

# **Exploratory and Empirical Assessment of the Homeland Security Advisory System**

Daniel L. Segal, Andrew Czaplewski, Eric M. Olson, & Alisa O'Riley  
University of Colorado at Colorado Springs

## **Abstract**

The Homeland Security Advisory System (HSAS) was unveiled in March 2002 with the purpose to provide information about the current threat level regarding terrorist attacks. Despite its widespread use, little is known about the public's perceptions of the system. Focus groups were conducted to generate items for a survey of attitudes about the HSAS. The pilot survey was administered to 93 undergraduate volunteers (*M* age = 25.5 years; 74% female) and yielded information about the marketing of the HSAS, citizen responses to threat level changes, and opinions about the HSAS. Generally, knowledge of the system was poor. The most popular informational source was local news (71%). As the threat level increases, participants thought they should be more vigilant and decrease travel. Regarding actual behaviors, as the level increases, participants reported that they would be more vigilant and decrease travel but they were less likely to continue normal activities. In general, attitudes toward the system ranged from highly negative to highly positive depending on the item. These data serve as a call to the government to better educate the public about the system, to clarify what behavioral responses the government recommends, and perhaps clarify factors that specifically affect threat level changes.

By executive order, the Office of Homeland Security was created on October 8, 2001 in response to the September 11 terrorist attacks on New York and Washington. This Office became the Department of Homeland Security on January 24, 2003 after Congressional approval. The Homeland Security Advisory System (HSAS) was unveiled on March 12, 2002 and began with a “yellow” or “Elevated” threat level. The Homeland Security Advisory System (HSAS) consists of five distinct threat conditions that range on a continuum from Low to Severe and are color coded(see Figure below).



One major purpose of the HSAS is to communicate information to the general public. However, little is known about the public perception of the system and the actual impact the system has on citizen behavior. The purpose of the present study was to address these issues and provide an initial exploratory and empirical evaluation of the HSAS. Specifically, we wanted to address the following questions:

1. How has the Advisory System been marketed to the public?
  - ◆ Where are citizens getting their information about the system?
2. How and to what degree does the Advisory System impact citizen behavior?
  - ◆ What are the beliefs of citizens about what they should do at each threat level?
  - ◆ What citizen behaviors are actually exhibited at different threat levels?
3. How do citizens perceive the Advisory System?
  - ◆ What attitudes and opinions do citizens have about the system?
  - ◆ Are citizens desensitized to the system and ignore it?

## Method

### Participants and Procedure

A survey instrument was designed to assess perceptions of and attitudes toward the HSAS. The first step in creating the survey was to conduct several focus groups with citizens regarding their general perceptions and insights into the HSAS. Focus groups represented the qualitative phase of the research. Five one-hour focus groups were conducted with a total of 30 participants. An interview protocol was developed and used to help focus the discussion. Based on focus group qualitative data, an initial pool of questions were developed and refined and a pilot version of the survey was created. The survey was administered to 93 participants who were recruited from undergraduate classes. This sample ranged in age from 18 to 55 years ( $M = 25.5$  years,  $SD$

= 7.4 years). The majority were female (73.9%) and almost exclusively Caucasian (86.0%). Education ranged from 12 to 19 years ( $M = 15.2$ ,  $SD = 1.1$ ).

## Results

### *Knowledge*

Overall, participants' knowledge about the system was poor.

- The most frequent response regarding when the system went into effect was September 2001 (35%). Only 3% knew the correct answer (March 2002).
- The most frequent response regarding the last time the threat level changed was September 2003 (38%). The correct response was May 2003 (7%).
- Most participants believed the threat level had changed 3 times in the past year (the range of answers for this question was 0 – 1000). The correct response was 8 times (2% correct).
- A minority of participants correctly knew that there were five threat levels in the system (38%, the range of answers was 3 – 12).
- Since the system is color-coded, participants were asked to match colors to their corresponding threat levels. Most participants correctly knew that the severe level in the system is color coded red (95 %). A majority knew the high level is orange (77%) and the elevated level is yellow (73%). Only 36% of participants correctly labeled the guarded level green. The most frequent (but incorrect) answer was blue (43%). Similarly, more participants (42%) incorrectly labeled the low level blue, and 37% correctly labeled this lowest level green.
- Less than half of the participants were aware that the current level was elevated (47%).
- Despite the system having 5 threat levels, neither the lowest level nor the highest level (severe threat) have ever been reached. Almost half of the sample (48%) incorrectly labeled severe as the highest level ever reached and almost half incorrectly labeled the lowest level ever reached (32% said low; 14% said elevated).
- Participants were asked from what sources they get information about the system. Local news was the most frequently endorsed source (71%) followed by national news (60%), cable news (45%) and other people (44%). Less popular sources included radio (32%), newspapers (29%), internet (24%), military bases (19%), news magazines (2%).

### *Behavioral Responses to the HSAS*

First, participants were asked what typical citizens *should do* when the threat level changed from elevated to high. The most popular responses were:

- “be more vigilant” (81%)
- “continue with their normal activities” (74%)
- “reduce international travel” (71%)
- “stock up on supplies” (34%)
- “reduce domestic travel” (32%)
- “avoid crowded places” (20%)
- “buy duct tape” (9%), “take out cash” (4%), and “do not know what to do” (2%).

Next, participants were asked what typical citizens *should do* when the threat level increases from high to severe. Almost all of the endorsement rates were higher for this behavior prompt than for the previous behavior prompt.

- “be more vigilant” (88%)
- “reduce international travel” (86%)
- “reduce domestic travel” (72%)
- “stock up on supplies” (61%)
- “avoid crowded places” (60%)
- “continue with their normal activities” (47%)
- “take out cash” (22%), “buy duct tape” (19%), and “do not know what to do” (3%).

Next, participants were asked what they **actually do** when the threat level changed from elevated to high. The most popular responses were:

- “continue with their normal activities” (80%)
- “be more vigilant” (71%)
- “reduce international travel” (50%)
- “reduce domestic travel” (30%)
- “avoid crowded places” (20%)
- “stock up on supplies” (17%)
- “buy duct tape” (3%), “do not know what to do” (3%), and “take out cash” (2%).

Finally, participants were asked what they **would do** should the threat level change from high to severe. The most popular responses were:

- “be more vigilant” (84%)
- “reduce international travel” (80%)
- “reduce domestic travel” (61%)
- “avoid crowded places” (50%)
- “continue with their normal activities” (48%)
- “stock up on supplies” (47%)
- “take out cash” (20%), “buy duct tape” (13%), “do not know what to do” (3%)

### *Attitudes*

- Participants were asked how their attitudes toward the system have changed since the system was first instituted.
  - Much more negative (4%).
  - Slightly more negative (10%)
  - No change (61%)
  - Slightly more positive (23%)
  - Much more positive (2%)
- Participants were asked how the HSAS has affected their fears about terrorism.
  - Very much decreased fear (0%)
  - Slightly decreased fear (10%)
  - No effect (53%)
  - Slightly increased fear (32%)
  - Very much increased fear (4%)

Finally, a series of diverse questions were asked about attitudes toward the HSAS and the quality of information provided by the system. These data are presented in Table 1.

## Discussion

### *Knowledge*

It was notable that knowledge about the system is poor. Most participants did not even know that the system has 5 separate levels and less than half correctly knew that the current level is elevated. Regarding the color scheme, the most likely errors involved mixing up the two lower levels (blue and green). One hypothesis for this confusion is the fact that although green comes before blue in the color spectrum, blue comes before green in the HSAS. Although participants clearly identified multiple information sources (e.g., local news), we find it interesting that even basic knowledge of the system is lacking. If this system is to be useful to the public, it is clear that more public education and awareness is needed.

### *Behavioral Responses to the HSAS*

In general, participants identified at high frequencies behaviors that they think average citizens should do when the threat level increase. As to reports of their actual behaviors, in general the frequencies for responses were lower except for the notion that they would continue their normal routines. Thus, actual behavior change due to the system is somewhat limited. This situation may suggest that the government needs to clarify its recommendations about appropriate behavioral responses to threat level changes.

### *Attitudes*

For the most part, attitudes toward the system were quite varied. Most participants indicated that in general their attitudes have remained relatively unchanged over the last 2 years. In fact, some (23%) felt slightly more positive toward the system than they did at its inception. The system, in general, seems to be viewed positively: Participants thought that the system itself is effective, meaningful, useful, and helpful.

Despite these positive, a substantial number of participants (36%) reported that the system has slightly or very much increased their fears about terrorism. A majority of participants (70%) also felt that they are rather helpless in the face of terrorist threats. These findings may suggest that the system has been ineffective in terms of alleviating fears about terrorist attack by providing information to the public about the present degree of risk and what citizens should do about that risk. In addition to these indications of ineffectiveness, participants also seem to have some negative attitudes toward the system itself. In general, these attitudes appear to be centered on the way threat levels are determined. A majority of participants (69%) believe that the system is affected by politics. Many participants (56%) also appear to be unclear about how threat levels are determined. Also, many participants (57%) also seem to be unsure of the reasoning behind threat level changes. In general, the government may need to be more specific about the factors that contribute to threat level changes.

Finally, participants seem to be divided in terms of their attitudes toward several aspects of the system. About half of the participants seem to feel that the system is too ambiguous, that the meaning behind threat level changes is unclear, that information about the system lacks objectivity, and that when the threat level changes nothing really happens. Clearly, we need more evaluation of these aspects of the HSAS system, and a larger study is currently underway.

Table 1  
*Frequencies for the Attitude Questions*

<b>Item</b>	<b>Strongly Disagree</b>	<b>Disagree</b>	<b>Agree</b>	<b>Strongly Agree</b>
I appreciate the government's continued efforts to keep me informed.	0	11%	60%	29%
I notice the system less than I used to, because the media coverage has died down.	5%	12%	68%	15%
In the end, I feel there is nothing I can do about terrorist threat.	2%	27%	47%	23%
The HSAS system is too ambiguous.	4%	51%	33%	11%
I don't really know what it means when the threat levels change.	9%	45%	39%	5%
I don't understand the purpose of the system.	19%	60%	17%	2%
When the threat level changes, nothing really happens.	5%	37%	51%	7%
I think the system is affected by politics.	5%	25%	47%	22%
When the threat level changes (for example, it goes from guarded to elevated), the change is well publicized.	5%	45%	40%	9%
The information I receive about the HSAS system lacks objectivity.	2%	51%	43%	3%
The information I receive about HSAS is valid.	3%	27%	63%	4%
The information I receive about HSAS sends conflicting signals.	4%	52%	38%	5%
The information I receive about HSAS communicates important details about the system.	7%	57%	34%	2%
The information I receive about HSAS provides me with the facts I need to make a good judgment regarding the risk of my own actions.	12%	42%	43%	3%
I consider the information I receive about HSAS to be relevant.	5%	24%	62%	8%
The reasoning behind the information I receive about HSAS is clear to me.	10%	47%	39%	4%
The information I receive about HSAS is timely.	3%	42%	52%	3%
The information I receive about HSAS is old news.	8%	58%	28%	1%
The information I receive about HSAS helps shape my travel plans.	15%	42%	31%	7%

<b>Item</b>	<b>Strongly Disagree</b>	<b>Disagree</b>	<b>Agree</b>	<b>Strongly Agree</b>
The information I receive about HSAS improves my understanding of the HSAS system.	10%	37%	47%	1%
The information I receive about the HSAS shapes my understanding of how levels are determined.	12%	44%	36%	3%
Overall, I think the system is effective.	7%	24%	56%	5%
Overall, I think the HSAS system is meaningful.	7%	23%	58%	7%
Overall, I think the HSAS system is useful.	7%	19%	62%	7%
Overall, I think the HSAS system is helpful.	8%	24%	56%	5%
I usually find myself ignoring the HSAS system.	9%	36%	34%	13%
I feel “burnt out” by the HSAS system.	19%	59%	10%	7%