



***Evolving the Civilian Harm Mitigation and Response Action
Plan to Support Precision Lethality and Effective
U.S. Military Operations***

A Briefing Paper of the Center for Ethics and the Rule of Law

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Executive Summary

Recent guidance from the Department of Government Efficiency (DOGE) has mandated an 8 percent cut in Department of Defense (DoD) programs not related to [17 priority items](#) Secretary of Defense Pete Hegseth has identified to spare from the funding cuts. Secretary Hegseth has accordingly [directed](#) Army leadership to identify programs where cuts can be made, but has suggested that his focus is on non-lethal programs that weaken U.S. warfighting readiness. Consistent with this guidance, press reports indicate that Secretary Hegseth is moving to close the Pentagon's Civilian Harm Mitigation and Response (CHMR) program and its Civilian Protection Center of Excellence (CP CoE).

Both the office and the center have roots in the first Trump administration, when Secretary James N. Mattis ordered a review of civilian casualties in U.S. targeting operations taking place in Iraq and Syria during the campaign against the Islamic State (ISIS). Mattis' order was based on a perception of high levels of civilian casualties involved in U.S. combat operations during the war on terror. The Biden administration responded to the findings of the study in 2022 by creating the Civilian Harm Mitigation and Response (CHMR) program, issuing the [Civilian Harm Mitigation and Response Action Plan \(CHMR-AP\) and creating new positions within operational commands to support military planning and operations](#), while Congress established a "Center for Excellence" (CP CoE) with bipartisan support under [10 U.S. Code § 184](#).

The [Center for Ethics and the Rule of Law](#) has contributed to the CHMR program through [conferences](#), student research and briefings, and on-going research, both in conversation with Army leaders in this area over the course of the past several years and independently. CERL is also providing its expertise to DoD CHMR initiatives addressing topics such as human shields and advanced technologies. CERL supports the continued efforts of the DoD to study civilian harm in warfare through the congressionally mandated civilian harm mitigation program and its associated center for excellence and believes that continuing these efforts is consistent with the bipartisan goals of enhancing the effective lethality of the U.S. military. These efforts, however, will not survive unless they are refocused. As critics of civilian harm mitigation initiatives have charged, CHMR guidance has the potential to constrain warfighters unduly if misunderstood or incorrectly

implemented. Now is the time for the CHMR program and its associated CP CoE to evolve to sharpen their focus in ways which are more consistent with the goals of the current administration.

This memo sets out reasons for retaining the CHMR program within the DoD, but with a revised emphasis that identifies four aims that should be the focus of the program, which reflect the current administration's thinking. This includes achieving enhanced lethality; maintaining that lethality in the face of certain practices involving civilian populations, such as human shielding, as well as promoting accountability for those using human shields; opportunities for demonstrated leadership in advanced technologies; and enhanced relationships with allies and partners.

First, the CHMR program must prioritize assisting the United States in honing its targeting operations to ensure its use of lethal force is both accurate and effective. The goal of enhancing lethality will not render U.S. operations more efficient unless that enhanced lethality also comes with an increase in accuracy. Historically, civilian harm often results from U.S. forces inadvertently attacking the wrong target; data from U.S. operations confirm that civilian harm mitigation enables our forces to more accurately identify threats and attack them with full effect. This also allows our forces to more efficiently manage our inventory of advanced munitions, a strategic imperative in the event of large-scale combat operations (LSCO) against a near-peer threat.

Second, the CHMR program must prioritize helping the United States address the challenge posed by adversaries that make use of civilians as human shields, a challenge that has recently come to the fore in the Israel-Hamas war, but which the United States has faced in several past conflicts and will undoubtedly face again in future warfighting. Civilian harm mitigation provides a practical approach that can help improve accountability of U.S. adversaries or the adversaries of U.S. partners and reduce impunity for unscrupulous parties employing human shields.

Third, the CHMR program must prioritize fostering the development of new technologies to minimize ineffective targeting operations and ensure that the United States is hitting its targets. Technologies such as AI and autonomous platforms and weapons are already beginning to revolutionize warfighting; they will do much more in future warfare. Enhancements to accuracy

and reliability enabled through civilian harm mitigation protocols help ensure our forces have the most cutting-edge tools of precision lethality as well as the creative capabilities to deploy trusted advanced technologies with confidence. President Trump has stressed the importance of making progress in advanced technologies, and the CHMR program is one arena in which such advancement would pay dividends.

Finally, the CHMR-AP should strengthen its focus on cooperation with allies and partners. Rather than using civilian harm incidents as an excuse to restrict arms sales to U.S. allies and partners, the U.S. government can maintain those weapons supplies if they assist our partners to improve their combat effectiveness by reducing civilian harm in the use of U.S. technologies and help them to increase situational awareness and responsiveness to the civilian environment.

I. The History of the Civilian Harm Mitigation and Response (CHMR) Program

The civilian harm mitigation program of the Department of Defense (DoD) dates back to an initiative of the first Trump administration from 2017, when Secretary Mattis [ordered a study](#) of civilian casualties arising out of U.S. operations against ISIS in Iraq and Syria, in response to allegations of high levels of civilian harm and their detrimental impact on mission effectiveness. The review recognized that the reported levels did not reflect the actual toll on civilians in those operations. But the actual toll was still higher than the United States had previously recognized. Furthermore, the review found that military commanders and forces lacked sufficient resources and processes to help them to achieve the accurate and precise effects they sought. These findings echoed those from previous assessments that had been performed in support of operational commanders in the field.

After the review, Secretary of Defense Mattis in 2017 ordered development of a department-wide policy issuance on civilian harm mitigation. The first Trump administration continued these efforts by releasing a [public-facing webpage](#) to improve how DoD tracks civilian harm, sponsoring additional research, and releasing [annual reports](#) to Congress. Building on the first Trump administration's advances in this regard, in 2022, Secretary Austin issued the [Civilian Harm](#)

[Mitigation and Response Action Plan \(CHMR-AP\)](#). As past commanders in the field, both Secretaries Austin and Mattis recognized civilian harm mitigation as an initiative that supported commanders and forces and enhanced mission effectiveness.

The CHMR-AP included the Civilian Protection Center of Excellence (CP CoE), established by Congress with bipartisan support in [10 U.S. Code § 184](#). The CHMR program taken as a whole was intended to enhance the accuracy and effectiveness of U.S. military operations, especially in contexts where significant numbers of civilians are present. The CP CoE's role includes directly supporting warfighters in operationalizing CHMR policies and serving as the DoD's analytic arm for integrating CHMR best practices across the Joint Force. Improvements in the precision of lethal force; enhanced effectiveness of military operations through more efficient use of munitions; reduction of risk in the information environment through the development of accurate metrics regarding civilian harm; realistic training for operators involving exposure to civilian populations in a variety of realistic settings; and mitigation of psychological impacts on individual troops and combat formations are among the various ways the CHMR program has been assisting with the goals of combatant commanders in seeking to make improvements to U.S. targeting operations. They are also ways a refocused CHMR program could assist with the current goals of the Trump administration and improvements to U.S. targeting operations.

The Center for Ethics and the Rule of Law (CERL) at the University of Pennsylvania has been working in parallel to DoD to explore methods of civilian harm mitigation, particularly in the context of urban warfare where civilians are placed at significant risk due to the use of human shields by terrorist groups, such as in the Israel-Hamas war. CERL believes there is an important opportunity to benefit both the United States and our allies such as Israel in future conflicts by reorienting the CHMR-AP to focus on abuses of civilians by organizations (like Hamas) who deliberately place civilians in harm's way and force civilian casualties on a nation fighting terrorism. The CHMR program is still early in its implementation, and there is potential to reorient the program to stress the priorities emphasized in this briefing paper.

II. Evolving the Civilian Harm Mitigation and Response Action Plan (CHMR-AP) to Meet Current Warfighting Challenges

A. Precision Lethality

Secretary Hegseth's focus on lethality is an understandable correction, given America's lack of success in defeating the Taliban and the perception of largesse in the U.S. military budget. However, lethality as a blanket goal will not help the United States win wars as such. As Secretary Hegseth and other military leaders understand, what is needed is enhancements to *precision lethality*.

The emphasis on precision targeting in warfighting is not a new one. America's dominance in precision warfare—the use of platforms, weapons, and methods to deliver weapon effects to a specific location—has given the United States a decisive combat edge for decades. From Desert Storm to the invasions of Iraq and Afghanistan, precision warfare has increasingly become the expectation, particularly in light of the increase in sophistication of advanced targeting technologies. As the United States has passed this capability on to its allies over the years, precision warfare has had an immense impact on the contemporary battlefield.

However, in operations, we have frequently seen how precision warfare can fall short. While weapons are delivered precisely, there are factors that can lead to the intended effects not being met. This can include coordination or identification challenges leading to the precise delivery of a weapon to the wrong target, or the unanticipated presence of civilians leading to a higher number of civilian casualties than expected, and in which the second-order effects outweigh the anticipated military value. This may result in a costly military attack that does not achieve its objectives.

What are the costs of these shortfalls in precision warfare, and how can such costs be measured? It is critical for the United States to confront such shortfalls systematically and not to undercount them. The costs of failed precision in U.S. targeting operations include: lost opportunities in neutralizing the intended target; wasted munitions; fuel for adversary efforts to delegitimize U.S. operations; spurred recruiting by the very terrorists or other adversaries that U.S. forces are trying

to combat; and tensions with our allies and partners who support the U.S. asymmetrically in competition with near-peer threats.

These costs are likely to be greatly magnified for the United States in the event of future war, and *enhancing precision lethality*, namely combining precision and accuracy to ensure that our weapon effects are delivered in ways that best meet our objectives, is essential. This approach suggests that learning from current conflicts and projecting such methods into future warfare, particularly warfare driven by advanced technologies, will be a critical task for the U.S. military. The specialized programs of the Civilian Harm Mitigation and Response Action Plan could assist combatant commanders and civilian strategists to reap those lessons effectively.

B. Human Shielding

As one of us (Orde Kittrie) has [documented](#) elsewhere, the Islamic State, the Taliban, and Libyan, Serbian, and Iraqi forces have all used human shields against U.S. and/or NATO forces. In 2019, NATO's Supreme Allied Commander Europe, General Curtis Scaparrotti, said he considered human-shields use "an important obstacle for the effectiveness and success of current and future NATO operations and missions." He explained that NATO's adversaries, notably in the Middle East, "have not hesitated to use the prohibited practice of human shields," as doing so forces NATO troops "to choose between not taking action against legitimate military targets or seeing their actions, and the overall mission, delegitimized."

America's adversaries will likely use human shields and related disinformation at an even greater scale in future wars to undermine international and domestic support for U.S. military operations. Loss of civilian life and civilian infrastructure is an unfortunate but inevitable part of war, particularly in urban conflicts. However, excessive civilian casualties are important to avoid, not only for legal reasons but also because they are inefficient and render warfighting vulnerable to manipulation of the information space and psychological operations (PSYOP), namely as a way of undermining international and domestic support for U.S. military operations. Indeed, terrorists and other U.S. adversaries engage in the actual war crime of using human shields in order to facilitate false accusations that the United States and its Western allies, including Israel, are committing war crimes such as the willful killing of civilians.

Lack of preparation for civilian harm and ineffective messaging compounds the problem, and the enemy can easily exploit civilian casualties to turn world opinion against U.S. operations. These collateral benefits to the enemy of increased civilian harm at the hands of U.S. forces can incentivize an enemy that is unconcerned about minimizing harm to its own civilian population to drive up the casualty toll amongst those civilians.

The Biden administration failed to adequately address the use of human shields by terrorist groups, disregarding the requirements of the “Strengthening Tools to Counter the Use of Human Shields Act,” which became law on April 24, 2024. In order to more effectively deter and counter the challenge posed by the use of human shields and hold terrorist groups accountable for their use, the CHMR program should be refocused to address and overcome such adversary actions that put civilians at risk, as well as to propose the use of advanced technologies to counter such unlawful uses of civilians by U.S. adversaries.

The 2024 Shields Act specifically requires the president to impose sanctions on persons which are involved in, or which knowingly and materially support, the use of human shields by Hamas, Hezbollah, and Palestine Islamic Jihad. The Act also requires the Secretary of Defense, within 120 days of enactment, to submit to Congress a plan to deter, counter, and address the challenge posed by the use of human shields and hold accountable terrorist organizations for the use of human shields. Despite strong evidence of human shields use by Hamas and the other terrorist groups, President Biden did not impose any such sanctions. Nor was the report submitted. Only recently, under the current administration, were steps taken to begin to develop this report. CERL is in consultation with the report drafters.

The retooling of the CHMR program should include adding an “adversary liability” component to its assessments and reporting on civilian harm to ensure there is documentation not only of U.S. actions and lessons learned but also of the responsibilities for civilian harm that are attributable to adversaries who violate international law with regard to human shielding and other methodologies that place U.S. and allied forces at risk with regard to civilian loss exposure. The program must help the DoD make clear, and develop and implement a strategy for countering, how enemies who

do not value civilian life manipulate the operational environment to place civilians at much greater risk and then deflect responsibility onto U.S. and allied forces when civilian casualty losses mount.

The experience of Israel's war in Gaza provides a clear case in point, and the United States can benefit from close study of the patterns of civilian losses and disinformation. Hamas' exploitation of the densely populated civilian environment in Gaza has made self-defensive operations on the part of the Israel Defense Forces (IDF) all but impossible without considerable civilian losses and associated destruction of civilian infrastructure that has reportedly left parts of Gaza nearly uninhabitable. The widespread and consistent Hamas practice of embedding military targets in a densely populated civilian environment has ensured that IDF military operations would result in significant civilian casualties and destruction to civilian infrastructure. The mounting casualty figures have in turn created openings for anti-Israel information operations worldwide.

It is critical that the United States develop a clear set of metrics as well as a reliable and transparent protocol for addressing the challenges associated with fighting an enemy that makes extensive use of inserting combatants amongst civilians and civilian assets. To date, there have been few systemic efforts to distinguish between different types of civilian casualties, for example, those caused by our own forces as regrettable but inevitable incidents to combat operations, and those directly attributable to an enemy's deliberate placement of civilians in harm's way. Accordingly, casualty statistics and reports fail to differentiate these different kinds and sources of civilian casualties, with grave consequences for the operation space in which combat operations are explained and transmitted to the public.

The "Strengthening Tools to Counter the Use of Human Shields Act" (the 2024 Shields Act) became law on April 24, 2024, as part of [Public Law 118-50](#), the emergency supplemental appropriations act which also contained security assistance for Israel and Ukraine. The "Strengthening Tools to Counter the Use of Human Shields Act" extended and expanded the human shields sanctions provisions in the "[Sanctioning the Use of Civilians as Defenseless Shields Act](#)" (which became law in December 2018).

The 2024 Shields Act required the Secretary of Defense to, within 120 days of enactment (i.e., by August 22, 2024) submit to Congress a report, including the following:

- (1) A description of the lessons learned from the United States and its allies and partners in addressing the use of human shields by terrorist organizations such as Hamas, Hezbollah, Palestine Islamic Jihad, and any other organization as determined by the Secretary of Defense.
- (2) A description of a specific plan and actions being taken by the DoD to incorporate the lessons learned as identified in paragraph (1) into DoD operating guidance, relevant capabilities, and tactics, techniques, and procedures to deter, counter, and address the challenge posed by the use of human shields and hold accountable terrorist organizations for the use of human shields.
- (3) A description of specific measures being developed and implemented by the United States Government to mobilize and leverage allied nations, including member nations of the North Atlantic Treaty Organization (NATO), to deter, counter, and hold accountable terrorist organizations for the use of human shields.

The report has now been commissioned to the Center for Naval Analysis (CNA), a thought leader regarding CHMR. This kind of research is critical for countering the terrorist practice of using human shields to protect the enemy and to create and exploit vulnerabilities in the public perception surrounding the operations of the United States or its allies. In the following section, we make the case that cutting-edge research of this sort should be expanded, with think tanks and academic institutions such as CERL playing a critical supportive role.

In conjunction with the Shields Act, the CHMR program could greatly assist with these needs. Rather than eliminate the program, Members of Congress should regard the refocusing of this program as an opportunity to achieve greater clarity on a critical aspect of contemporary and future warfighting and to develop badly needed protocols to help make U.S. military operations more efficient, more precise, and ultimately more effective in achieving their objectives.

C. AI and Advanced Technologies

The emphasis on countering civilian losses and protecting the information space dovetails with the Trump administration's emphasis on advanced technology development, particularly using the tools of Artificial Intelligence (AI) and advanced robotics. A recent executive order entitled "Removing Barriers to American Leadership in Artificial Intelligence" (January 23, 2025) directs various federal agencies to develop a plan to "sustain and enhance America's global AI dominance in order to promote human flourishing, economic competitiveness, and national security." The development of AI-based techniques and robotics in aid of the dual goals of operational precision and civilian loss minimization would provide opportunities for the exercise of leadership and dominance in the domain of artificial intelligence and advanced technologies. Facial recognition technologies paired with drone technologies can enhance lethality while reducing the risk of inaccuracies in targeting. Advanced robotic technologies, either autonomous or semi-autonomous, have played an important role in Gaza in navigating subterranean battlespaces, and have assisted both with intelligence regarding the placement of hostages and with force protection. The same technologies that protect civilians in war can also protect our forces both against the enemy and against friendly fire incidents. Technological development at the cutting edge of AI and robotics is a critical part of both enhanced lethality and enhanced civilian protection and minimization of civilian losses in war.

The CHMR program can also enhance trust for commanders and warfighters as we develop and place innovative new weapons and tools employing AI and autonomy in their hands. The civilian harm mitigation approach promotes innovation coupled with careful consideration of risk and risk mitigation that can accelerate the development and fielding of revolutionary capabilities to tip the scales of decisive combat power in favor of U.S. forces. Likewise, those steps strengthen the confidence of our commanders and forces to employ them because they are trusted and reliable.

D. Allies and Partners

The United States provides arms, equipment, training, and other assistance to a wide set of allies and partners in ways that broadly support national security interests. For example, such assistance promotes more effective partners for dealing with threats, strengthens interoperability, aligns national interests in shared challenges, and provides economic benefits. That said, history shows

that civilian casualties connected with capabilities and advice provided through U.S. security assistance can result in costs to both the United States and its recipient partners and allies.

This challenge can be addressed through practical assistance. For example, the Targeting Infrastructure Policy was established in 2019 to incorporate practical assistance to partners in support of their effective and accurate use of arms and equipment. Around the same time, CNA developed a complementary, broader concept of tailored conditionality—moving away from a reactive, punitive approach to security assistance where certain assistance is curtailed because of perceived risks to civilians, and instead taking a proactive approach with allies and partners where potential risks are identified and managed in stride during assistance efforts.

Through expanded options enabled by tailored conditionality, the United States can, in appropriate cases, tailor its approach toward individual allies and partners to promote better operational outcomes and improve relationships, interoperability, and partner effectiveness. The CHMR program can support this goal through programming where we work with allies and partners on practical steps they can take to better mitigate harm to civilians and improve their effectiveness. Such relationships between the United States and relevant partners and allies have proven highly successful in the past: many partners welcome this cooperation as an opportunity to enhance their lethality and reduce the myriad costs of civilian harm in their own contexts, and we reinforce that the United States is the partner of choice for national security—there is no other country that can provide such assistance in a practical and uncritical way.

III. Proposed Retooling of the CHMR program

Current guidance has the potential to constrain warfighters if incorrectly implemented. Lethality must remain DoD's core mission. Service members must avoid the "COIN hangover," in which restrictive rules of engagement from past U.S. counter insurgency operations are imposed on allies facing existential threats or make American commanders overly hesitant to use force when training for, or engaging in, the much larger scale combat operations (LSCO) of the future. Experience from counter-terrorism operations can scale up to LSCO, and indeed most anticipated LSCO engagements involve a degree of counter-terrorism planning as ancillary to an International Armed Conflict (IAC). The CHMR program can help the United States prepare for the next LSCO by

studying and generalizing from the counterterrorism operations of past U.S. engagements as well as the engagements of our allies and partners, particularly that of Israel.

The foregoing considerations suggest that the CHMR program should be refocused on operational precision and overcoming adversary actions that put civilians at risk. Such a retooling should include adding an “adversary liability” component to its assessments and reporting on civilian harm to ensure there is documentation not only of U.S. actions and lessons learned but also of the responsibilities for civilian harm that are attributable to adversaries who violate international law with regard to human shielding and other methodologies that place U.S. forces at reputational and legal risk with regard to civilian loss exposure. DoD must make clear how enemies who do not value civilian life manipulate the operational environment to place civilians at much greater risk and then deflect responsibility onto U.S. and allied forces when civilian casualty losses mount.

The newly refocused DoD program should include emphasis on technological advancement in a variety of sectors, particularly in the domains of AI and AI based robotics. AI enabled simulations can better represent the civilian environment in training, particularly in urban settings. Such technologies can improve military targeting in ways that simultaneously accelerate identification of targets and alert operators about risks to civilians. Robotics and autonomous or semi-autonomous vehicles can help minimize civilian casualties by excavating territory in dense urban environments, such as tunnels, and transmitting information about likely civilian assets and potential losses to help minimize unnecessary harm.

Finally, the CHMR program should strengthen its focus on cooperation with allies and partners. Rather than restricting arms sales in response to civilian harm incidents, the U.S. government should be finding ways to help our partners improve their combat effectiveness such that civilian harm will be reduced in the future. This approach has already been adopted for several U.S. partners who have welcomed such assistance. The U.S. defense industrial base should benefit from the fact that America’s weapon systems lead the world in precision and battlespace awareness, two key ingredients to countering civilian harm.

In addition to increasing purchases of weapons, particularly of needed advanced technological equipment, American allies could benefit the U.S. military by sharing hard-earned lessons about countering civilian harm. Consulting with our Israeli partners, for example, in a systematic and data-driven way would help to prepare the U.S. military for comparable conflicts involving use of human shields, disinformation techniques, widespread exposure and radicalization of the civilian population, and significant direct participation in hostilities (DPH-ing) on the part of non-combatants. Despite the precautions the IDF took to protect civilians—some very innovative—Hamis created dilemmas that intentionally put civilians in harm’s way and eroded international support for Israel when incidents occurred. There are many lessons America and Israel can share through more systematic collaboration and study to help both our militaries adapt and improve. Shining a clearer light on the actions of Hamas to put its own population in harm’s way will help counter Hamas efforts at misinformation and disinformation and capture lessons for countering actions like human shielding in future conflicts around the world.

Finally, we conclude that the DoD program could be strengthened through establishing a stronger ecosystem of learning and innovation. The DoD CHMR-AP implementation focused on hiring over 160 DoD civilian positions and creating new offices and organizations. While some new personnel are beneficial for providing coordination and deep expertise, this approach added to staffing numbers but neglected the qualitative priorities emphasized here, which seek to promote innovation and develop new protocols and capabilities. CERL’s collaboration with DoD leaders and other national security experts and entities indicates that innovation often stems from the interplay of government with appropriate non-governmental expertise.

IV. Conclusion

U.S. Combatant Commands and other operational commands around the world have identified lessons and developed important tools to protect civilians and to counter efforts by adversaries to put civilians at risk. DoD’s CHMR program is responsible for identifying and institutionalizing these lessons for warfighters and helping them apply these tools in exercises and operations. One of the most challenging aspects of its mission is to help develop capabilities and procedures to address the illegal use of human shields by adversaries, including in urban environments and future LSCO. DoD’s efforts, therefore, would benefit from being re-tooled with a stronger focus on

helping America's military counter the efforts of its adversaries, particularly with regard to techniques like human shielding that place civilians at grave risk, ensuring that guidance actually enhances precision lethality, and equipping combatant commanders with data science tools and objective metrics needed to counter manipulation of the information environment.

The focus on civilian harm mitigation is critical for the mission effectiveness and precision lethality of U.S. forces. A retooled CHMR program could help the United States further hone its warfighting skills, enhance precision lethality, learn from the experience of our allies such as Israel who have been grappling with the problem of minimizing civilian casualties when fighting an enemy that uses civilians as human shields, and develop new technologies that will both assist with mitigating civilian harm in war and enhance lethality in both counter-terrorism operations and ultimately in large-scale combat operations.

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For Further Reading

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About CERL

The Center for Ethics and the Rule of Law (CERL) at the University of Pennsylvania is a non-partisan interdisciplinary institute dedicated to preserving and promoting the rule of law in twenty-first century national security, warfare, and democratic governance. CERL draws from the study of law, philosophy, and ethics to answer the difficult questions that arise in times of war and contemporary transnational conflicts.