



May 31, 2016

CRUEL AND UNUSUAL SERVICE

Prepared by the Office of Senator Claire McCaskill



The Servicemen Left Behind by the
Secret Mustard Gas Experiments of World War II

Learn more at www.mccaskill.senate.gov/mustard-gas

EXECUTIVE SUMMARY

The U.S. military exposed thousands of servicemembers to mustard gas or lewisite through secret experiments during World War II. By the end of the war, 60,000 servicemembers had been human subjects in the U.S. military's chemical defense research program, with an estimated 4,000 of them receiving high levels of exposure to mustard gas or lewisite.¹ The U.S. military did not fully acknowledge its role in the mustard gas or lewisite testing program until the last of the experiments was declassified in 1975.² Many veterans did not come forward until the oath of secrecy was effectively lifted in 1991.³ As a result, these veterans have endured chronic and debilitating diseases for decades without acknowledgment or compensation.

At the request of Senator Claire McCaskill, this report details the federal government's efforts to provide appropriate compensation to these veterans as required by law. It is based on document requests, agency briefings, and communications with affected veterans over the course of ten months.

The report has six principal findings: (1) the U.S. Department of Veterans Affairs (VA) failed to adequately notify veterans exposed to mustard gas or lewisite of their eligibility for benefits; (2) the VA's list of eligible medical conditions is incomplete; (3) the VA relies on incomplete, conflicting data regarding veterans' mustard gas or lewisite exposure; (4) the VA's adjudication process for claims of full-body exposure is opaque; (5) veterans are unable to prove exposure due to missing or inadequate records; and (6) the VA denies the vast majority of benefits claims.

- The VA failed to adequately notify veterans exposed to mustard gas or lewisite of their eligibility for benefits. Aside from two outreach efforts in 1991 and 2004, the VA made no additional attempts to reach out to veterans who may have been exposed to mustard gas or lewisite. Of the estimated 4,000 veterans who endured significant exposure to mustard gas, one estimate found that the VA identified only 610.
- The VA's list of eligible medical conditions is incomplete. In order to receive service-connected disability benefits due to mustard gas or lewisite exposure, a veteran must prove that he has a medical condition on the VA's list of presumptive ailments.⁴ The VA's list of ailments is based on inadequate and dated science, and the VA has failed to ensure that the list is updated.
- The VA relies on incomplete, conflicting data regarding veterans' mustard gas or lewisite exposure. In order to receive service-connected disability benefits due to mustard gas or lewisite exposure, a veteran must prove that he has both a medical condition on the VA's list of presumptive ailments and that he was exposed to full-body mustard gas or lewisite

¹ Institute of Medicine, *Veterans at Risk: The Health Effects of Mustard Gas and Lewisite*, at 1 (1993).

² Email from Defense Department Staff to McCaskill Staff (December 3, 2015).

³ Institute of Medicine, *Veterans at Risk: The Health Effects of Mustard Gas and Lewisite*, at 11 (1993).

⁴ Department of Veterans Affairs, *Claims Based on Chronic Effects of Exposure to Mustard Gas or Lewisite*, 59 Fed. Reg. 42499 (August 18, 1994).

during World War II.⁵ A database maintained by the Defense Department and used by the VA to track exposure to chemical and biological weapons does not include all veterans found to have been exposed to mustard gas. In addition, the Defense Department and the VA maintain separate, conflicting lists of sites where mustard gas or lewisite exposure occurred.

- The VA's adjudication process for claims of full-body exposure is opaque. Although the VA's adjudication manual provides the steps a VA adjudicator should consider in reviewing a claim for benefits, the process remains opaque to veterans. There are also inconsistencies in which veterans are awarded or denied benefits that are not explained by the adjudication manual.
- Veterans are unable to prove exposure due to missing or inadequate records. In 1973, a large fire at the National Personnel Records Center (NPRC) destroyed approximately 16 to 18 million Official Military Personnel Files (OMPF). The U.S. Army lost 80 percent of the records for servicemembers discharged between 1912 and 1960. The high number of missing records from the World War II era prevents many veterans from being able to prove their exposure to mustard gas or lewisite in order to receive VA benefits.
- The VA denies the vast majority of benefits claims for mustard gas or lewisite exposure. The VA has rejected approximately 90 percent of applicants for VA benefits connected to exposure to mustard gas or lewisite. Currently, only 40 veterans are receiving these benefits.

The case of Arla Harrell, a veteran from Missouri, illustrates many of the failings of the federal government's process to provide compensation to veterans. Harrell was twice subjected to mustard gas and returned home from service with multiple chronic and acute ailments. Harrell's wife Betty and their five children have fought for compensation for his service with the VA since 1992. A VA ombudsman filed the latest appeal on Harrell's behalf in 2015, and the VA denied this most recent appeal on April 21, 2016.

BACKGROUND

After mustard agents and other chemical agents were used against U.S. servicemembers in World War I, the U.S. military developed new equipment to combat chemical warfare. Concerned that chemical warfare would be used again in World War II, the U.S. military exposed American servicemembers to mustard gas and lewisite to test the protective equipment that had been developed.⁶ Mustard gas (sulfur mustard) causes blisters on exposed skin and damage to the eyes and respiratory system.⁷ Lewisite, another mustard agent, is a chemical

⁵ Department of Veterans Affairs, *Claims Based on Chronic Effects of Exposure to Mustard Gas or Lewisite*, 59 Fed. Reg. 42499 (August 18, 1994).

⁶ Institute of Medicine, *Veterans at Risk: The Health Effects of Mustard Gas and Lewisite*, at 31 (1993).

⁷ Centers for Disease Control and Prevention, "Emergency Preparedness and Response: Facts about Sulfur Mustard", (online at <http://emergency.cdc.gov/agent/sulfurmustard/basics/facts.asp>).

warfare agent containing arsenic, and its health impacts are similar to mustard gas.⁸ Henceforth, mustard gas and/or lewisite will be referred to as “mustard agents.”

The Chemical Warfare Service, a division of the Army, administered three basic types of mustard agents testing with human subjects: patch or drop tests, field tests, and chamber tests. Patch tests were the most common and the least severe type of exposure to mustard agents, involving a drop application of sulfur mustard to test the efficacy of ointments.

Field tests involved contaminating areas of land with sulfur mustard; human subjects were then placed in the contaminated area and used to test protective gear, monitor the effects of the agents on animals, and measure sulfur mustard concentrations in soil and water samples. A report from the Chemical Warfare Service Conference in 1944 indicated that bombing runs dropped between 125 and 550 tons of sulfur mustard over targeted areas where servicemembers would conduct simulated trainings for anywhere from one to 72 hours, coming into direct contact with the contaminated environment for the entire length of their training.⁹

Chamber tests were used to test the efficacy of protective clothing and gear, sometimes referred to as “man-break” tests.¹⁰ Servicemembers would remain in chambers filled with mustard agents for a period of one to four hours at a time. Following the exposure, servicemembers were instructed to wear their gas masks for an additional five minutes and remain in their suits for anywhere from four to 24 hours, which allowed for additional contact and inhalation from contaminated surfaces and clothing.¹¹ The servicemembers were required to repeat this procedure and enter the chambers every day or every other day until they developed moderate to intense erythema, a painful disorder characterized by tender bumps under the skin. The repeated use of gas masks and long periods of exposure increased the risk that the gas masks would leak, resulting in significant inhalation, which is the most dangerous form of exposure.¹² Many veterans also recalled that the testing chamber door could not be opened from the inside, leading to feelings of entrapment and psychological impacts later in life.¹³

In total, approximately 60,000 men are estimated to have participated in the tests, with about 4,000 of them exposed to the most extreme forms of exposure via chamber tests.¹⁴ Men who participated in the chamber tests reported that they originally volunteered to “test summer clothing” in exchange for vacation time; it was not until they arrived at the testing site that they were told that they would be exposed to mustard agents. Servicemembers who became sick during tests were threatened with court martial if they did not continue with the testing.

⁸ Department of Veterans Affairs, “Compensation: Exposure To Mustard Gas or Lewisite”, (online at <http://www.benefits.va.gov/COMPENSATION/claims-postservice-exposures-mustard.asp>).

⁹ Institute of Medicine, *Veterans at Risk: The Health Effects of Mustard Gas and Lewisite*, at 41 (1993).

¹⁰ *Id.* at 36.

¹¹ *Id.* at 52.

¹² *Id.* at 54.

¹³ *Id.* at 65.

¹⁴ *Id.* at 1.

Because the tests were classified, servicemembers who participated were threatened with dishonorable discharges and imprisonment at Fort Leavenworth, a Defense Department prison, if they ever revealed their participation.¹⁵ In addition, all servicemembers were sworn to an oath of secrecy, further limiting their ability to share what had happened to them with anyone, including their healthcare professionals. Because their healthcare professionals were not aware of the testing, these veterans suffered for the rest of their lives with the effects of the testing without adequate treatment. For many, this meant years of suffering – not only for them but their families – and frustration as they sought medical care from doctors who were in the dark about their true medical history.¹⁶

The Defense Department declassified the last of the mustard agent experiments and other related testing programs in 1975.¹⁷ However, veterans exposed to mustard agents were prevented from seeking assistance at that time because they were still bound by the oath of secrecy. In June 1991, however, VA Secretary Edward Derwinski announced new guidelines for compensating veterans who were exposed to mustard agents, effectively lifting the oath of secrecy.¹⁸ The participants were subsequently officially released from the oath in 1993, when Deputy Defense Secretary William J. Perry filed an order.¹⁹

Around the time Perry released affected veterans from the oath of secrecy in 1993, veterans started coming forward about their exposure.²⁰ At a Congressional hearing on the issue, the Deputy Under Secretary for Benefits at the VA stated, “...I reemphasize VA’s commitment to these veterans. We have taken, and will continue to take, all steps necessary to respond to the unusual circumstances under which they served.”²¹

Regulations issued in 1991, and updated in 1994, stated that in order to receive service-connected disability benefits due to mustard agent exposure, a veteran must prove: (1) that he received full-body exposure to mustard agents, (2) that he has a medical condition on the VA’s list of presumptive ailments, and (3) that the exposure happened during the veteran’s service.²²

When it issued the update to its regulations in 1994, the VA noted that both the VA and the Defense Department had “initiated projects which will make it easier for veterans to establish

¹⁵ *Id.* at 65.

¹⁶ *Id.* at 66.

¹⁷ Email from Defense Department Staff to McCaskill Staff (December 3, 2015).

¹⁸ Institute of Medicine, *Veterans at Risk: The Health Effects of Mustard Gas and Lewisite*, at 11 (1993).

¹⁹ Email from VA Staff to McCaskill Staff (November 9, 2015).

²⁰ *Id.*

²¹ Subcommittee on Compensation, Pension, and Insurance of the Committee on Veterans Affairs of the House of Representatives, *Department of Defense Mustard Gas Testing*, 102nd Cong. (March 10, 1993).

²² Department of Veterans Affairs, *Claims Based on Chronic Effects of Exposure to Mustard Gas or Lewisite*, 59 Fed. Reg. 42499 (August 18, 1994).

entitlement to benefits under this regulation.”²³ As is evident from the experience of Arla Harrell and others, and from the findings of this report, it has been very difficult for veterans to navigate this process with the VA and the Defense Department.

FINDINGS

A. VA Failed to Adequately Notify Veterans of Their Eligibility for Benefits

The VA engaged in some efforts to locate the affected veterans in 1991.²⁴ The VA’s outreach attempts included placing articles in military magazines, producing broadcast announcements, and displaying posters in VA regional offices and medical centers. The VA also mailed a public affairs notice to veterans who were identified by the Defense Department’s declassified documents as having been exposed to mustard agents.²⁵ The VA cannot account for how many veterans were identified, located, and contacted due to these efforts, however, because the mailings were done on paper and electronic processing did not begin until later.²⁶ In 1993, the VA planned to contract with the National Institute of Occupational Safety and Health (NIOSH) to obtain current addresses and notify participants of potential health effects and eligibility for disability benefits; however, there is no record of the VA ever having done so.²⁷

In 2004, the Defense Department provided the VA with a database, known as the Chem-Bio database, of approximately 4,500 veterans who were identified as having been exposed to mustard agents during World War II.²⁸ The VA then partnered with the Internal Revenue Service (IRS) and contracted with a credit bureau, Choice Point, to obtain current addresses for living veterans whom the Defense Department deemed were exposed to mustard agents. At the time, the VA was able to locate approximately 300 living veterans using this process and claimed that all others had died or could not be contacted due to incomplete information.²⁹

Aside from these two outreach efforts in 1991 and 2004, the VA made no additional attempts to reach out to veterans who may have been exposed to mustard agents.³⁰ Last year, a National Public Radio (NPR) investigation found that from 1993 to the present, the VA attempted to reach a total of 610 veterans who received full-body exposure to mustard agents.³¹ Working with public records, federal records requests, free databases, and information from an

²³ Department of Veterans Affairs, *Claims Based on Chronic Effects of Exposure to Mustard Gas or Lewisite*, 59 Fed. Reg. 42498 (August 18, 1994).

²⁴ Email from VA Staff to McCaskill Staff (November 9, 2015).

²⁵ Public Affairs Notice provided by the VA Staff to McCaskill Staff (November 9, 2015).

²⁶ Email from VA Staff to McCaskill Staff (November 9, 2015).

²⁷ *Id.*

²⁸ *Id.*

²⁹ *Id.*

³⁰ *Id.*

³¹ *The VA’s Broken Promise to Thousands of Vets Exposed to Mustard Gas*, National Public Radio (June 23, 2015) (online at <http://www.npr.org/2015/06/23/416408655/the-vas-broken-promise-to-thousands-of-vets-exposed-to-mustard-gas>).

epidemiologist at the VA, a single NPR research librarian then located more than 1,200 men who had been exposed.³²

VA's List of Eligible Medical Conditions is Incomplete

In order to receive service-connected disability benefits due to mustard agent exposure, a veteran must prove that he has a medical condition on the VA's list of presumptive ailments.³³ VA's list of ailments is based on inadequate and dated science, and the VA has failed to ensure that the list is updated.

In 1991, the VA identified a list of six medical conditions associated with exposure that would be eligible for care and medical benefits.³⁴ These conditions would become known as "presumptive ailments," the set of conditions that are presumed to follow from mustard agent exposure.³⁵ The VA also requested that the Institute of Medicine (IOM) assemble a committee and publish a report on the health effects of exposure to mustard agents.³⁶ Through the IOM review process, veterans who had been exposed to mustard agents during World War II were invited to testify about their experience. Following the release of the IOM Report in 1993, eight additional medical conditions were added to the presumptive ailments list used by the VA.³⁷

The 14 medical conditions, comprised of the initial VA list and the IOM additions, are:³⁸

1. Chronic conjunctivitis	8. Chronic keratitis
2. Chronic corneal opacities	9. Scar formation
3. Nasopharyngeal cancer	10. Laryngeal cancer
4. Lung cancer (except mesothelioma)	11. Squamous cell carcinoma
5. Chronic laryngitis	12. Chronic bronchitis
6. Chronic emphysema	13. Chronic asthma
7. Chronic obstructive pulmonary disease	14. Acute non-lymphocytic leukemia

While the IOM Report findings expanded the number of approved medical ailments, the authors outlined significant doubt concerning the long-term health effects related to exposure. The lack of follow-up health assessments of the human subjects in the chamber and field tests

³² *Id.*

³³ Department of Veterans Affairs, *Claims Based on Chronic Effects of Exposure to Mustard Gas or Lewisite*, 59 Fed. Reg. 42499 (August 18, 1994).

³⁴ Institute of Medicine, *Veterans at Risk: The Health Effects of Mustard Gas and Lewisite*, at 11 (1993).

³⁵ Department of Veterans Affairs, *Claims Based on Chronic Effects of Exposure to Mustard Gas or Lewisite*, 59 Fed. Reg. 42499 (August 18, 1994).

³⁶ Institute of Medicine, *Veterans at Risk: The Health Effects of Mustard Gas and Lewisite*, at 11 (1993).

³⁷ Department of Veterans Affairs, *Claims Based on Chronic Effects of Exposure to Mustard Gas or Lewisite*, 59 Fed. Reg. 42497 (August 18, 1994).

³⁸ Department of Veterans Affairs, *Claims Based on Chronic Effects of Exposure to Mustard Gas or Lewisite*, 59 Fed. Reg. 42499 (August 18, 1994).

“severely diminished the amount and quality of information that could be applied in the assessment of long-term health consequences.”³⁹ Additionally, the level of exposure experienced by the servicemembers may have been much higher than originally believed. The range of mustard agent concentrations that were actually experienced or inhaled by the servicemembers can only be roughly estimated, but the IOM Committee believes they may have reached levels similar to those in combat due to repeated skin exposure compounded by inhalation.⁴⁰

The IOM report recommended that the VA immediately begin longitudinal studies on known exposed veterans to better understand the long-term health effects of exposure. However, the VA never conducted any additional research.⁴¹

VA Relies on Incomplete, Conflicting Data Regarding Veterans’ Mustard Agent Exposure

In order to receive service-connected disability benefits due to mustard agent exposure for mustard agents, a veteran must prove that he has a medical condition on the VA’s list of presumptive ailments and that he received full-body exposure during his service.⁴²

One of the first steps that the VA takes to determine whether a veteran had full-body exposure is to search the Defense Department’s database of veterans exposed to chemical or biological substances, including mustard agents. The Defense Department contracted with the Battelle Memorial Institute to create the database⁴³ in order to certify the names of all individuals recognized to have been exposed to testing of mustard agents (and several other chemical agents).⁴⁴ This database was part of a \$6 million effort by the Defense Department to identify records regarding chemical weapons testing on human subjects.⁴⁵ Currently, the Defense Department maintains this database, known as the Chem-Bio Database, and granted the VA access in 2004 in order to enable certifications of individuals exposed to mustard agents.⁴⁶ The Chem-Bio Database is supposed to be the most comprehensive database of veterans exposed to chemical and biological substances during their service.⁴⁷ Currently, the Chem-Bio Database lists 4,618 veterans listed as having been exposed to mustard agents during World War II.⁴⁸

However, McCaskill staff found the Chem-Bio database to likely be incomplete. For example, the VA has granted compensation attributed to mustard agent exposure to 21 veterans

³⁹ Institute of Medicine, *Veterans at Risk: The Health Effects of Mustard Gas and Lewisite*, at 214 (1993).

⁴⁰ *Id.* at 215.

⁴¹ Email from VA Staff to McCaskill Staff (December 10, 2015).

⁴² Department of Veterans Affairs, *Claims Based on Chronic Effects of Exposure to Mustard Gas or Lewisite*, 59 Fed. Reg. 42498 (August 18, 1994).

⁴³ Email from Defense Department Staff to McCaskill Staff (February 5, 2016).

⁴⁴ Briefing from Defense Department Staff to McCaskill Staff (February 4, 2016).

⁴⁵ Email from Defense Department Staff to McCaskill Staff (February 5, 2016).

⁴⁶ Briefing from Defense Department Staff to McCaskill Staff (February 4, 2016).

⁴⁷ *Id.*

⁴⁸ Email from Defense Department Staff to McCaskill Staff (March 22, 2016).

who are not included within the Chem-Bio Database.⁴⁹ With written permission from a veteran who has been receiving service-connected disability benefits due to his exposure since 2000, McCaskill staff reached out to the Defense Department to ascertain whether the veteran was in the Chem-Bio database. According to the Defense Department, no record of the veteran appeared in the database.⁵⁰ The Defense Department subsequently informed McCaskill staff that this veteran is being “temporarily added” to the database.⁵¹

The VA and the Defense Department also maintain separate but overlapping lists of sites where mustard agents testing occurred, and neither agency claims to have a definitive understanding of where the U.S. military tested mustard agents on its own enlisted men.⁵² The table below includes the Defense Department’s and VA’s list of testing sites, with the names written as they are referred to by each agency:

The Defense Department List of Known Testing Sites⁵³	VA List of Known Testing Sites⁵⁴
Fort McClellan, Alabama	Rocky Mountain Arsenal, Colorado
Camp Sibert, Alabama	Camp Sibert, Alabama
Huntsville Arsenal, Alabama	Camp Lejune, North Carolina
Bushnell Field, Florida	Bushnell, Florida
Great Lakes Naval Training Center, Illinois	Great Lakes Naval Training Center, Illinois
Edgewood Arsenal, Maryland	Edgewood Arsenal, Maryland
Fort Detrick, Maryland	Ondal, India
Naval Research Laboratory, Maryland	Naval Research Laboratory, D.C.
Horn Island Installation, Mississippi	Hart’s Island, New York
Dugway Proving Ground, Utah	Dugway Proving Ground, Utah
Tooele Army Depot, Utah	Charleston, South Carolina
Fort Clayton, San Jose Island, Panama	San Jose Island, Panama Canal Zone
	Naval Training Center, Bainbridge, Maryland
	Naval Research Laboratory, Virginia
	U.S.S. Eagle Boat No. 58

Both the VA and the Defense Department claim that their individual lists of military testing sites are not used in determining whether a veteran received full-body exposure.⁵⁵

⁴⁹ Email from VA Staff to McCaskill Staff (April 12, 2016).

⁵⁰ Email from Defense Department Staff to McCaskill Staff (December 1, 2015).

⁵¹ Briefing from Defense Department Staff to McCaskill Staff (February 4, 2016).

⁵² Email from Defense Department Staff to McCaskill Staff (April 18, 2016); Email from VA Staff to McCaskill Staff (April 13, 2016).

⁵³ Email from Defense Department Staff to McCaskill Staff (April 18, 2016).

⁵⁴ Email from VA Staff to McCaskill Staff (February 10, 2016).

⁵⁵ Email from VA Staff to McCaskill Staff (April 13, 2016); Email from Defense Department Staff to McCaskill Staff (April 18, 2016).

VA's Adjudication Process for Claims of Full-Body Exposure is Opaque

It is unclear whether the VA or the Defense Department is responsible for determining whether a veteran experienced full-body exposure to mustard agents. The VA stated that it “relies on the Defense Department to verify a claimed exposure event.”⁵⁶ However, the Defense Department claims that “the access, the inquiry, and the determination can be made by the VA without any DoD involvement.”⁵⁷

The VA process to adjudicate incoming claims relies on veterans to submit documents to the VA proving full-body exposure to mustard agents that happened during their service. To verify exposure, the VA searches for the veteran in the Defense Department's Chem-Bio Database. If the veteran is not found in the database, the VA attempts to verify exposure another way, often involving the Defense Department in the process, although the VA has the independent authority to verify exposure regardless of the Defense Department's determination.

In fact, more than 20 percent of the veterans currently receiving benefits were approved due to “VA exercising its discretion to award benefits even though the Defense Department was unable to confirm exposure to mustard agents.”⁵⁸ The VA has not provided McCaskill Staff with any information regarding the criteria or the procedures the agency uses in exercising this discretion.

The VA provided McCaskill staff with a copy of the relevant portion of its adjudication manual for claims for disabilities resulting from exposure to mustard agents.⁵⁹ While the manual provides step-by-step guidance for VA staff to take in verifying exposure and determining whether a veteran has the appropriate condition, it does not provide guidance to VA staff regarding how and when to exercise discretion to approve benefits when the Defense Department cannot verify full-body exposure.

McCaskill staff understands that the Defense Department lacks any written policies and procedures for adjudicating full-body exposure.⁶⁰

Veterans Unable to Prove Exposure Due to Missing or Inadequate Records

The result of the conflicting and insufficient information at the agencies is that, in most cases, the burden of proving full-body exposure falls entirely on the veteran. For most veterans, this burden is impossible to overcome, in part due to the incredibly high number of missing service records from the World War II era.

On July 12, 1973, a large fire at the National Personnel Records Center (NPRC) destroyed approximately 16 million to 18 million Official Military Personnel Files (OMPF). The

⁵⁶ Email from VA Staff to McCaskill Staff (February 10, 2016).

⁵⁷ Email from Defense Department Staff to McCaskill Staff (April 26, 2016).

⁵⁸ Email from VA Staff to McCaskill Staff (April 12, 2016).

⁵⁹ Email from VA Staff to McCaskill Staff (May 4, 2016).

⁶⁰ Phone conversation between Defense Department Staff and McCaskill Staff (April 28, 2016).

Army lost 80 percent of the records for servicemembers discharged between 1912 and 1960.⁶¹ No duplicate copies were maintained, nor were there microfilm copies. NPRC has protocols in place to help veterans who are looking for their records; however, it is impossible to produce records that were permanently lost.⁶²

The issue of missing records is also exacerbated by the amount of time that has passed between when the veterans were exposed to mustard agents, the records fire, and when the VA opened itself to claims for benefits. Given that most of these veterans did not talk about their exposure, by the time they could submit claims for compensation in the 1990s, their records had been missing for a very long time, making them all the more difficult to reconstruct.

Additionally, of the files that do exist, many of them may not accurately attribute mustard agent exposure to a veteran who was exposed. According to the IOM Report, it was common for mustard agent exposure to be excluded from official service records, likely because the experiments were classified at the time.⁶³ Thus, placing the burden on the veterans to produce proof of their full-body exposure creates a nearly impossible burden for the veteran to overcome.

VA Denies the Vast Majority of Claims

Given the lack of a consistent process for adjudicating mustard agent claims, it is unsurprising that the number of veterans who make successful claims for benefits due to mustard agent exposure is extremely low. Currently, only 40 veterans are receiving benefits for mustard agent exposure.⁶⁴

In 2005, the VA began tracking mustard agent claims using a unique workload identifier; until this point the VA only tracked claims based on disability level and not the reason for disability. To date, the VA has provided McCaskill staff with conflicting data regarding the results of claims filed by veterans for mustard agent exposure compensation.

In response to an information request from the McCaskill staff, the VA stated on November 25, 2015, that from 2005 to 2015, the VA identified 1,213 disability claims related to mustard agent exposure from 792 unique World War II veterans. Of those claims, 1,028 were denied — an 84.7 percent denial rate.⁶⁵ The VA's reasons for these denials fall into one of three categories: (1) the claimed condition is not on the VA's list of presumptive ailments; (2) the veteran could not prove he was exposed to mustard agents; or (3) the VA obtained a medical opinion that the claimed condition was not caused by mustard agent exposure.

⁶¹ National Archives, "The 1973 Fire, National Personnel Records Center", (online at <http://www.archives.gov/st-louis/military-personnel/fire-1973.html>).

⁶² *Id.*

⁶³ Institute of Medicine, *Veterans at Risk: The Health Effects of Mustard Gas and Lewisite*, at 11 (1993).

⁶⁴ Email from VA Staff to McCaskill Staff (April 12, 2016).

⁶⁵ Email from VA Staff to McCaskill Staff (November 25, 2015).

However, on February 10, 2016, the VA gave different numbers for the same dataset in response to another request from McCaskill staff. In that response, the VA stated that from 2005 to 2015, the VA identified 1,562 disability claims related to mustard agent exposure from 774 unique World War II veterans. The VA denied benefits for 1,427 of those claims, or 91.4 percent, and granted benefits for 135 of the issues submitted, or 8.6 percent.⁶⁶ Of the 1,427 claims that were denied, 969 or 67.9 percent, were denied by the VA based on the official reason of “Not Incurred/Caused by Service.”⁶⁷

Arla Harrell, 89, Bevier, MO – A Case Study

In 1945, 18-year-old Arla Harrell was sent to Camp Crowder in Neosho, Missouri for his basic training. Harrell joined the military after both of his parents died as a way to provide for his younger sister and brother. As a new recruit to the Army, Harrell was stationed at Camp Crowder for his basic training.

At Camp Crowder, Harrell was twice subjected to mustard gas patch and chamber tests. Harrell recalled: “They rubbed a liquid chemical on my arm and hand and had me breathe a gas without a mask on. I had no protective clothing in the gas chamber.”⁶⁸ Harrell’s commanding officers told him that he had been exposed so that he would know, as a field medic, how to treat servicemembers. Along with all of the other exposed servicemembers, Harrell was instructed never to tell anyone about his experience in the gas chamber.

Following his exposure, Harrell became very ill and was hospitalized at Camp Crowder with a high fever and sore throat. He was officially diagnosed by the Army as having nasopharyngitis, tonsillitis, and gum disease. Harrell remained in the hospital for six days following his exposure. Following his basic training, Harrell was sent to Germany as a part of his service, where he became very ill and was hospitalized at the 98th General Hospital in Munich. During this hospitalization, Harrell was diagnosed with acute, non-venereal Balanitis (penile lesions).⁶⁹ The irritation to Harrell’s skin was very likely caused by his exposure to mustard gas during his basic training.⁷⁰

Harrell returned home from service and maintained his oath of secrecy while suffering from multiple acute and chronic ailments. Since he was honorably discharged from the Army in 1948, Harrell has suffered from various health issues including: multiple strokes, long-term pulmonary issues, and multiple occurrences of skin cancer. His ailments have had an immense impact on his life and his family. Trish Ayers, Harrell’s daughter, recalled: “I never knew a healthy dad growing up ... Dad worked the whole time, but Dad struggled with his breathing.”⁷¹

⁶⁶ Official response from VA Staff to McCaskill Staff (February 10, 2016).

⁶⁷ *Id.*

⁶⁸ Written statement from Arla W. Harrell (April 8, 2008).

⁶⁹ Military Records courtesy of Arla W. Harrell (November 9, 2015).

⁷⁰ Institute of Medicine, *Veterans at Risk: The Health Effects of Mustard Gas and Lewisite*, at 65 (1993).

⁷¹ *Missouri World War II Vet Has Mustard Gas Exposure Claims Denied by VA*, St. Louis Post Dispatch, (February 7, 2016) (online at <http://www.stltoday.com/news/local/govt-and->

Harrell worked on and off as a mechanic and truck driver, while his wife, Betty, worked as a nurse. Harrell is the only known living World War II veteran from Missouri who was exposed to mustard gas.

In the early 1990s, Harrell and his daughter Trish went to the VA hospital in Columbia, Missouri, for a regular checkup. Upon reviewing Harrell's medical history, a health care provider there asked Harrell if he had been exposed to mustard gas. Harrell reluctantly confirmed that he was subjected to mustard gas tests. This was the first time Harrell ever told anyone about what the U.S. military subjected him to during his service.

Harrell's wife Betty and their five children have fought for compensation for his service since the oath of secrecy was lifted, filing his first claim with the VA in 1992. Harrell and his family have tried multiple times, over the course of more than two decades, to appeal to the VA for benefits. McCaskill staff has confirmed that much of Harrell's military record was destroyed by the NPRC fire in St. Louis; NPRC was able to partially reconstruct his record but much of it remains impossible to read.

The family was told in 2006 that due to a lack of documentation, the only way that the VA would acknowledge his exposure was if the family contacted his commanding officer, who would then have to contact the VA to verify Harrell's exposure. Even though Harrell has two medical conditions on the VA's list of presumptive ailments and was hospitalized twice during his service, the VA has stated there is not sufficient evidence to prove his exposure to mustard gas and that his medical conditions occurred outside of his service.

McCaskill staff, at the request of Senator McCaskill, have been working closely with the Harrell family on Harrell's case. A denial letter that Harrell received from the VA in 2011 cited "a negative response from the Central Office Mustard Gas Database" and "final verification from the Defense Department Mustard Gas Database" as reasons for his repeated denials.⁷² However, McCaskill staff discovered a 2012 Army Corps of Engineers report that strongly suggests that mustard gas testing happened at Camp Crowder, where Harrell was stationed.⁷³ The document shows aerial shots of gas chambers that were used to facilitate mustard gas exposure at Camp Crowder. The document also provides photo evidence of vials containing sulfur mustard that were recovered from the site.⁷⁴

Harrell is now living in a nursing home and has a limited ability to communicate; he also has memory issues related to his strokes. His children are concerned about how much his wife Betty is continuing to pay out of pocket for Harrell's medical bills. Additionally, his children feel it is very important that their father receives an acknowledgment from the government of what

politics/gateway-to-dc/missouri-world-war-ii-vet-has-mustard-gas-exposure-claims/article_d8698e5b-b85f-58d5-ac58-06b8436d2561.html).

⁷² Rating decision letter to Arla W. Harrell, Department of Veterans Affairs (August 8, 2011).

⁷³ Army Corps of Engineers, *Former Fort Crowder Chemical Warfare Materiel Site: Newton County, Missouri*, at Figure 2-2, (July 2012) (online at <http://dnr.mo.gov/env/hwp/docs/ftcrowder-pp-2012.pdf>).

⁷⁴ *Id.* at 3.

happened to him. Harrell's daughter, Beverly Howe, said that what is important now is that "my father could understand that somebody finally believes him."⁷⁵ A VA ombudsman filed the latest appeal on Harrell's behalf in 2015. McCaskill staff confirmed that this most recent appeal was denied on April 21, 2016.

CONCLUSION

Seventy years after the U.S. military intentionally exposed thousands of servicemembers to mustard agent testing, the U.S. government has exacerbated the harm to these veterans through its inability to provide appropriate compensation for decades of suffering. The effort to identify and compensate these veterans has been woefully inadequate and much of the burden of proving their exposure has been left up to the veterans themselves, often in the face of impossible hurdles such as nonexistent records. Neither of the two agencies with responsibility for identifying and/or compensating these veterans has taken full responsibility of their respective duties, and a lack of communication and coordination has hampered the adjudication of benefit claims.

Of the World War II veterans who were exposed that are still alive, the majority of them are elderly and in poor health. Time is running out for the VA, the Defense Department, and Congress to act to ensure that these veterans receive the compensation and care they deserve.

⁷⁵ *Missouri World War II Vet Has Mustard Gas Exposure Claims Denied by VA*, St. Louis Post Dispatch, (February 7, 2016) (online at http://www.stltoday.com/news/local/govt-and-politics/gateway-to-dc/missouri-world-war-ii-vet-has-mustard-gas-exposure-claims/article_d8698e5b-b85f-58d5-ac58-06b8436d2561.html).