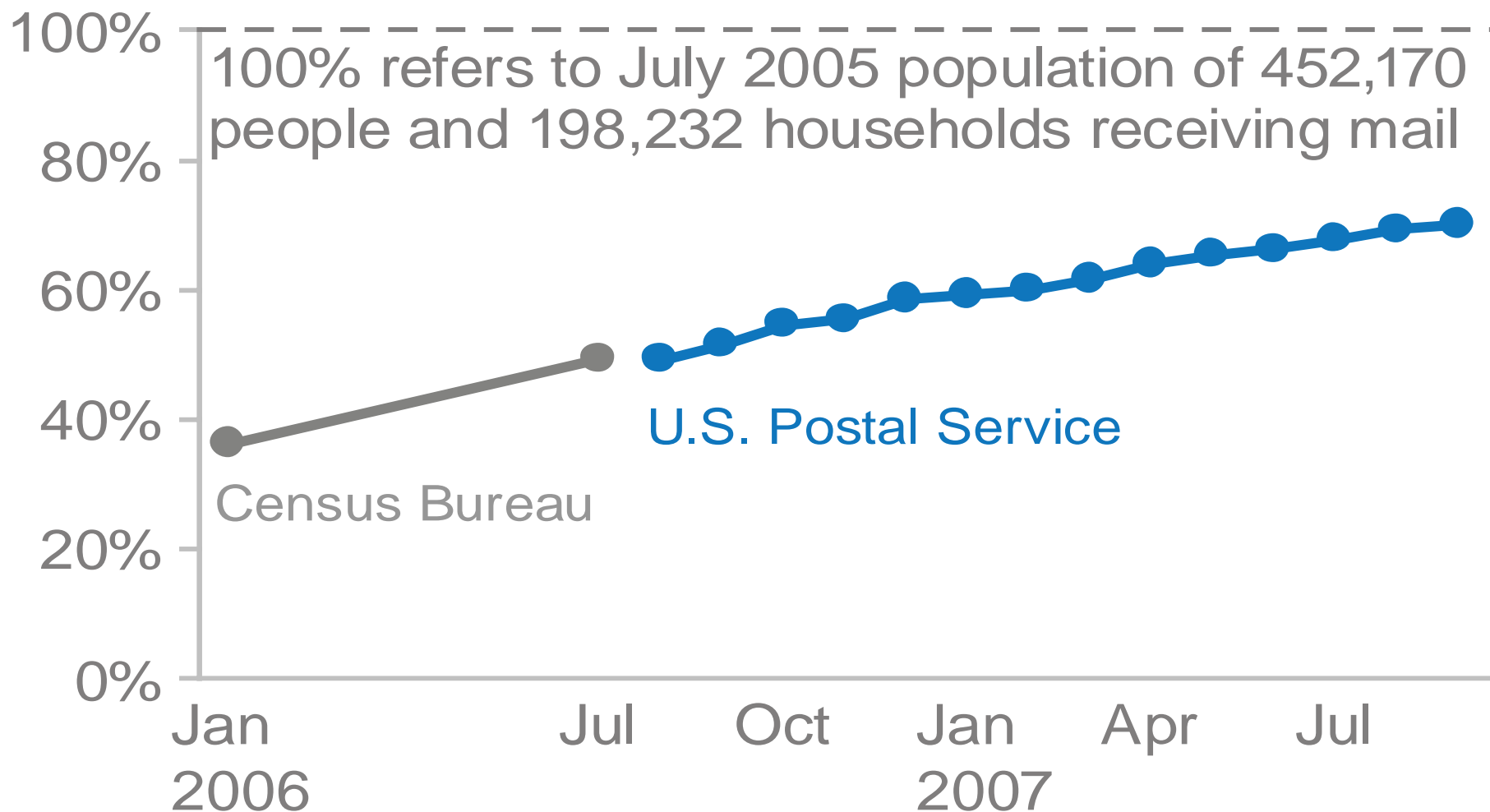
City of New Orleans Health Department



CITY OF NEW ORLEANS

C. Ray Nagin, Mayor

# New Orleans Post-Katrina Population Indicators



**City of New Orleans Health Department**  
GREATER NEW ORLEANS  
**COMMUNITY DATA CENTER**  
<[www.gnocdc.org](http://www.gnocdc.org)>



CITY OF NEW ORLEANS  
C. Ray Nagin, Mayor

# Repopulation Trends

The population of the city of New Orleans continues to rebound.

- **Through October 2007, the City continues to grow at a rate of approximately 4,000 residents per month.**
- Growth continues to radiate from established neighborhoods and communities.
- This trend has been apparent and consistent through 2007

**Source: GCR & Associates**

**City of New Orleans Health Department**



CITY OF NEW ORLEANS

C. Ray Nagin, Mayor

# Getting People Healthy in New Orleans

## Seven-Point Plan as a Grid for Recovery

- Seven-Point Plan's focus areas consistent with Healthy People 2010

- Smoking
- Obesity, Physical Activity and Consequent Conditions
- Risky Behaviors
  - Alcohol and Substance Abuse
  - Irresponsible Sexual Activity
  - Co-occurring Mental Illness
- Maternal and Child Health
- Lead Exposure and Environmental Health
- Access to Health Care and Health Education
- Employee Health

City of New Orleans Health Department



CITY OF NEW ORLEANS

C. Ray Nagin, Mayor



# 2. Problems Exacerbated by Katrina... And Resulting Policy and Programmatic Changes

City of New Orleans Health Department



CITY OF NEW ORLEANS

C. Ray Nagin, Mayor

# Hospital Beds in Orleans Parish

## Pre-Katrina

## Post- Katrina

• MCLANO	522	• MCLANO	170
• Touro	252	• Touro	270
• Methodist	273	• Methodist	0
• Memorial	360	• Memorial	0
• Tulane	342	• Tulane	120
• Bywater	136	• Bywater	0
• Children's	201	• Children's	150
• Lindy Boggs	172	• Lindy Boggs	0
• Total	2,258	• Total	710

City of New Orleans Health Department



CITY OF NEW ORLEANS

C. Ray Nagin, Mayor

# MH/SA Post Disaster Utilization Rates

- **“Stress has long been recognized as one of the most powerful triggers for drug craving and relapse to drug abuse” (NIDA Notes, Vol. 17, No. 4 )**
- **We know epidemiologically about 17% of the population of a health community seek behavioral health services either in the form of mental health services or substance abuse treatment.**

**City of New Orleans Health Department**



**CITY OF NEW ORLEANS**

C. Ray Nagin, Mayor

# MH/SA Post Disaster Utilization Rates

**After reviewing the literature, it appears there are several groups of individuals we need to focus on as service delivery. The groups are:**

- Individuals who are in recovery.**
- Individuals currently using and more likely to increase use from recreational use to dependence and more harmful consequences**
- Individuals who begin using substances as a result of the disaster (for instance, in “Depression, PTSD, Substance Abuse Increases in Wake of September 11 Attacks,” researchers found that, of the respondents not using prior to 9/11, 19.3% started consuming alcohol, 3.3% started smoking, and 2.5% began using marijuana).**

**City of New Orleans Health Department**



**CITY OF NEW ORLEANS**

**C. Ray Nagin, Mayor**

# MENTAL HEALTH DEUS IN ORLEANS Parish

## Pre-Katrina

- MCLANO 159
- NOAH 30
- Methodist 14
- Depaul 74
- Touro 48
- Bywater 20
- Total 345

## Post- Katrina

- MCLANO 30
- NOAH 30/40
- Methodist 0
- Depaul 0/33
- Touro 0
- Bywater 0
- Total 60/103

City of New Orleans Health Department



CITY OF NEW ORLEANS

C. Ray Nagin, Mayor

# The Severity of Katrina's Impact

**National Center for Post-traumatic Stress Disorder has shown that in moderately to severely affected areas:**

- **25-30% of the population will experience clinically significant issues**
- **10-20% will fall into the sub-clinical category.**

**City of New Orleans Health Department**



**CITY OF NEW ORLEANS**

C. Ray Nagin, Mayor

# Mental Health

## Self-Reported, Mental Health Scaled Scores 2006 Health and Population Survey

<b>Mental Health Indicator – Assessment only of Head of Household</b>	<b>Estimated Count</b>	<b>Estimated Percent</b>
Not Indicated	2,635	3.5
Serious mental health condition indicated by score (Score $\geq$ 13)	12,470	16.3
Score 0-12	61,247	80.2
Total	76,352	100.0

City of New Orleans Health Department



CITY OF NEW ORLEANS

C. Ray Nagin, Mayor

# Mortality Study

- **Hypothesis**
  - Persistent, elevated proportion of death following Katrina due to delayed death reporting and minimal inter-agency communication; increased stress and high risk behavior; decreased access to healthcare and medication
- **Methodology**
  - Attempted to validate printed monthly death notices as a tool for LHDs by looking at significance between state's 2002-03 vital statistics and notices
- **Findings**
  - Crude data revealed increase in proportion of Jan-Jun. deaths compared to baseline (1317/mo. vs. 924/mo.)
  - Differences between 2002-03 death notices and top ten Cause of Death were insignificant.
- **Solutions**
  - implement Electronic Death Registration Systems (EDRS) to facilitate rapid reporting, real-time death monitoring and interoperability

City of New Orleans Health Department



CITY OF NEW ORLEANS

C. Ray Nagin, Mayor



### 2002 Death notices vs. 2002 state data (proportions)

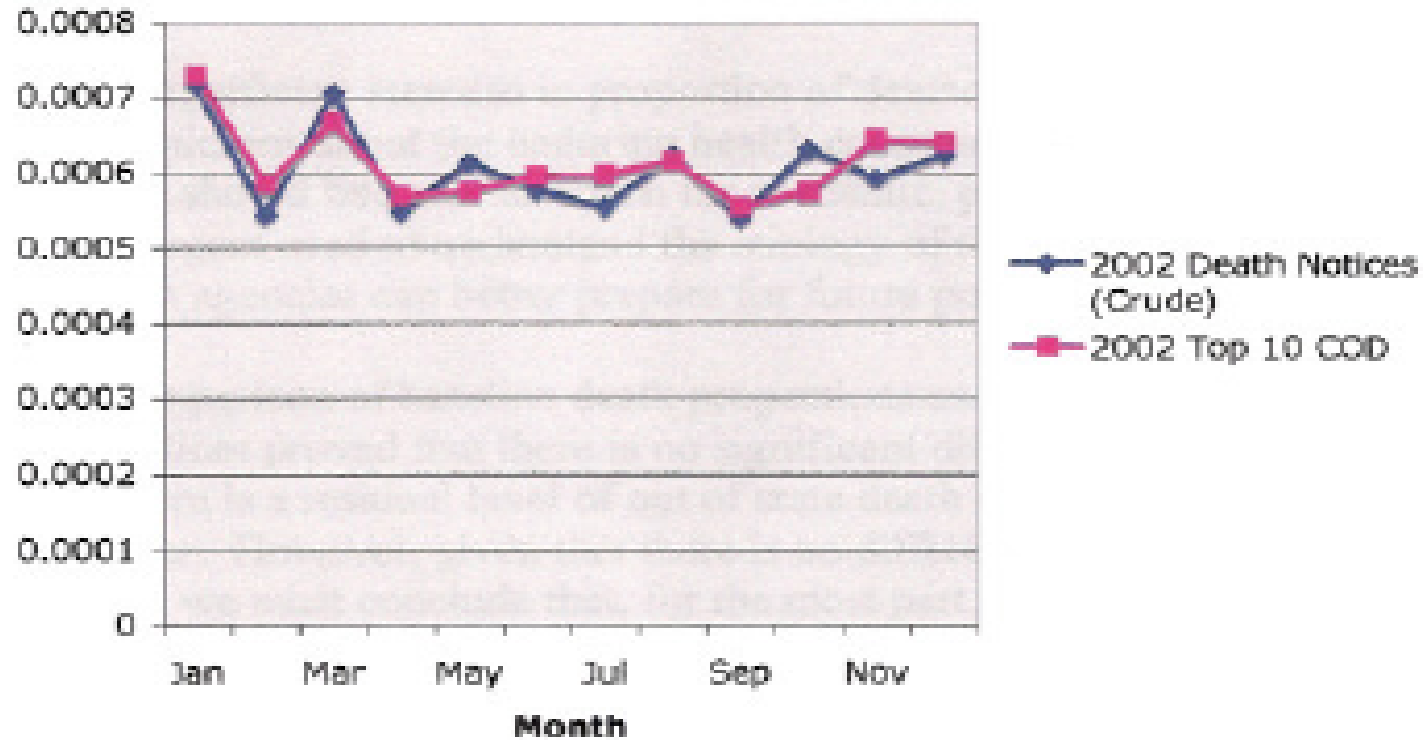


Figure 3

City of New Orleans Health Department



CITY OF NEW ORLEANS

C. Ray Nagin, Mayor

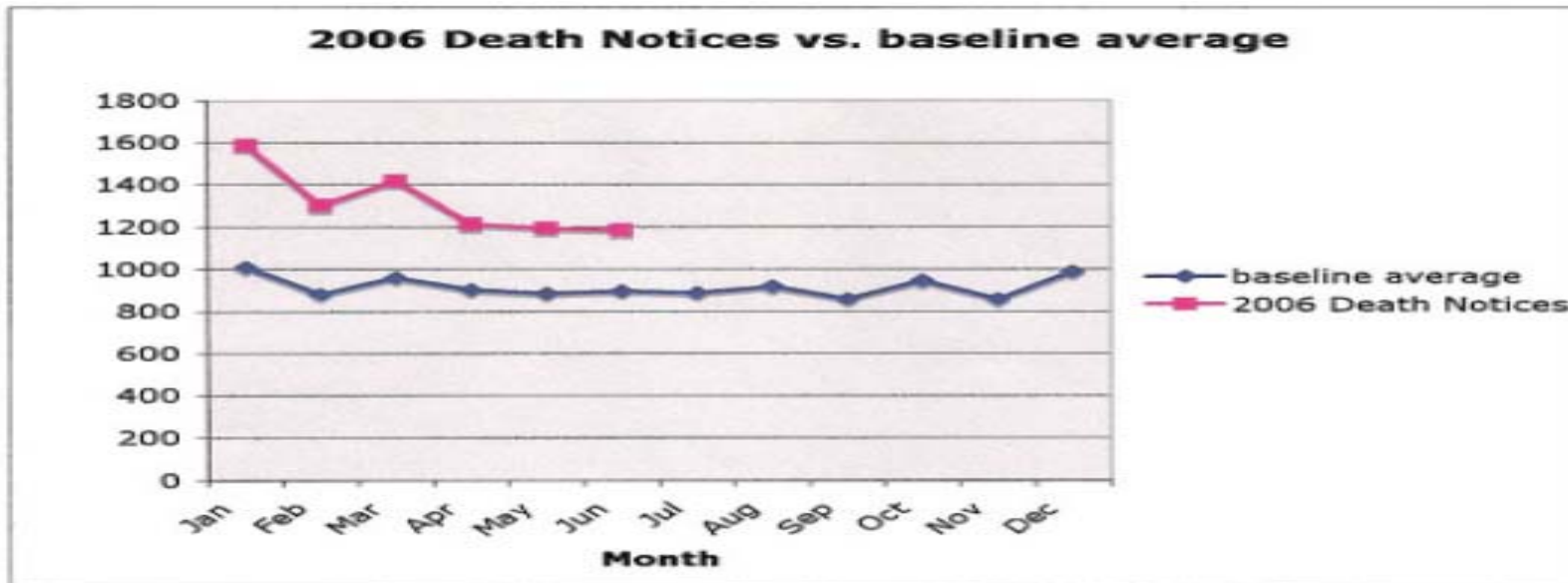


Figure 2

Trend analysis using a linear regression model indicated a downward tendency in proportion of deaths ( $p=0.03$ ) at a rate of 0.007% per month. The R-square value of the regression model is 0.728. This model appears to contradict the result from the two sample binomial test. If there were a true downward trend, then it would be reasonable to observe a significant difference between January 2006 and June 2006; however, this does not seem to be the case. However, due to the small number of months being tested, the strong indication of a downward linearity could be ambiguous. These results may warrant further study.

Differences between 2002 & 2003 death notices and state vital statistics were insignificant in both frequency ( $p=0.13$ ,  $p=0.81$ , respectively) and proportions ( $p=0.14$ ,  $p=0.81$ , respectively) (Figures 3 & 4).

City of New Orleans Health Department



CITY OF NEW ORLEANS

C. Ray Nagin, Mayor

# Louisiana

## Attempts to Redesign Healthcare

The goal was to establish:

- Medical Home system of care
- Health Insurance *Connector*—subsidizing participation in employer sponsored health coverage or private insurance

City of New Orleans Health Department



CITY OF NEW ORLEANS

C. Ray Nagin, Mayor

# Healthcare in New Orleans

The overriding issues are:

- Health Disparities
- High Uninsured Population

City of New Orleans Health Department



CITY OF NEW ORLEANS

C. Ray Nagin, Mayor

# Healthcare in New Orleans

There are several solutions:

- Increase access to Primary Healthcare
- Increase ER and Hospital beds
- Health Information Technology
- Address Social Determinants
- Insurance

City of New Orleans Health Department



CITY OF NEW ORLEANS

C. Ray Nagin, Mayor

# Healthcare in New Orleans

## Specific Initiatives:

- Methodist Hospital
- DRA funding
- Workforce Development
- Grants and Research

City of New Orleans Health Department



CITY OF NEW ORLEANS

C. Ray Nagin, Mayor

# Conclusion

Burden of health care is an issue not just for NOHD, but also for health officials around the country who provide services for the Diaspora

Kevin U. Stephens, Sr., MD, JD

Director of the City of New Orleans Health Department

504-658-2506 phone / 504-658-7996 fax

kustephens@cityofno.com