CDC Virtual World Requirements and Best Practices

Purpose
This document has been designed to assist Center for Disease Control and Prevention (CDC) employees and contractors who wish to participate in ongoing or new virtual world outreach efforts.

Background
CDC encourages the strategic use of virtual worlds to effectively and creatively reach individuals and partners with timely health information that may relate to campaigns and upcoming events.

Virtual worlds are immersive and engaging environments that encourage active participation and learning. Virtual worlds rely upon avatars, a user's visual representation usually displayed as a unique three-dimensional model. In most virtual worlds, avatars can participate in activities and interact with one another. According to a KZero report: Virtual Worlds 2010+, "Registered virtual world accounts continue to increase, with the largest growing sector in the 10 to 15 year old age bracket." (http://www.kzero.co.uk/blog/?p=2926) Virtual worlds provide an excellent opportunity for users to 'model' healthy behaviors. When used effectively, virtual worlds can provide a safe and engaging environment where users learn the positive and negative consequences of health decisions and the skills to make healthier choices.

Process
Virtual worlds are emerging spaces that offer many opportunities for communication outreach. CDC participates in the virtual worlds Second Life and Whyville. The Division of eHealth Marketing (DeHM) researches and provides strategic communications expertise for expanding CDC’s presence in current virtual spaces and working with partners to build the evidence behind this medium.

Virtual worlds often require a high level of engagement, maintenance and overhead. Because these spaces are very new, they often present a number of security issues. Please contact NCHM Interactive Media at NCHMInteractiveMedia@cdc.gov for information on how to participate in CDC’s virtual world activities or for current research, partnership opportunities. NCHM will work with you to ensure that each virtual world project meets security requirements and utilizes the best practices for development.

Clearance
CDC virtual world activities are managed by DeHM. Any proposed activity or information must be cleared and pre-approved through the Center’s normal clearance channels. All content displayed in any official CDC virtual world presence should be posted by DeHM.
Security Requirements
Please note: Due to security concerns related to participating in virtual worlds, all participation in must also be cleared by the Office of the Chief Information Officer (OCISO.) To facilitate this process, contact your Center’s Information System Security Officer (ISSO). All participation must occur off of the CDC network, by using an off-network laptop with a wireless internet card or a personal home computer.

Refer to the Social Media Security Mitigations for more detailed security information.

Planning Requirements
To use resources effectively, a collaborative planning meeting with DeHM should be arranged to discuss:

1. Target Audience(s):
   As with any communications activity, it is important to define your intended target audience(s) in order to develop and communicate messages and graphics that resonate with your audience and prompt them to take action. For the most part, virtual worlds target consumers; although, there may be some instances when partner organizations, healthcare providers, public health professionals or other audiences are targeted.

2. Objectives:
   It is also important to have clearly defined objectives before participating in virtual worlds. Do you want to increase awareness of the topic, expand the reach or scope of the message or encourage a behavior change?

3. Virtual World Decisions
   During the planning stage, the following needs to be addressed:
   a. What is your budget?
   b. Which virtual world do you plan to participate in? Why?
   c. What type of involvement would you like to have?
   d. What design aspects are important to include?
   e. Do you plan to use animation, audio, or translation services?
   f. What content will you be linking to?
   g. Do you need to develop messaging or content and, if so, how long will it take to clear?
   h. How will you promote your involvement?
   i. What is your plan for continued participation and interaction?
   j. How will you maintain or grow your activity?
   k. Is there a designated employee responsible for the upkeep and day-to-day issues?
   l. What resources are available to support maintenance and evolution of the content?

4. Design and Usability
Social Media Guidelines and Best Practices

All virtual worlds must follow HHS and CDC recommendations for good design and usability within these unique spaces. Please refer to the following for additional information:

http://intranet.cdc.gov/cdcweb/reqs_bestpractices/guidance_standards.htm (not accessible outside the CDC network). CDC maintains a virtual space, called an island, on Second Life. Participation on that Island should follow the design for that space. DeHM will help with this.

5. All content presented within virtual worlds should be:
- Organized topically or strategically structured to meet a communication objective.
- Displayed in consumer-friendly language.
- Up-to-date and reviewed annually.
- Posted by DeHM.

Specific Requirements: Second Life

Second Life is a virtual world, created by Linden Labs, where individuals can create avatars and create space on islands.

If you would like to participate in ongoing Second Life activities, here are a few recommended areas for participation. All items require prior approval from the DeHM prior to beginning a project in order to discuss objectives and scheduling. Bracelets and posters require a minimum of one-week to produce. The graphics for bracelet and poster items should be completed by Creative Services. Once graphical elements are produced by Creative Services, they must undergo clearance by the Division of eHealth Marketing (~2 work days) and if cleared they will be uploaded (~2 work days)

1. Bracelets
   CDC provides free virtual awareness bracelets in Second Life on the CDC Island. The bracelets are updated regularly to display new health campaign information (see example). Each Bracelet has an image (.jpg, .gif or .tga) with the CDC logo, the campaign title, and date displayed. The bracelets should be colorful and fun. The campaign title should be in 24 point bold Arial font. Each campaign should have an associated URL on CDC.gov. The image size is 512 x 64 pixels.

2. “Posters” or Campaign Graphics
   There is the opportunity to display “posters” or campaign graphics inside of the buildings on the CDC Second Life Island (see example). The posters can be displayed in either landscape or portrait layout and must measure 512 x 334 pixels. Each poster must have an associated URL on CDC.gov to link to for additional information. Each poster must include a text description that will be displayed as the image footer. The size of this
3. Videos and Podcasts
DeHM is able to embed video files from the CDC YouTube Channel into the streaming media area inside of the Second Life Island. This allows for promotion of the CDC YouTube Channel and for the ability to obtain accurate metrics. Current video podcasts (from the CDC.gov podcast page) can also be added to the Second Life Island. All audio with words must be open-captioned. Videos can be in .mov or .mp4 formats. See Online Viral Video Guidance for more information.

4. Interactive Activities
If you would like to build any interactions into Second Life, please contact NCHMInteractiveMedia@cdc.gov to obtain pre-approval and to discuss scheduling and planning options, goals and objectives and to discuss the resources required to build new interactive functions.

**Specific Requirements: Whyville**
Whyville is a popular virtual world designed for “tweens” (children ages 9-12) that has over 3.8 Million registered users. According to Numedon Inc., a virtual world creator that launched Whyville in 1999, “Whyville is a virtual city for engaging young people in constructive educational activities while promoting socially responsible behavior.”
(http://b.whyville.net/smmk/top/gatesInfo?topic=whyville_for_parents)

Activities in Whyville must be designed, created and executed in collaboration with Numedon, Inc. to ensure it meets the community standards and Whyville environment.

Whyville custom builds interactive activities that maximize user engagement and participant learning. A number of interactive activities are available, with varying resource requirements. For more information on possible activities, please contact NCHMInteractiveMedia@cdc.gov.

**Best Practices**
Virtual world activities should be created, implemented and evaluated in accordance with the unique characteristics of the space. Activities may vary depending on the specific virtual world.

1. **Budget**
   Participating in a virtual world may have costs associated with it. The costs vary greatly depending on the virtual world and the activities planned. Please discuss budget before developing plans for participation.

2. **Graphics and Images**
   a. Any graphics and images used must be purposeful and thoughtful.
b. All graphics and images must appear current and timely.
c. All graphics and images need to include alternate text that completely describes the image.

3. Audio and Video
   a. Audio / Video content should not automatically begin playing as soon as the page loads.
   b. Provide users with mute, volume and play buttons, and closed captioning.
   c. All audio with words must be captioned. For other information on Section 508 guidance, please contact NCHMInteractiveMedia@cdc.gov.

4. Promotion
   Promotion of virtual world activities should be done primarily in-world. Since each virtual world is unique, a specific promotion plan should be developed prior to participation.

5. Evaluation
   All efforts should be evaluated by reviewing the metrics, articulating the lessons learned, and determining whether the effort was successful and met project goals. Specific metrics for each virtual world vary. Current metrics available for CDC’s Second Life Island are the number of visitors, the number of bracelets and biohazard suits given away and the number of responses received by the survey robot. Additional metrics may be available in the future. To discuss evaluation strategies for Second Life, please contact NCHMInteractiveMedia@cdc.gov

Examples

Second Life Bracelet
This 2006 photograph depicted a female Aedes aegypti mosquito while she was in the process of acquiring a blood meal from her human host.