

NIEHS WETB SBIR Update

May 3, 2011

Dan Suhr

inXsol, LLC

CommandPlan

Incident Command Training Platform

Powered by:



elearning
edutainment
simulations

NIH GRANT SUPPORT AND DISCLAIMER - The project described is supported by Grant Number R43ES015697 from the National Institute of Environmental Health Sciences. The content is solely the responsibility of the authors and does not necessarily represent the official views of the National Institute of Environmental Health Sciences or the National Institutes of Health.

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May 2011

HAZMAT/MC Training Challenges...

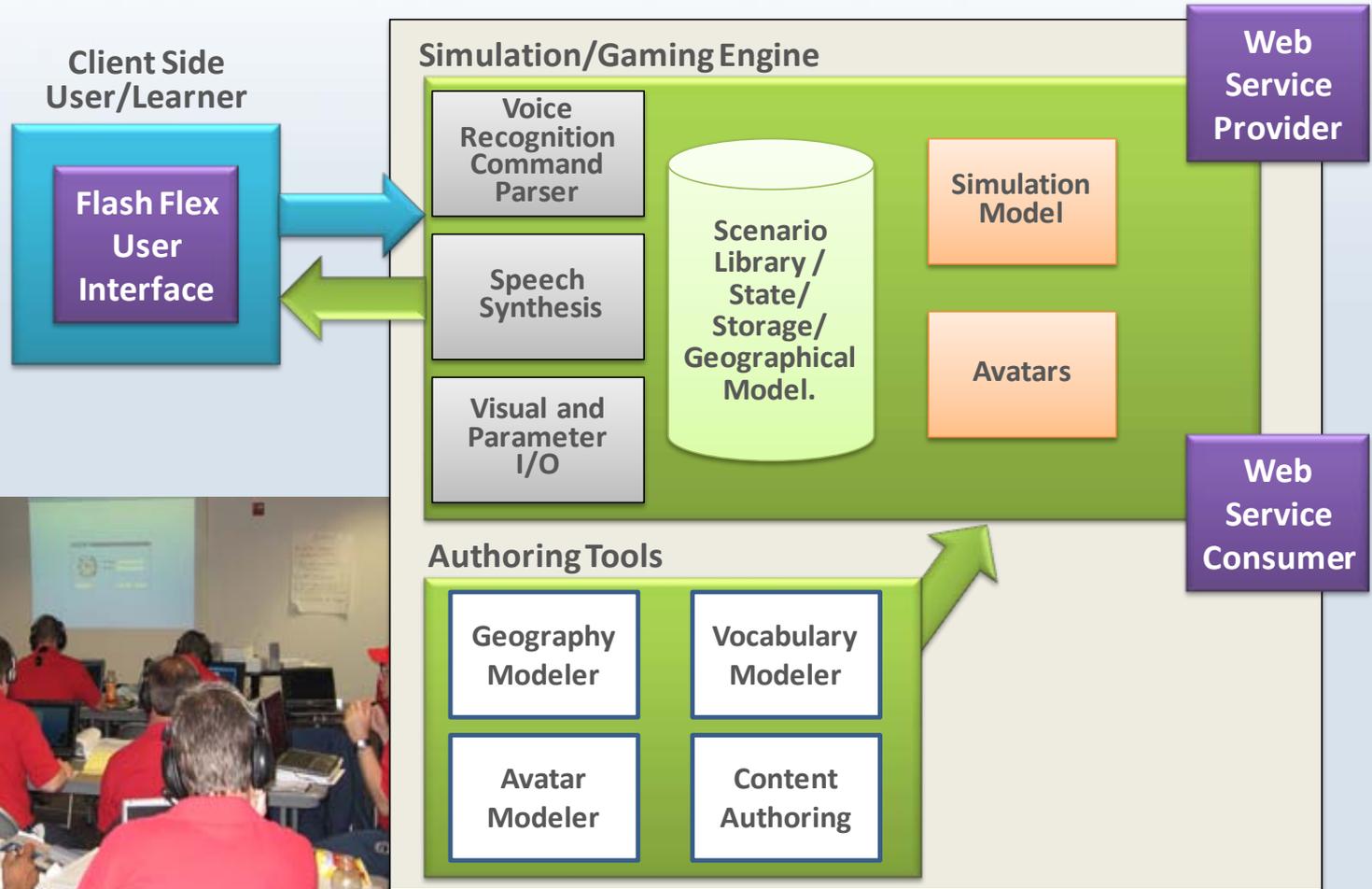
- Incident Commanders have limited opportunities to exercise their IC skills.
- Simulation-based training generally uses generic environments for scenarios.
- Simulation software is expensive.
- Custom scenarios are expensive.
- Exercises and scenarios are difficult to share among different agencies.

Solutions...

- Low-cost web-based IC simulation.
- Authorable scenarios.
- Ability to share with other agencies or communities.
- Link simulation scoring to specific training.
- Author flexible in building scenario complexity.

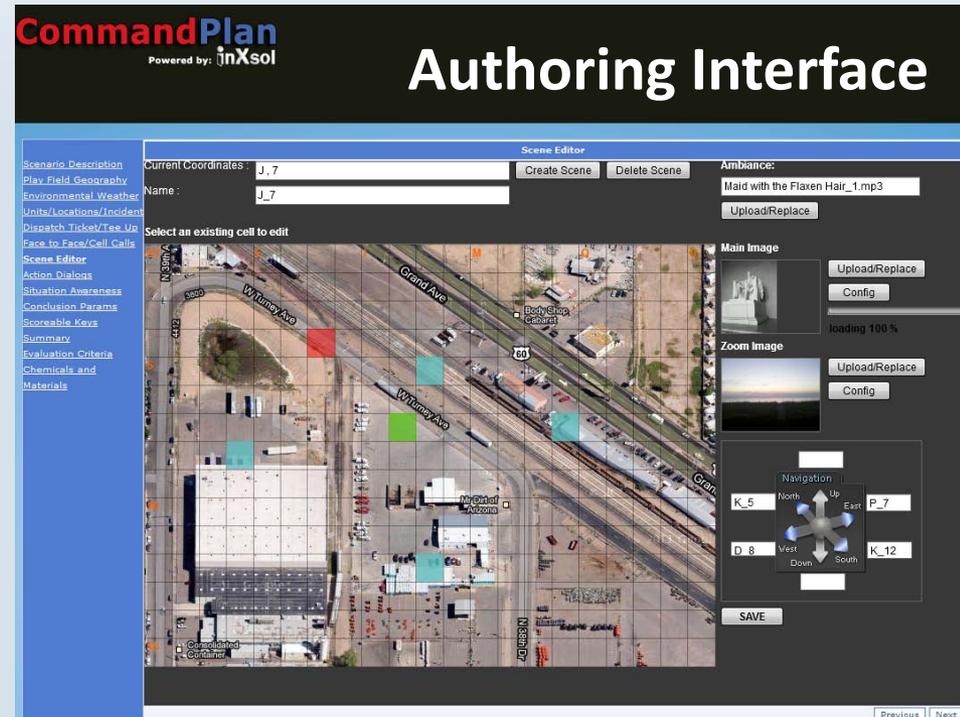


Technology Web-based Structure



Next Steps...

- Complete and test web-based product and HAZMAT scenarios. (7/2011)
- Participate with other organizations in applying for training grants.
- Expand simulation beyond traditional incident command (fire/HAZMAT) roles into large event incidents, emergency operations centers, industrial and energy facilities, mining, and detention facilities.
- Further integrate training with strategic partners.



Terrell Fulbright
JXT Applications, Inc.

- Interactive, multi-media, scenario based, continuing medical education (CME) e-learning course
- For community health workers (Nurses)
- Focus on pandemic influenza outbreak
 - Patient assessment
 - Personal protection
 - Incident reporting
- Available September 2011 (Internet/DVD)

- Introduction
- News bulletin
- Scenarios
 - Urgent Care
 - Physician Office
 - School Health Clinic
- Medical conditions
 - Avian Influenza
 - H1N1 Influenza
 - Seasonal Influenza
 - Tuberculosis



Patient

You are the nurse at the Urgent Care Center on a summer afternoon. The clerk tells you that she has just signed in 4 new patients.

You review the charts and look at the patients in the waiting room before calling in the first patient. You must evaluate all 4 patients to complete the scenario.



Charts for each patient are available to you and as you obtain information it will go into the chart.



You should select the patients in order of urgency and complete the steps you determine are best for the patient, then proceed to the next patient until you are finished.



Click the **next button** to continue.



- Review charts
- Interview patients
- Take vitals
- Assess medical condition
- Make decision
 - Place in Exam Room
 - Order Diagnostic Tests
 - Take Protective Measures
- Properly use and dispose of PPE
- Report and coordinate incident
- Complete review and test for CEUs



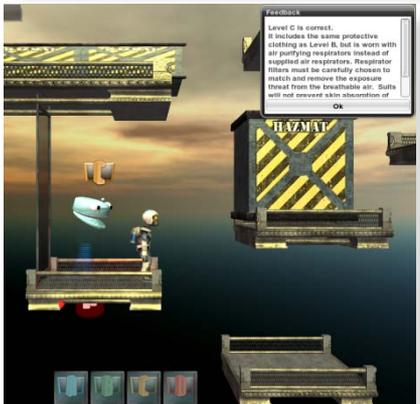
For additional information contact Terry Fulbright
tfulbright@jxtai.com or 937-431-1566 ext 110

Kelly Clark

WisdomTools LLC,
an Information In Place Company



WisdomTools: Who Are We?



Green Dreams & Nightmares : Episode 1 - Scene 1

Merle Supervisor
Diane Job Corps Laborer
Gerard Tile Setter
Ed Stone Mason
Kara Carpenter

It's 7:30 on a Friday morning and the building with retail on the lower floor building in the city. There are plans windows will be made of high R-value pavers and Diane has just arrived at

Merle Supervisor
Merle Ferguson, Supervisor

Midwest building site has just begun. Green Dreams is a multi-use office building that has been designed to become the most environmentally friendly building in the city. It features a state-of-the-art advanced storm water drainage management system, and all the most complete and the upper floors are still in development. Ed is cutting through a concrete wall to install a wheelbarrow load of them.

Ed: (joking) You know Diane, if you keep kicking up that dust, you're going to make it awfully hard for me to slack off today.
Diane: That's too bad, I think we could be kicking up. How can you work like this?
Ed: That's just part of the job, m'lady. My lungs have calluses.
Diane: (unamused) I've been standing here for hours and I'm already choking on it. I don't... (erupts into a fit of coughing)
(Ed stops his saw to pound Diane on the back.)
Ed: (sarcastic) You're a regular after-school special, you know that, Ed? I'm already coughing my head off. This stuff has to be terrible for your lungs.
Diane: Like I said, it just comes with the territory. I put on a mask when it starts bugging me too much.
Diane: (getting annoyed) I'm pretty sure that this came up in my OSHA 10 training, Ed, and I don't think a facemask will cut it.
Ed: Geez, it's not even 8:30 in the morning and I've already got someone on my case. That's Merle's job, and he does just fine without your help.
Diane: I'm serious, Ed. My safety training said...
Ed: (impatient) Do you believe everything they tell you in school? Just go get me some more pavers and less attitude, all right?

Overview Episodes Scenes 2 3 4 5 6 Resources Glossary Back

- ▶ Custom Course Authoring
- ▶ Serious Games, Simulations, Story Based Learning
- ▶ Instructional Design



Green Construction CoP: Story-Based Learning Meets WH&S



► Scenarios™ and eScenes™

- Scenarios
- eScenes

► Why use Scenarios™?

- Learning—not memorization—in the same way that real-life experiences teach us all
- Greater focus on tacit knowledge, shades of gray, and work-around solutions that occur daily in the workplace

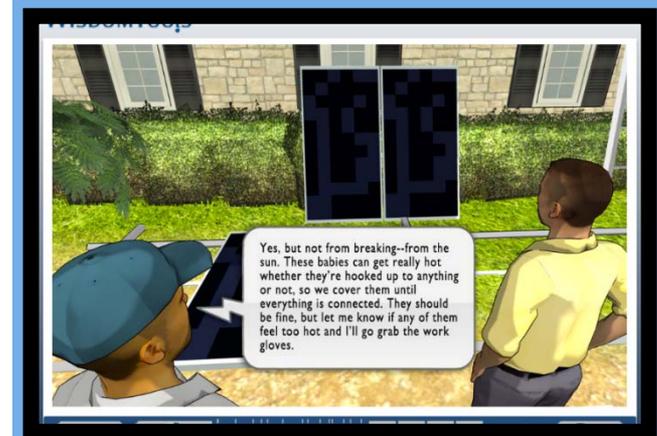
Green Dreams & Nightmares
Release 1.1
Scene 1

It's 7:30 on a Friday morning and the workday at the Green Dreams Midwest building site has just begun. Green Dreams is a multi-use office building with retail on the lower floors and offices above. Green Dreams has been designed to become the most environmentally friendly building in the city. There are plans for solar panels, geothermal heating, an advanced storm water drainage management system, and all the windows will be made of high R-value glass. So far, the first floor is mostly complete and the upper floors are still in development. Ed is cutting pavers and Diane has just arrived at his station with another powered wheelbarrow load of them.

Ed: (going) You know Diane, if you keep bringing all these pavers over you're going to make it awfully hard for me to slack off today.
Diane: That's too bad. I think we could all use a break from the dust you're kicking up. How can you work like this?
Ed: That's just part of the job, m'lady. I'm used to it. I'm so tough that even my lungs have calluses.
Diane: (unamused) I've been standing here talking to you for 30 seconds and I'm already choking on it. I don't... (snorts into a fit of coughing)
(Ed stops his saw to point Diane on the back. After a moment she spits out some dust she has inhaled and stops coughing. Ed lights a cigarette and continues.)

Ed: You should take up smoking. It'll toughen up those healthy pink lungs of yours, and all this dust just makes them taste better by comparison.
Diane: (sarcastic) You're a regular after-school special, you know that, Ed? I'm already coughing my head off. This stuff has to be terrible for your lungs.
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Overview Episodes Scenes 2 3 4 5 6 Resources Glossary



Learning Objectives

- ▶ Apply the Hierarchy of Controls concept and justify appropriate controls for a given green construction task.
- ▶ Identify sources of silica dust and methods for measuring exposure for a given traditional or green construction task.
- ▶ Find and describe regulations and recommendations for controlling silica exposure.

The screenshot shows a digital story interface. At the top, it displays the title 'Green Dreams & Nightmares :: Episode 1 - Scene 1' and a row of character portraits: Merle (Supervisor), Diane (Job Corps Laborer), Gerard (Tile Setter), Ed (Stone Mason), and Kara (Carpenter). Navigation links for 'Credits', 'Contact', and 'Help' are on the right. The main text area contains a scene description and dialogue between characters. A text box on the right side of the dialogue is partially visible, containing text about OSHA 10-hour construction safety training requirements in various states. At the bottom, there is a navigation bar with tabs for 'Overview', 'Episodes', 'Scenes', and a numbered list (1-6) where scene 2 is selected. There are also 'Back' and 'Next' buttons and a globe icon.

Green Dreams & Nightmares :: Episode 1 - Scene 1

Merle Supervisor, Diane Job Corps Laborer, Gerard Tile Setter, Ed Stone Mason, Kara Carpenter

Credits Contact Help

It's 7:30 on a Friday morning and the workday at the Green Dreams Midwest building site has just begun. Green Dreams is a multi-use office building with retail on the lower floors and offices above. Green Dreams has been designed to become the most environmentally friendly building in the city. There are plans for solar panels, geothermal heating, an advanced storm water drainage management system, and all the windows will be made of high R-value glass. So far, the first floor is mostly complete and the upper floors are still in development. Ed is cutting pavers and Diane has just arrived at his station with another powered wheelbarrow load of them.

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Several states, including Massachusetts, Connecticut, New Hampshire, Rhode Island, New York, and most recently, Missouri and Nevada require construction workers to complete the OSHA 10-hour construction safety training course prior to working on public sector projects.

Ed lights a cigarette and has to be terrible for your lungs.

I cut it.
It's fine without your help.

Overview Episodes Scenes 2 3 4 5 6 Resources Glossary Back

▶ Green Construction CoP:

Using Immersive Stories to Address Silica Exposure in Green Construction

Custom Course Development

- ▶ 20 Slide Layouts
- ▶ Live Preview
- ▶ Export to three different screen resolutions
- ▶ Add a sound track
- ▶ Embed a video, picture, flash treatment, eScene, or learning activity
- ▶ Five built-in activity types
- ▶ SCORM compliant exports
- ▶ Content authoring with no need for a programmer means it's cost effective and fast

Add new slides, sections, subsections with one click, export your course in seconds, spell check, save, or create a course outline.

Choose from 20 different slide layouts and add media, text, rollovers, links, or activities to any frame.

Add or remove new media files quickly and easily

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▶ WisdomTools Authoring Studio

Custom eLearning tools made easy, cost effective, and awesome!

Chris Held
Metamedia Training
International, Inc.

HAZMAT GURU Chemical Entry Screen

On this screen the user can type the name of the chemical or the chemical UN ID#.

HAZMAT GURU will search its internal database for the chemical properties.

HAZMAT GURU Basic Chemical Properties Screen

On this screen the user will be provided With basic information about the chemical such as:

- UN Number
- ERG Number
- Warning Symbol
- State
- Buttons to access chemical properties
- Buttons to access Meters and PPE

HAZMAT GURU

Type in name of chemical
Propane

or
Type in UN ID#

SUBMIT

CLICK HERE IF UNKNOWN

Copyright © 2010 MetaMedia Training International, Inc.

HAZMAT GURU

PROPANE

UN NUMBER 1978 ERG NUMBER 115

1075
2

SOLID LIQUID GAS

Flammable

Reacts With... Toxic Other Properties

Meters PPE

BACK TO MAIN SEARCH

HAZMAT GURU

HAZMAT GURU

FLAMMABLE - propane

F.I.P - FLAMMABLE GAS

LEL - 2.1%

UEL - 9.5%

Meters PPE

BACK

HAZMAT GURU

PPE - propane

PPE is Mission Driven

Rescue Line of Sight Plumbing

RESCUE LINE OF SIGHT

Quick In • Quick Out
Turn Out / SCBA or Level B

F (Yellow absolute ABORT → Level A)

Running Red Lights → Officer Discretion
Based on degree of difficulty

Meters PPE

BACK

HAZMAT GURU

METERS - propane

Red Lights	Gamma 2xBG	Rad radioactive	
	Corrosive Gas	F • pH corrosive	
	Increase Temp.	TempGun reaction	X
	10% T.O. 1% Plastic	CGI LEL/O2	X
	Poison Meters	PID ≤ 10.6eV	X
		FID Char	X
		Freons F,Cl,Br,I	
		Tube Chip	X
Shock Sensitive		KIss explosive	

Meters PPE

BACK

SCSR Expectation Training

SCSR Expectation Training

Scenario (Part 5) Main Menu



- A) Wait to reestablish contact with the outside.
- B) Don their SCSRs and start heading towards the man trip.
- C) Don their SCSRs and wait for a rescue team.
- D) Conserve their SCSRs and begin evacuating on foot.

Submit

Slide 12 / 23 | Answer Question

00:01 / 00:57

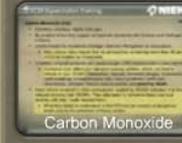


NIEHS

Media Bar



Donning the M-20



Carbon Monoxide

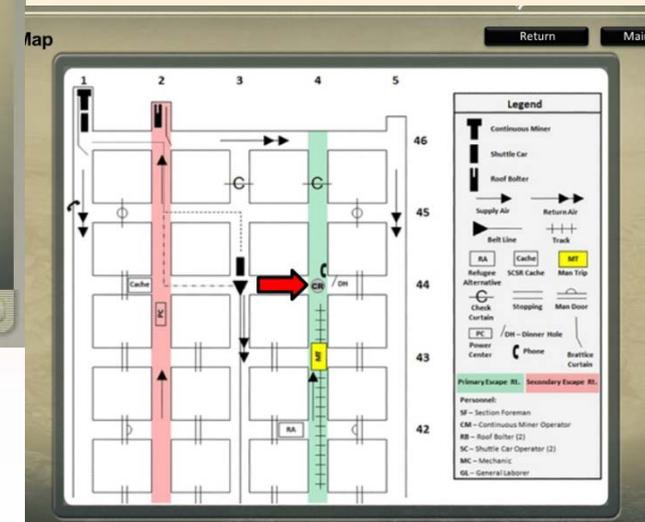


M-20 Details



Mine Map

Elapsed Time: 17 min.



SCSR Expectation Training

SCSR Expectation Training



Return Main Menu

Quality of Breathed Air:

- **Compressed Gas Units** (e.g. M-20 and EBA 6.5) produce air/oxygen that is generally hot and very humid.
 - May cause some breathing resistance or
 - May feel that unit is malfunctioning.
 - Unit is functioning properly.
- If breathing becomes uncomfortable:
 - Reduce your speed or work rate.
 - Breathe normally.
- Never remove your SCSR unit or mouthpiece for any reason.



FA
Media

SCSR Expectation Training



Return Main Menu

Refuge Alternatives:

- Are an option when self-escape is **not possible**.
- Provide a safe location for rest (air, food, SCSRs and water) or until a Rescue Team arrives.
 - Research supports self-escape as opposed to rescue as the most likely scenario for reducing fatalities.
- Are usually placed at 30-minute intervals, however, the exact distance is based on the **seam height**.
 - e.g. For a 6-foot seam the distance is 5,700 feet (determined from SCSR location guidelines).
- Use requires that you keep the SCSR on until the alternative is purged of "bad air" and the readings are clear.
 - You may then remove the SCSR, but be sure to have extra units available.



FA
Media

Jonathan Kaye
Equipment
Simulations, LLC

if simulations work...

why don't we use more of them
at work?

...the process to create [simulations] today is too long and too expensive for most organizations to use them beyond the 5% to 10% of their high value/mission critical and external facing courses today. Further, the marketplace for selling and otherwise sharing them is too fragmented to provide reliable returns to attract many content creators. This has resulted in an identified, but unfulfilled need....What is now needed are powerful, flexible, and accessible simulation creation tools as well as a viable, persistent simulation repository and marketplace.

Clark Aldrich

thought leader on educational simulations and games

June 2010

SIMSYOU SHARE.COM

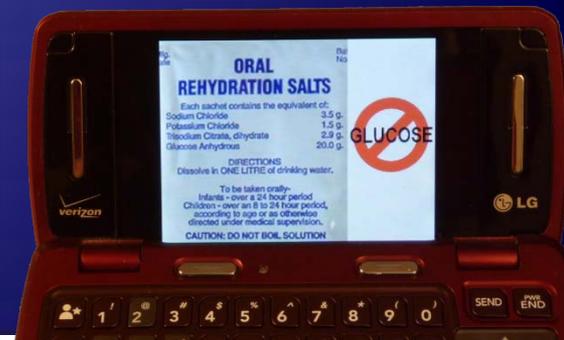
- Cloud-based simulation repository and development platform for Public & Industrial Safety instructors
- ‘YouTube’ of training simulations, with a kick
- Benefits
 1. Simple and consistent development process
 2. Centralized focus, decentralized deployment
 3. Reduced market redundancy through efficient sharing
- Coming 2012

Cesar Bandera

Cell Podium, LLC

Unified Cellular Training

- ◆ Video, animations, slide shows with voice-over delivered to any cell phone
 - ◆ Smartphones with Internet access
 - ◆ Simple phones with no web browsing
- ◆ Media pushed onto phone without user involvement
- ◆ View/replay media anytime
- ◆ Collect media *from* phones
- ◆ Secondary content dissemination
 - ◆ peer-to-peer forwarding, viral



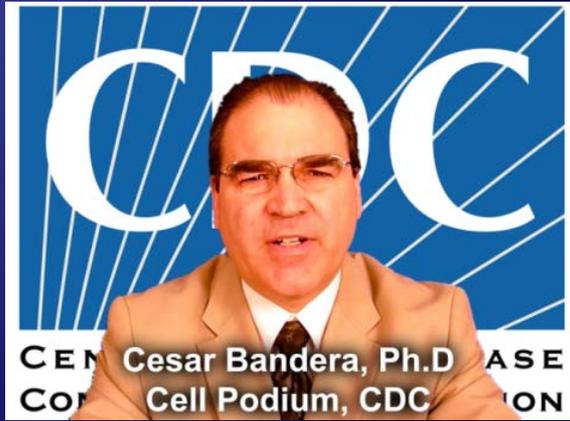
Nine Winter Preparedness Videos in Six Weeks



TITLES OF VIDEOS

- Preparing Your Home
- Supplies For Your Home
- Supplies For Your Car
- Heating Your Home Safely
- Monitor Infant Temperature

- Preparing Your Car
- Outdoor Safety
- Avoiding CO Poisoning
- Thank you for watching



Description

How to opt-in

How to opt-out

Invitation E-mail

CDC Winter Weather | Winter Weather Preparedness Videos - Windows Internet Explorer

http://emergency.cdc.gov/disasters/winter/emails/signup.asp

CDC Home
Centers for Disease Control and Prevention
Your Online Source for Credible Health Information

Emergency Preparedness and Response

Emergency Preparedness & Response

- Specific Hazards
- Preparedness for All Hazards
- What CDC Is Doing
- What You Can Do
- Blog: Public Health Matters
- What's New

Winter Weather Preparedness Videos

Stay Informed

The Centers for Disease Control and Prevention (CDC) is happy to offer a free mobile subscription service which allows CDC.gov users to receive Winter Weather Preparedness videos by phone. CDC has created videos for your phone to help you be prepared this winter season.

Subscribe Now

To receive winter preparedness videos on your cell phone via MMS or mobile web, dial (973)735-5823 and an automated voice system will guide you through the quick enrollment process. If you wish to receive videos via email to your mobile device, simply send an email to winter@cellpodium.com.

Your email address or phone number will only be used to deliver the requested information.

Unsubscribing

To stop receiving videos, simply dial (973)735-5823, or if you enrolled via email then just send an email to winter@cellpodium.com with "Remove" in the subject line.

Prevent emails from being marked "SPAM" or "JUNK"

To ensure delivery of emails to your inbox, please add winter@cellpodium.com to your email your spam settings, or follow the instructions from your email provider.

Text size: S M L XL

Email page
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To receive email updates about this page, enter your email address:

What's this?

Contact Us:

Centers for Disease Control and Prevention
1600 Clifton Rd
Atlanta, GA 30333
800-CDC-INFO
(800-232-4636)
TTY: (888) 232-6348
24 Hours/Every Day
cdcinfo@cdc.gov

REPORT AN EMERGENCY

Tell us what you think about this page!

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Centers for Disease Control and Prevention (CDC) · 1600 Clifton Rd · Atlanta GA 30333 · 800-CDC-INFO (800-232-4636)

From: Centers for Disease Control & Prevention [mailto:cdc@service.govdelivery.com]

Sent: Friday, February 18, 2011 12:34 PM

To: bandera@ieee.org

Subject: New Winter Weather videos available on your cell phone or email!

You are subscribed to [What's New on the Winter Weather Site](#) for Centers for Disease Control and Prevention (CDC). This information has recently been updated:

Cool Tip of the Week: Receive winter weather preparedness videos on your cell phone or email. [Enroll today!](#)

[Modify/Update Subscriber Preferences](#) | [Unsubscribe](#) | [Send Feedback](#) | [Learn more about CDC Email Updates](#)

To receive the latest news for your region, please [update your profile](#) with your country, state and zip code.

Questions or problems? Please contact support@govdelivery.com.



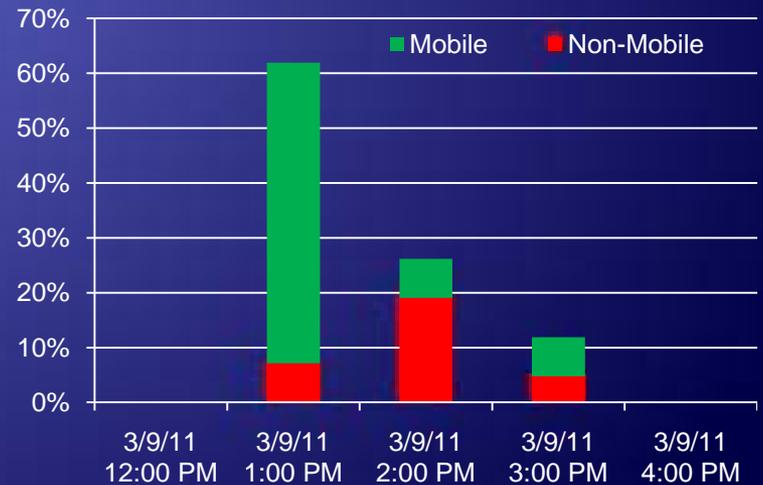
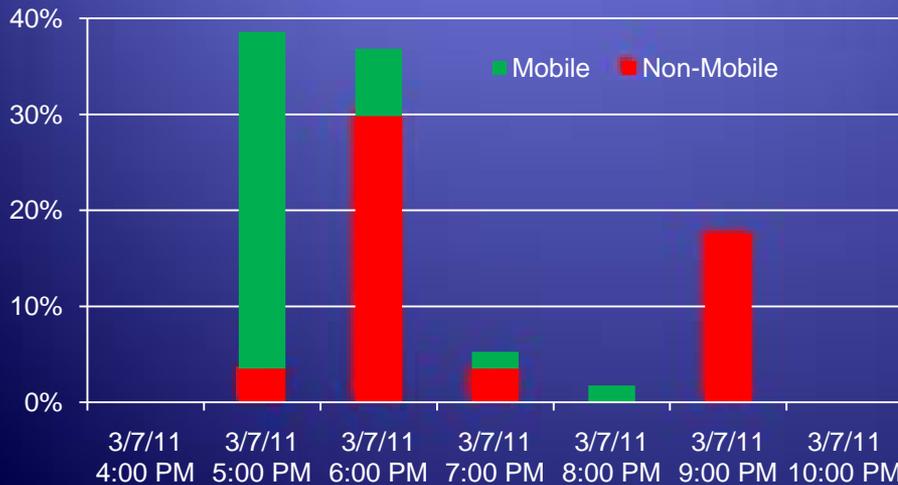
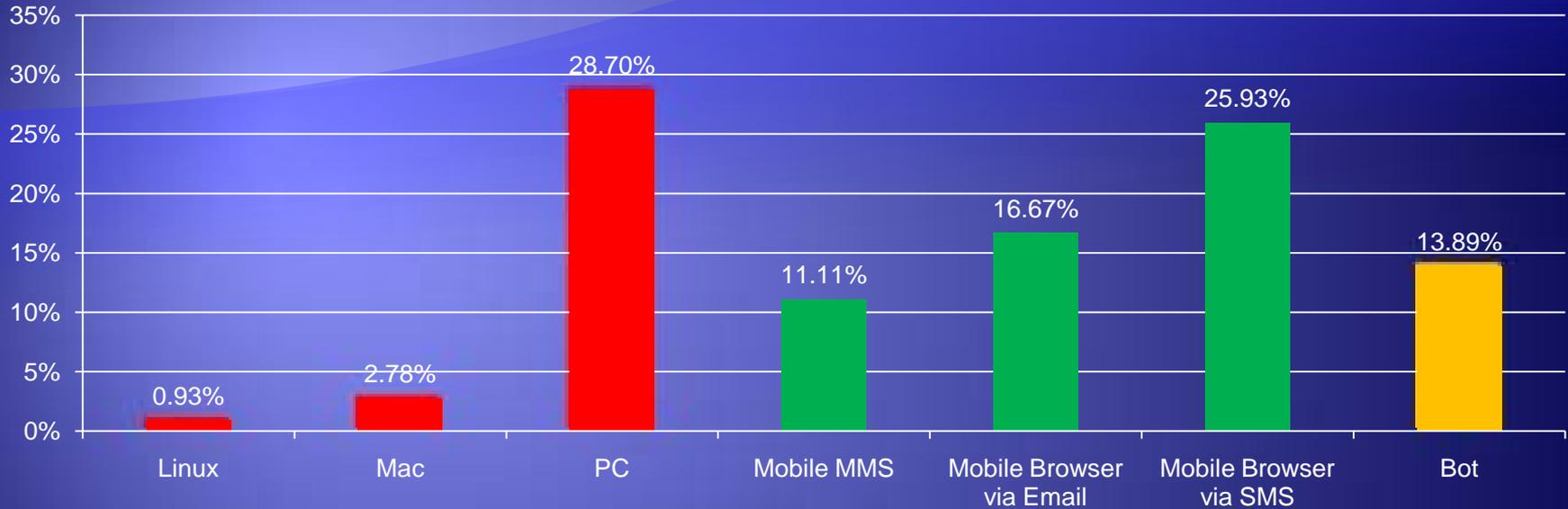
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Cell Phone Users Are More Likely to Watch Videos, and Sooner



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[http://www.niehs.nih.gov/careers/hazmat/
programs/att/index.cfm](http://www.niehs.nih.gov/careers/hazmat/programs/att/index.cfm)