

Hospital-Based Injury & Violence Prevention Intervention



Presented by: Nichole Kent Spivey, MBA Injury Prevention Coordinator Palmetto Health Richland Level I Trauma Center

1 Killer for Ages 1-44

Leading Causes of Death



Injury Deaths Compared to Other Leading Causes of Death for Persons Ages 1–44, United States, 2013

Source: CDC

Top 5 Trauma Visits Ages 11-18

Leading Causes of Injuries



ATV

MVC Falls Violent Injuries Sports

Source: PHR Trauma Registry 2009-2011



EAGLE

realistic education about dying young

HPOLA

Res.

SWITHPULE

Project READY

Realistic Education About Dying Young

- demonstrates consequences of risky behaviors that lead to traumatic injury
- designed to help young adults make better choices
- a hands on, eye opening, interactive experience



Program Origin

Project READY:

- The brain child of Raymond Bynoe, MD, Former Trauma Medical Director at Palmetto Health Richland.
- Program initiated in November 1999.
- The central concept for program was to provide adolescents with realistic insight of the effects of violence.



Raymond Bynoe, MD, FACS

Curriculum

Program Modules

- Motor Vehicle Safety
 - Distracted driving (texting, etc.)
 - Speeding
 - Impaired driving (alcohol & drugs)
 - No seat belt use
- Trauma Treatment
 - Overview of blunt and penetrating trauma
 - Trauma Statistics
- ThinkFirst
 - Brain and spinal cord injury education
 - Illustrate the consequences of poor choices
- Hospital Tour
 - Emergency Room/Trauma Bay
 - Operating Room
 - Rehab Gym
 - Morgue



Motor Vehicle Safety

• Learning Objective:

To improve decision making to decrease the risk behind the wheel of an automobile.

•Leading causes of motor vehicle crashes

- a. Non Seat Belt Use
- b. Impaired Driving
- c. Distracted Driving
- d. Speeding

•Evaluate state laws and penalties

- a. Examine South Carolina's laws pertaining to adolescent drivers
- b. Overview of South Carolina's Graduate Drivers License requirements

•Demonstrate alcohol toxicity effects

a. DUI drunk goggle activity









Trauma Treatment

Learning Objective:

Increase knowledge about the Level I Trauma Center by exposing participants to real life patient cases.

- •What is a level I trauma center?
- •Trauma Statistics

•Overview of blunt trauma

- a. Head and facial injuries
- b. Rib fracture injury
- c. Motor vehicle crash injuries

•Overview of penetrating trauma

- a. Gunshot wound
- b. Stab wound
- c. Motor vehicle and motorcycle crash injuries



ThinkFirst

Learning Objective:

Helping teens to reduce their risk for traumatic brain and spinal cord injuries by explaining how injuries occur, how they affect the body, and how they can be prevented.

•Brain or spinal cord injury education

a. Overview of the spinal column and the effects of spinal cord injuries

•Illustrate the consequences of poor choices

- a. Review how the brain functions and how injury will affect the brain
- b. DVD
- c. Voice of Injury Prevention (VIP) Speaker (person with brain or spinal cord injury)



Hospital Tour

Learning Objective:

Expose participates to the ED, OR, therapy gym, and morgue to touch and feel the real equipment used to treat injuries.

- Room Layout for ED and OR
- Describe all roles necessary for OR
- Process of being admitted into the morgue
- Interact with PT, OT, ST to become aware of the daily challenges experienced by trauma patients.





 We have reached over 5,000 adolescents served through the Project READY program from June 2013-present.



Program Evaluation

 In 2014, we conducted a IRB study to measure the participants' level of risk before and after the program using the validated National Youth Risk Behavior Survey (YRBS).

Questions		Pre-Test (n, %)		Post-Test (n, %)			
			Sometimes/		Sometimes/		
		Rarely/Never	Often/	Rarely/Never	Often/	P value	Notes
			Always		Always		
1	Among those who rode ATV in past 12 months, those who never/rarely wore helmet	8 (50.0)	8 (50.0)	7 (43.8)	9 (56.3)	0.317	Decrease (6%)
2	Never/rarely wore a seat belt when riding a car driven by someone else	6 (6.0)	94 (94)	2 (2.0)	98 (98.0)	0.046*	Decrease (4%)
3	Among those who drive, those who never/rarely wore a seat belt	2 (4.9)	39 (95.1)	1 (2.4)	40 (98.6)	0.317	Decrease (2.5%)
4	Among those who drove in past 12 months, those who texted/emailed	15 (50.0)	15 (50.0)	15 (53.3)	14 (46.7)	0.706	Decrease (3.3%)
5	Rode in car/vehicle with someone who texted/emailed in last 30 days	39 (39.3)	60 (60.6)	43 (43.3)	56 (56.6)	0.450	Decrease (4%)
6	Rode in car/vehicle with someone who have been drinking in last 30 days	82 (82.0)	18 (18.0)	90 (90.0)	10 (10.0)	0.074	Decrease (8%)
7	Among those who drove in past 12 m, those who have been drinking	28 (87.5)	4 (12.5)	30 (93.8)	2 (6.3)	0.317	Decrease (6.3%)
8	Carried a weapon on one or more of the past 30 days	91 (91.0)	9 (9.0)	91 (91.0)	9 (9.0)	1.000	No Change
9	Carried a gun on one or more of the past 30 days	93 (93.9)	6 (6.1)	95 (96.0)	4 (4.0)	0.527	Decrease (2.1%)
10	Were in a physical fight on one or more of the past 30 days	71 (71.0)	29 (29.0)	92 (92.0)	8 (8.0)	<0.0001*	Decrease (21%)
11	Were in a physical fight with injuries (doctor) on one or more of the past 30 days	96 (96.0)	4 (4.0)	98 (98.0)	2 (2.0)	0.414	Decrease (2%)

Results

In 2014, 221 adolescents participated in the Project READY program and 100 (45%) of the participants completed both the pre and post-test surveys. Demographics of the participants were, 61.0% black and 30.0% white. There were 48 males (48.0%) and 52 females (52.0%) with a median age of 15.

Among several questions there was a significant decrease (21%) in the risk-taking behavior of participating in physical fights in the past thirty-days. There was a 4% decrease in participants answering they "Never/Rarely" wore a seat belt as a passenger in a car. A decrease of 8% in responses to Question 6, regarding participants riding in a car with an impaired driver.

SimCoach Presentation





Classroom Presentation



- 45-minute
 PowerPoint Presentation
- 5-minute
 Question/Answer Session



SimCoach Layout

Trauma Bay

- Hospital Bed
- Live Patient Moulaged
 - C-Collar
 - Leg Splint
 - Wounds
- Code Cart
- Heart Monitor
- Slide Show playing on the TV

Operating Room

- Hospital Bed
- Intubated Simulator
- Ventilator
- Code Cart
- Heart Monitor
- Open Heart Video playing on the TV







Nichole Kent Spivey 803.434.6231 nichole.spivey@palmettohealth.org

For more information about Project READY visit www.palmettohealth.org/trauma