

# DVT/PE Awareness and Knowledge Gaps in the General Public

Jack E. Ansell, MD, Lenox Hill Hospital, New York, NY; Gregory A. Maynard, MD, MSc, SFHM, UC San Diego, San Diego, CA; Richard J. Friedman, MD, FRCSC, Medical University of South Carolina, Charleston, SC; Elizabeth A. Varga, MS, CGC, Nationwide Children's Hospital, Columbus, OH; Lisa L. Fullam, Scottsdale, AZ; Alan P. Brownstein, MPH, National Blood Clot Alliance, Tarrytown, NY

## Background

- Deep vein thrombosis (DVT) and pulmonary embolism (PE) impose a major public health burden in the United States (U.S.), affecting an estimated 350,000 to 600,000 individuals and accounting for ~100,000 deaths each year, according to *The Surgeon General's Call To Action to Prevent Deep Vein Thrombosis and Pulmonary Embolism* (2008).<sup>1</sup>
- According to Centers for Disease Control and Prevention mortality data (2006), only deaths from heart disease and cancer surpass deaths from PE.

## Objectives

- The National Blood Clot Alliance (NBCA), a patient-led advocacy organization dedicated to promoting patient and public awareness about the signs and symptoms of DVT and PE, implemented this survey to:
  - Benchmark DVT/PE awareness gaps among the general public
  - Bridge these gaps with information that will bring about increased awareness and optimal adherence to evidence-based strategies for optimal DVT prophylaxis

## Methods

- This DVT/PE awareness survey was fielded by the survey firm USA/Direct, Inc., among a representative cross-section of 500 adults in the U.S., ≥20 years, 64% female, screened from online or Internet research panels.
- Little information about the public's knowledge of venous thromboembolism is found in the literature, making this one of the most comprehensive, relatively large surveys of its kind.

## Results

**1**

Awareness/Knowledge of DVT/PE	National Sample n=500; % yes answer
Do you know what a blood clot is?	82%
Have you heard of a condition called "DVT"?	21%
Have you heard of a condition called "PE"?	16%
Have you heard of a condition called "VTE"?	9%
Have you heard of "venous thromboembolism"?	15%
Correctly identified what thrombophilia means?*	23%
Correctly identified what thrombosis means?*	41%
Have you ever had a blood clot in leg or lung?	13%
Family member with blood clot in leg or lung?	29%

Respondents understand term "blood clot," but have little awareness of medical/technical terms for thrombosis

Nearly 1/3 at risk due to family history of blood clots and 13% at risk due to previous blood clots

\*correctly identified from a choice of definitions

**2**

Awareness/Knowledge of DVT/PE	National Sample
Those who heard of DVT identified it correctly	86% n=104
Those who had <u>not</u> heard of DVT, when defined for them, said they understood meaning	29% n=411
Those who heard of PE identified it correctly	83% n=80
Of those who had <u>not</u> heard of PE, when defined for them, said they knew meaning	47% n=434
Of those who know/claim to know what a PE is correctly identified it from list of terms	74% n=268

Of those who said they understood term, 15% to 30% could not identify it correctly

When defined for those who did not understand, ~50% or less understood the definition

n = question base

**3**

Awareness of DVT Signs & Symptoms	National Sample
Those aware of DVT could name risk factors	53% n=206
Those who know what PE stands for or what PE is could name signs & symptoms	34% n=268

There are ample opportunities for improved awareness related to medical terms, risk factors, and signs/symptoms

n = question base

**4**

Leading Factors to Cause "Blood Clots"	National Sample (N=490)
Family history of blood clots	73%
Major trauma	71%
Major surgery	69%
Being bedridden	68%
Extended immobility	63%
Long car / plane trips	56%
Smoking, HBP, old age, OCs, pregnancy, hospitalization, cancer, hormones, chemo	<60 %

There are gaps that can be filled to optimize public awareness about risk factors

**5**

Awareness/Knowledge of Seriousness of "Blood Clots"	National Sample (490)
Can be life threatening	98%
Can interfere with blood flow	97%
Can travel to other parts of body	92%
Can occur without warning	94%
Can result in loss of limb	73%

Respondents demonstrate high awareness of thrombosis health risks when term "blood clot" is used

## Conclusion

- The public health impact of DVT/PE is significant, while DVT/PE public awareness, including awareness of important DVT/PE risk factors and signs/symptoms, is low.
- Little awareness of DVT/PE exists, but there is general awareness of blood clot. HCPs should be careful with terminology used.
- These survey data support recommendations in the *Surgeon General's Call to Action to Prevent DVT/PE*, as they:
  - Underscore the urgent need for education to close gaps in DVT/PE public awareness and knowledge
  - Provide guidance to potential educational initiatives relative to DVT/PE that may contribute to decreased morbidity and mortality

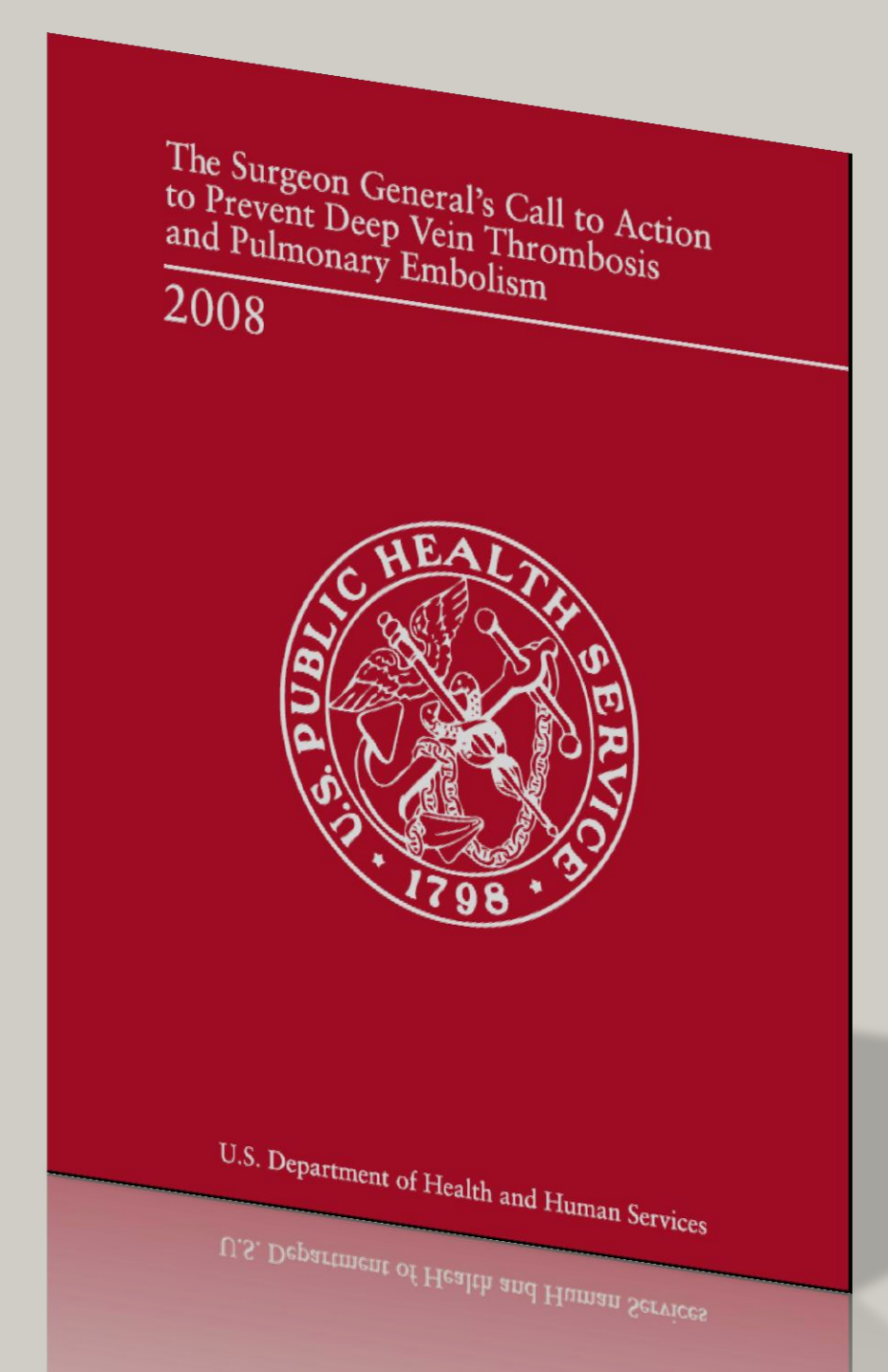
## Future Directions

- Advocacy and public health groups should decide how the public should be educated about thrombosis and how related terminology can most effectively be used or simplified.
- The complex topic of thrombosis will require use of better tools to educate the general public.

## References

1. [www.surgeongeneral.gov/topics/deepvein/calltoaction/call-to-action-on-dvt-2008.pdf](http://www.surgeongeneral.gov/topics/deepvein/calltoaction/call-to-action-on-dvt-2008.pdf)

*Surgeon General's Call To Action to Prevent Deep Vein Thrombosis and Pulmonary Embolism, 2008*



The NBCA DVT/PE Survey Was Made Possible by a Grant From Ortho-McNeil™, a Division of Ortho-McNeil-Janssen Pharmaceuticals, Inc.