

# TOXIC EMBEDDED FRAGMENT SURVEILLANCE CENTER

## INFORMATION FOR VETERANS



### TOXIC EMBEDDED FRAGMENT SURVEILLANCE CENTER

VA has created the Toxic Embedded Fragment Surveillance Center (TEFSC). The purpose of this center is to give support to VA care providers in managing the health of Operation Enduring Freedom (OEF), Operation Iraqi Freedom (OIF), and Operation New Dawn (OND) Veterans who have fragments in their bodies after an injury. Most fragments come from being injured by an improvised explosive device (IED) or other blast.

### WHAT IS A TOXIC EMBEDDED FRAGMENT?

An embedded fragment is a piece of metal or other material, such as plastic, that stays in the body after an injury. Another common term used for this material is shrapnel. The word “toxic” is used to describe the fragments because they may be made out of a material that might be harmful.



### WHY MIGHT A RETAINED FRAGMENT BE HARMFUL?

Fragments could cause harm to the body in two different ways. First, there could be problems (such as inflammation) at the site of the fragment. Second, toxic materials from the fragments could dissolve and go to other parts of the body through the bloodstream.

### WHAT TYPES OF HEALTH PROBLEMS MIGHT OCCUR?

No one knows the specific health problems that might happen because of the fragments. VA has set up TEFSC to follow Veterans with fragments so that potential health problems can be identified and treated.

### WHAT DOES TEFSC DO FOR VETERANS?

The mission of TEFSC is to offer medical surveillance to Veterans injured by a bullet (or other projectile), blast or explosion and who have retained embedded fragments from their injury. To do this, TEFSC has created a registry of OEF, OIF, and OND Veterans who have had a fragment removed or who still have a fragment in their body. TEFSC will:

- Use information from the registry to write guidelines for medical care.
- Provide guidelines for medical care to other VA health care providers across the country.
- Provide special testing for toxic materials that might be released from the fragments.



## HOW CAN I BE TESTED FOR TOXIC MATERIALS THAT MIGHT BE RELEASED FROM FRAGMENTS?

If you have an embedded fragment, talk with a VA health care provider who can provide you with a urine collection kit and a form that asks about your injury and fragments. The kit will also include instructions for collecting a spot urine sample. A spot urine sample is needed to measure the level of toxic materials that may be present or released from fragments.

## WHAT WILL BE MEASURED IN THE URINE SAMPLE I PROVIDE?

Your urine will be tested to detect possible exposure to certain metals and plastics. The creatinine level will also be measured. Creatinine is a waste product always found in urine. It helps determine how diluted or concentrated the urine is during the time of the test. It also allows urine samples to be more accurately compared to each other.

## IF TOXIC MATERIALS ARE FOUND IN MY URINE WHAT DOES IT MEAN?

It is common for people to have small amounts of toxic materials in their urine. Most people are exposed to these materials through the food they eat or water they drink. However, the actual levels of the toxic materials found will be helpful in determining what the fragments in your body may contain. TEFSC will send you and your VA health care provider a letter explaining the results of the testing. TEFSC will also discuss recommended follow-up with you and your VA health care provider.

## WHAT SHOULD I DO IF A FRAGMENT WORKS ITS WAY OUT OF MY BODY?

If a fragment works its way out of your body, talk with your VA health care provider. Your provider can send the fragment to TEFSC to have it tested. Testing the fragment to find out what it is made of can help identify potential health problems.

## IMPORTANT TERMS AND DEFINITIONS

- **Creatinine** — a normal waste product found in the urine.
- **Embedded** — enclosed in the body.
- **Fragment** — a piece of material that results from an explosion.
- **Improvised explosive device** — a device made from any material that can explode and cause harm.
- **Medical surveillance** — following the health of individuals over time to look for health effects linked to an exposure.
- **Shrapnel** — a piece of material that results from an explosion.
- **Registry** — a database to collect health information on individuals sharing the same condition (like having an embedded fragment). When this information is taken together, it can answer questions about the health of that group.
- **Toxic** — can cause harm.
- **Toxic material** — material that can cause harm.
- **Treatment guidelines** — plan of action for providing care.

### CONNECT WITH US:



SUBSCRIBE TO RECEIVE EMAIL UPDATES AT [WWW.PUBLICHEALTH.VA.GOV](http://WWW.PUBLICHEALTH.VA.GOV)



[FACEBOOK.COM/VETERANSHEALTH](https://FACEBOOK.COM/VETERANSHEALTH)



[TWITTER.COM/VETERANSHEALTH](https://TWITTER.COM/VETERANSHEALTH)