

## **Initial Analysis**

How is Online Content About the Meningitis Crisis Influencing Overall Perceptions About the Safety of Prescription Medications Among Active Digital Health Consumers?

Enspektos, LLC  
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[www.enspektos.com](http://www.enspektos.com)



*Learn more about the digihealth pulse research initiative at [www.digihealthpulse.info](http://www.digihealthpulse.info)*

## Analysis: Initial Impact of Meningitis Crisis-Related Online Content on Consumer Perceptions of the Overall Safety of Prescription Medications and Injections

<b>6 Questions and Answers About this Research</b>	
<b>Question</b>	<b>Answer</b>
1. Who Conducted the Research?	This research was conducted by <b>Enspektos, LLC</b> , a health marketing innovation consultancy.
2. What Was the Goal of the Study?	Understand how online content related to the meningitis crisis influenced perceptions of the <b>overall safety</b> of prescription medications and injections.
3. What Was the Study Question?  <i>(This question was asked immediately after meningitis-related online content was consumed by study participants.)</i>	<p><b>The Question:</b> After reading this information, are you more likely to be concerned about the safety of prescription medications and injections?</p> <p><b>202 Responses:</b></p> <ul style="list-style-type: none"> <li>• <b>63%</b> Yes</li> <li>• <b>37%</b> No</li> </ul>
4. What is the Study Population?	<p>Representative group of <b>398</b> active digital health consumers:</p> <ul style="list-style-type: none"> <li>• They use the Web and social media</li> <li>• They have searched online for health content for themselves or others during previous six months prior to September 2012</li> </ul>
5. When Was this Data Collected?	Data was collected <b>immediately</b> after study participants consumed meningitis-related Web content between <b>October 9 and 15, 2012.</b>
6. What's Next?	Additional data on the impact of meningitis outbreak is <b>being collected daily</b> as the crisis unfolds. We expect exposure of study population to online meningitis content to increase beyond the 14% rate we observed during the initial study period.
<p><b>Source:</b> Enspektos, LLC  <b>Where to Learn More About digihealth pulse:</b> <a href="http://www.digihealthpulse.info">www.digihealthpulse.info</a></p>	

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## **Overview**

From October 9<sup>th</sup> through the 15<sup>th</sup>, Enspektos, LLC tracked consumption of and reaction to online content related to the ongoing meningitis outbreak. This crisis was sparked by tainted steroid pain medications manufactured by the New England Compounding Center. This data was collected as part of digihealth pulse, Enspektos' ongoing tracking study of active digital health consumers.

This study represents the first time data has been gathered (in real time) on the impact of health crisis-related online information on consumer perceptions at the start of an event. We are capturing responses to content rather than conducting sentiment analysis and making assumptions about the influence of content tonality (negative or positive) on perceptions.

In addition, this data on how meningitis-related Web content influenced perceptions was collected immediately after it was consumed. Study participants read (or watched) content (during their unaided Web browsing sessions) on the event and were asked to respond with information about their perceptions of overall drug safety.

The crisis is still unfolding and appears to be escalating. Given this, we are offering a preliminary analysis of a data set we collected over a limited time period. However, examination of information we have received to date indicates that after reading content about the meningitis crisis some consumers have become *more* concerned about the overall safety of prescription medications and injections.

### *Why Does This Research Matter?*

We are releasing this data due to the important public health and safety implications of the meningitis crisis. In addition, this study provides previously unknown information about how:

- Negative online content about a health crisis can influence perceptions immediately after it is read
- The role of e-mail and traditional online news outlets on the spread and consumption of important health information

### *Data Collection and Initial Results*

Immediately after they consumed content (received via e-mail, online news sites, social media and other sources) about the meningitis crisis online, digihealth pulse study participants were asked: "After reading this

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information, are you more likely to be concerned about the safety of prescription medications and injections [Yes or No]?”

We received 202 responses to this question between October 9 and October 15, 2012:

- 63% were “yes” answers
- 37% were “no” answers

### *How Did Active Digital Health Consumers Receive this Information?*

Study participants received this information via online news sources such as CNN, Yahoo! and WebMD. In some cases, they were informed about the crisis via e-mail due to online news alerts or summaries distributed by mainstream news organizations.

### *Study Methodology*

Enspektos is currently tracking the online PC and laptop-based activities of a representative group of 398 U.S. adult active digital health consumers. These are individuals who use the Web frequently, utilize social media channels, such as Facebook and Twitter and searched online for health content for themselves or others 6 months prior to the September 2012 launch of the study.

We are collecting data, in real-time, on how consumers perceive, react to and alter their health behaviors after consuming health content on 39 common topics such as heart disease, breast cancer and influenza. In addition to these 39 topics, we are also tracking awareness of and reaction to the ongoing meningitis crisis. To date, we have analyzed more than 360,000 Web pages and Twitter/Facebook status updates received by study participants.

This study is powered by enmoebius, a patent-pending digital surveillance and behavioral measurement engine developed by Enspektos.

### **Additional Contextual Information About This Study**

Since early October, the volume of negative coverage of the meningitis outbreak tied to tainted steroid injections has increased. Yet, while the medication is different, the overall story is similar to one that has been reported previously. Lapses in medication quality and safety have once again called into question the ability of regulators and the pharmaceutical industry (even though the affected product was not developed by a pharma company) to manufacture and regulate helpful rather than harmful products.

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When these types of unfortunate events occur some may ask whether the latest round of negative news about drug safety has negatively impacted overall consumer perceptions of the reliability of the medications they take. In the past, we've relied on a few tools to answer this important question. One has been sentiment analysis of news coverage, which has been used to link the tonality of content to consumer perceptions (i.e., negative coverage leads to negative perceptions). Another has been surveys where consumers are asked to rely on their memory and current state of mind to provide information about the impact of negative market events.

Yet, while both of these methods are useful they do not allow interested parties in health to answer the following important questions:

1. How are people finding negative drug safety information online?
2. What are the *specific* news stories and other information sources people are reading?
3. What is the *impact* of content consumed via e-mail, news sources, social media and other sources on perceptions and intent?

With this information, the pharmaceutical industry, public health officials and others can (in the context of this crisis and beyond):

- Understand the content (and the context) of how people are consuming health content
- Identify when people are receiving inaccurate or biased information, and the impact of this content on perceptions
- Track the spread and impact of media content in real time and on a range of consumer groups

With digihealth pulse, Enspektos is helping to answer these important questions.

### *Scope and Additional Data Collection*

Enspektos is basing its initial assessment on meningitis content consumed by approximately 14% of the digihealth pulse population over a six-day period. We have seen overall awareness of this issue (among our study population) rise and fall along with news reports of major developments in the meningitis crisis. We continue to collect data on this issue and anticipate that the number of study participants who encounter information about this topic online will increase over the next few weeks.

Those interested in following our analysis of the meningitis crisis can visit [www.digihealthpulse.info](http://www.digihealthpulse.info) to receive more information as we release it.

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**About Enspektos, LLC**

Enspektos, LLC is an innovation consultancy that has provided marketing and communications services to health organizations operating around the world since 2005. Our mission is to help the health industry use digital technologies to persuade patients, providers, caregivers and others to take action around health and wellness.

The firm produces technology-driven strategy, research and training products and services for a diverse range of clients, including government agencies, non-profits, pharmaceutical companies and payers. Learn more about Enspektos at <http://www.enspektos.com>.