

# PREVENTING INTENTIONAL DEATH BY RAIL

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#### **BACKGROUND**

- Trespassing and railway suicides are two interrelated issues of concern in the railway system. These issues are generally related to severe injury or untimely deaths.
- 2012: 19 Suicides on Western city railway; 2013: 7
- 2012: 8 Trespassing incidents on Western city railway; 2013: 9
- Death on the railway has a vast impact:
  - Individual and family
  - Community
  - Operator
  - Organizational
  - Economic



## BACKGROUND: REVIEW OF RAILWAY SUICIDE

- Suicide involving trains accounted for 12% of all suicides.
- Up to 94% of attempts were found to result in death.
- Suicides occur in proximity to railroad crossings:
  - 43% percent of suicides occurred within 0.1 mile from a crossing.



#### **BACKGROUND: PREVENTION**

- Physical barriers
- Crisis lines
- Signage
- Suicide prevention training programs
- Community Awareness





### 1. TRANSIT EMPLOYEES: TRAINING GROUP A

- N=15
- 34.8% male
- Age ranged from 22 -63; mean 42.89



## 2. TRANSIT EMPLOYEES: TRAINING GROUP B

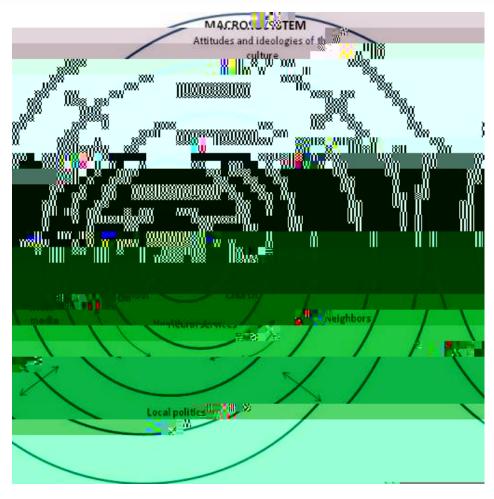
- N=45
- 53% male
- Age ranged from 25 -79; mean of 59.25



## 3. TRANSIT EMPLOYEES: COMPARISON GROUP

- N=16
- 47.6% male
- Age ranged from 23 -62; mean of 36.33
- 33.3% White, 28.6% Asian, 23.8% Hispanic,
   9.5 Other, 4.8% African American, 4.8%
   Hawaiian or Pacific Islander
- Years in TP range from less than 2 years 34 years; mean of 10.22 years.
- Education ranged from GED to doctorate

### **OUR APPROACH**



#### PROGRAM GOALS

Increase Awareness

Reduce Stigma

**Engage Community** 

Improve Identification/Surveillance

Enhance Employees' Self- efficacy



#### DATA ANALYSIS PLAN

- Reliability analysis
- Paired and independent sample t tests to:
  - 1. Compare differences between pre and post training in transit employees.
  - 2. Determine demographic differences.
  - 3. Compare differences between transit employees and comparison groups.



Self- Efficacy	Mean	SD	Т	Sig
Pre Training	45.67			
Post Training	54.33	8.10	-	

17

## **SELF-EFFICACY**

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Knowledge significantly improved as a result of the training. Participants who did not attend the training did not show significant improvements in self- efficacy

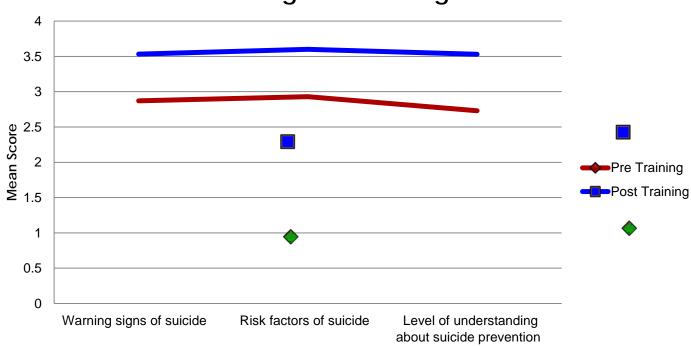
Knowledge	Mean	SD	T	Sig
Pre Training	17.13			
Post Training	21.33	3.10	-5.250	.000

Knowledge	Mean	SD	T	Sig



#### **KNOWLEDGE**

#### **Rating of Knowledge**



#### ATTITUDES REGARDING TRAINING

- 95.4% would recommend the training to their coworkers.
- 86.4% attitudes towards suicide changed since the training.
- 81.7% more confident of ability to prevent suicide.
- 77.3% report a clearer understanding of their role.

### TRAINING GROUP A VS. GROUP B

Items	Group	Mean	Std. Dev.	t	Sig. ng	C /44 Tc
A13.29>>BDC						

#### GENDER DIFFERENCES

Overall, men seem to be less accepting of suicidal intent and may associate more stigma to suicide than women. There is no significant difference between men and women in regards to self -efficacy and

knowledge

All transit employees post training N=60

Items	Group	N	Mean	t	Sig.
۸ <b></b>	Male	35	38.80		
Attitudes	Female	36	34.08	2.68	.009
Self- Efficacy	Male	34	47.41		
	Famala	27	40.76	- 1 E 1	400
	Female	37	49.76	1.54	.128
Knowledge	Male	37	17.57		
				-	
	Female	36	18.03	.447	.657



### **AGE DIFFERENCES**

Items	Group	Mean	t	Sig.	
A ttitudos	20-40	33.86			
Attitudes	41-80	38.23	-2.18	.033	
Self-Efficacy	20-40	49.54			
	41-80	48.50	.608	557575	757

#### PERSONAL EXPERIENCES

- Over 66% of transportation employees have some personal experience with suicide:
  - A close personal friend
  - An acquaintance
  - A person from work or school
- 50% know of an employee who has witnessed or been involved in an incident related to suicide.
- 34% of transportation employees do not know anyone who has committed suicide



### PERSONAL EXPERIENCES

Items	Group	N	Mean	t	Sig.
Attitudes	No Personal experience	23	36.79		
Aunudes	Personal Experience	48	36.23	.281	.780
Self-	No Personal experience	23	49.00		
Efficacy	Personal Experience	48	48.46	.328	.744
Knowlodgo	No Personal experience	24	18.42		
Knowledge	Personal Experience	49	17.49	.8x8	c.f

4/12/14

#### **COMMUNITY SAMPLE**

- N=453 Western city community members
- 51.8% male
- Age range from 13 -80; mean of 44.32
- 44.8% White, 14.1% Hispanic, 6.8% Asian, 6.0% African American, 2.4% Multiracial, .4% Native American or Alaskan Native, 3.8% Other, 8.2% did not identify their race
- Education level ranged from haven't completed high school to doctoral degree
- 4.8% worked on the railroad in some capacity



#### **COMMUNITY ATTITUDES**

- 64.6% of people feel that you can talk to suicidal people without making it worse. This is an area of intervention!
- General agreement (80.0%) that suicide is preventable.
- General agreement (71.6%) that suicide is a community responsibility.
- 67.4% say they would ask about intent if they observed that there were warning signs for suicide.
- Participants were unsure about whether there were warning signs of suicide. Another area of intervention!
- Younger adults believe that suicide is preventable, believe that they can help prevent suicide, and feel more prepared to recognize warning signs than older adults
- Women appear to have better attitudes about suicide prevention.



## 2. COUNSELING PSYCHOLOGY MASTERS STUDENTS

- N=35
- 20% male
- Age range from 22 -41; mean of 26
- 80% White, 5.7% Hispanic 2.9% Asian, 11.4% did not respond

## **CONCLUSIONS**

The results suggest that for the most part, Transit employees...

Believe that they have a responsibility to helping prevent suicide.

Have an open mind about suicide and suicide prevention.

Did not feel prepared to recognize or help a suicidal person prior to training. Improved following training.

Are willing to help someone in need. **improved following training.** 

Have mixed knowledge about the risk factors and warning signs of suicide. Improved following training.

Initially did not rate their knowledge of risk factors and warning signs to be high indicating a need to improve self efficacy before the training.

Improved following training.

<u>Training improved self-efficacy, actual knowledge and perceived knowledge about the risk factors and warning signs.</u>



#### RECOMMENDATIONS

- Continue suicide training programs.
- Target improving male's and older folks attitudes towards suicide prevention.
- Increase awareness of warning signs of suicide:
  - leaving possessions on platform
  - Intoxication
  - erratic behavior
- Create a <u>safe environment</u> for employees to discuss suicide prevention and share knowledge and experiences.
- Change <u>message to community</u> members and increase and enlist their support and participation in prevention.
- Inform community members about suicide's preventability.
- Results show that community feels it has responsibility. But, no idea how to help.
- Next Steps: Signage (pre-post community members), additional employee trainings, and additional community events.

