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REAR ADM. PAUL REED, DEPUTY ASSISTANT SECRETARY FOR HEALTH AND DIRECTOR OF THE OFFICE OF DISEASE PREVENTION AND HEALTH PROMOTION



U.S. Public Health Service Rear Adm. Paul Reed, M.D., advises the Assistant Secretary for Health in the Department of Health and Human Services on disease prevention and health promotion programs and oversees various national health initiatives, including [Healthy People 2030](#), [Dietary Guidelines for Americans](#) and [Physical Activity Guidelines for Americans](#).

Your office has been coordinating the development of a post-COVID federal plan for recovery and resilience. From your perspective, what are your key takeaways? What does resilience look like in a post-pandemic world — both for individuals and for the broader health system?

The federal plan actually is a product of about two years of effort by an interagency workgroup. It started in April of 2020 at the early stages of the whole government response when the National Response Coordination Center (NRCC) came together and was co-led by CDC [the Centers for Disease Control and Prevention] and FEMA [Federal Emergency Management Agency], given the nature of the pandemic and the widespread national-level disaster that it was — and that it was anticipated to be. Under the NRCC, a task force on mitigation and recovery was stood up. And that task force, among other things, was handed the mandate to think differently about how recovery was going to look, anticipating that the pandemic was going to have the far-reaching impacts that it did. The other thing it was asked to do was to consider what it was going to mean to establish a new level of resilience in the country. Again, very prescient in the spring of 2020, it was realized that the level of resilience that the nation knew in December of 2019, before COVID, would prove inadequate. And therefore, trying to return to that baseline of resilience just wasn't viable.

We had to do more, considering a different, more long-term approach to recovery and building forward to a greater degree of resilience in the nation. So that was the genesis of the whole thing. In the ensuing two years, the [Federal] Interagency [Workgroup](#) that was formulated under the task force for mitigation and recovery and tasked with addressing these issues took their mandate in earnest. Ultimately, this workgroup has grown to include 135-plus senior career folks across the interagency, across now 35-plus agencies. [That is] truly unprecedented in terms of the breadth of brought. After the NRCC sunset later in the summer of 2020, the work got handed off to the Joint Coordination Cell, which was the subsequent interagency body overseeing much of the whole-of-government response, just at a slightly different scale and scope. Then, as of January 1, 2021, the ongoing effort of the interagency workgroup was brought to my office to carry forward. And we've been the stewards of it all along. When Adm. [Rachel L.] Levine assumed her position as Assistant Secretary for Health in the spring of 2021, she was briefed on this effort and immediately endorsed its continued development. She and I have been providing executive leadership for this work, though it very much remains in an interagency space. It is critical that this idea and approach to building forward to an enhanced level of resilience and recovering in an extraordinary way as compared to other national level disasters isn't just an effort focused on health outcomes.

There are parts of it that are health-related, but it really demands a much broader perspective on all of society's roles, all the sectors of government and the responsibilities they have to society, which is exactly the perspective this federal plan now takes. The plan, by the way, went through two rounds of interdepartmental clearance this past winter and has been ratified. It has since been elevated to the White House and we're in dialogue with a variety of components in the White House, including OMB [Office of Management and Budget], the NSC [National Security Council], Domestic Policy Council, OSTP [Office of Science and Technology Policy] and others to discuss how exactly this initiative should be carried forward.

Those are the important, level-setting practical considerations when it comes to this work. To answer your subsequent questions: what are the key takeaways? Well, one of them is you can't just look at it through the health lens. Second, we really do need to build back from the pandemic in a way that is intended to equitably enhance resilience across the nation.

Again, it was recognized from the start of the work that enhanced resilience was really the order of the day. And third, you can't have a short view on this; you really must have a long view. And very smartly, the workgroup early on adopted a 10-year horizon and beyond, in entertaining what the nature of their work or the recommendations for the work of enhancing resilience post-pandemic was really going to demand. And that has carried forward in the two years since. We've actually expanded that horizon to be well beyond years to the concept of embedding the recommendations into the usual course of business for federal agencies.

You asked what does the post-pandemic world look like in terms of resilience. Well, let's talk about the U.S. first, because that's a bold enough scoping of the problem, much less a global scoping of it. Even across this country, enhancing resilience at the individual and community level is — well, to say it's complicated is not even coming close to what we're talking about here. But there's a way to break it down to some very elemental pieces that do make it seem a lot more approachable, which is really what this federal plan intends to do. Ultimately, we need to see a level of resilience in each and every one of us as individuals, and in the communities within which we live. That's defined through the framework of the Vital Conditions for Health and Well-Being, which is a very different approach to framing recovery.

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And actually, when the workgroup was establishing its work early on, it did a landscape analysis of what frameworks could best define the broad aspects of enhanced resilience, and therefore could be built upon to develop the plan and its recommendations for the federal government to act on. What the workgroup landed on is this framework for the Vital Conditions for Health and Well-Being, which, back to my earlier point, is a much broader perspective on the aspects of our lives that contribute to our health and well-being, and therefore contribute to our level of resilience. That framework has existed in civil society for some time, and it was being leveraged by a number of community-based organizations, both national and local, to ask a very similar question that was posed to the mitigation and recovery workgroup, which is: how do we collectively in society come together better to enhance resilience of communities?

And then, COVID hit. And that framework became all the more relevant. So, they ran with it. And in the summer of 2020, this consortium of nongovernmental organizations and individuals established a civil society equivalent to what we now have in the federal government, known as Thriving Together, or the Springboard for Thriving. Now, with deliberate intention, we have an opportunity to harmonize federal and civil society efforts. And by the way, that work in civil society has further blossomed in the past two years. It's gone far and wide and it's encompassing a great deal, a great number of different entities, including local jurisdictions, state jurisdictions, and even some regional jurisdictions in the nation have been adopting it and employing it.

We're at a tipping point where the federal government has a fully vetted plan that mirrors the civil society plan. We're hoping that we can create the harmony between those two things, in part because we have this common lexicon, this common framework of the Vital Conditions for Health and Well-Being.

What makes the Vital Conditions framework different from Social Determinants of Health (SDOH)?

The SDOH framework, while conceptualized early on with support from the World Health Organization, has subsequently been espoused through the Healthy People initiative, as Healthy People has evolved over the years. Healthy People has looked more and more upstream to those factors that influence health and well-being of individuals in the country, to set objectives — to set the metrics and benchmarks that Healthy People defines for the whole of government and the nation. Recently, there's been a bit of consternation around this Vital Conditions framework as compared to the framework for Social Determinants of Health. And the way I relate it is that, first, the Social Determinants of Health framework has a long legacy existing within the traditional health system, traditional health sector. And therefore, it's very focused on a description of the problem. What are those aspects of our lives that contribute to our ill health? We call it the Social Determinants of Health, but we use it as the Social Determinants of Ill Health or Disease in our historical narrative, in the way we talk about it and the way we apply it.

In contrast to that, the framework for the Vital Conditions for Health and Well-Being is very prospective, it's very forward-looking. And it asks, what can we do? What are the assets that we can bring to bear that elevate vital conditions, such that individuals and communities are healthy and have a greater opportunity for thriving and well-being? So, it's prospective, it's asset-based, it's looking at capabilities and thinking of those vital conditions in positive terms with positive outcomes, as opposed to negative terms. It's not descriptive of the problem, but descriptive of how to create an environment that fosters health and well-being. That's an important contrast with how the SDOH framework has been applied. And we actually leverage that in our briefings to everybody, frankly.



The Vital Conditions framework is also very inclusive. It's much more inclusive in comparison to how the SDOH framework is talked about and thought of, predominantly from the perspective of the health sector. The Vital Conditions framework is much more inviting of various sectors that are not health, which we find imperative.

I don't know if you all remember the old model of the "life space" or the "white space." There was a former U.S. Army surgeon general, the first full-term female nurse surgeon general in the Army, Lt. Gen. [Patricia D.] Horoho, who used to talk about it all the time. At the time, as surgeon general, she commanded hospitals, doctors, nurses, etc. And yet, she spent all of her time talking about those things that had nothing to do with the assets that she had direct control over, like where soldiers ate and family life issues of her soldiers. Realizing that in order to do her job — and she had one primary mission, which was to ensure a healthy fighting force — she realized she wasn't going to achieve a healthy fighting force by focusing on what she could control in the way of her medical assets and delivering health care better to her soldiers. Whereas, if she could influence the way her soldiers eat, the way they live, the way they play and do all those other things in life, she could better ensure their health and well-being. So that's how she spent her time.

That's a metaphor for what this Vital Conditions for Health and Well-Being framework is all about. It's looking at the entire aspects of our lives. The framework organizes those aspects of life in seven components. Most interestingly and most imperative is the central component of that framework, which is belonging and civic muscle, or the sense that one and one's community can thrive only if there is an opportunity to speak in terms of the needs of that individual and that community, from the context of that community. And that really demands civic engagement. It means not only having a seat at the table but also having a voice at the table and having authority at the table to express that perspective. We've lost that in this country, and the way in which we deliver resources to support health and well-being in this country is very

paternalistic, it's directive, it's hierarchical. It certainly isn't grounded in the diverse needs of communities, not in large part. So, we miss the mark all the time.

The Vital Conditions framework tackles that big issue. How do we ensure — or how do we optimize — civic muscle for individuals and communities around the country, such that their needs are best defined, such that we can best understand those needs and therefore, best apply our resources against those needs (as opposed to taking a bunch of assets, throwing it on the wall and seeing what sticks, which is really the way we traditionally do business)?

There's the old saying, "health care is local." Extending this, health and well-being are also local. How do you account for differences in health equity, but also in the distribution of the nation's resources? Those vital conditions vary. And we certainly know this from the disaster preparedness world, where you have a huge spike in interest and resources, and then a year later, interest wanes. So how would we reframe that value proposition to start investing in communities and taking it back to the local level?

There's a lot to unpack there. Again, in our minds, it starts with first and foremost being respectful of where the issues lie, that the solutions need to be applied against. Rather than just doing that wholesale, start by looking very deliberately at where the requirements are at the most hyperlocal level of community. Because it's only really in the hyperlocal viewpoint that you can: (a) see things for what they are, and (b) best apply the resources that you have available against those needs. So again, back to that point about civic muscle, that makes a lot of difference when you can achieve social capital for all, across the country, at every local jurisdiction.

“First of all, we need to stop limiting the conversation to “health” equity. I know I do it, I know my office does it, I know Healthy People does it. But it's really in the broader context of equity that the real solutions are found, just like the wider aperture of the Vital Conditions for Health and Well-Being, like humane housing, accessible transportation, affordable nutrition, etc. All those things are outside the health sector domain.”

But that's a philosophical shift. That's a transformational shift in mindset at every level, not the least of which is at the federal government level. Because we're used to doing things in a wholesale way. Interestingly, this federal plan doesn't demand any real legislative action. It doesn't demand anything in the way of changes in authority, funding, etc. But what it demands is a mind shift, that philosophical frame shift toward looking at the application of resources that are already available in a unique way, so it isn't as complicated as it sounds in that regard.

Health equity. First of all, we need to stop limiting the conversation to “health” equity. I know I do it, I know my office does it, I know Healthy People does it. But it's really in the broader context of equity that the real solutions are found, just like the wider aperture of the Vital Conditions for Health and Well-Being, like humane housing, accessible transportation, affordable nutrition, etc. All those things are outside the health sector domain. The concept of deriving health equity is only achievable by defining all those ways in which equity needs to be realized. Back to the white space or that life space that Gen. Horoho used to talk about: people don't get well from the minutes or few hours per year on average that we spend engaged with the health-care system. It just doesn't work that way. You get well, or you stay well, or you are well as a reflection of the conditions in the environment within which you live.

So, equity in health means equity in all those life experiences. I would venture to guess that all of us on this call right now have a life circumstance that is health-promoting: where we live, what we eat, what we have access to, what we can afford, how we move about, etc. That is not true for the vast majority of the country. It's certainly not true for the vast majority of the world. You can't go pursuing health in individuals unless at the same time you're pursuing equity in all aspects of the world around them.

Actually, public health is not a term I use very often. And it's to the point, it's to the very point. We have a fairly concrete perspective of public health in this country. And it's one that is largely borne out of about 150 years of history in the infectious disease model of John Snow [British physician widely recognized as being the father of epidemiology]. What are those environmental factors that influence our health in terms of communicable disease risk — clean water, sanitation, all of those things? We must get away from that model. It's not to say we must lose it altogether, because those risks for emerging and communicable infectious diseases remain equally concerning today, in many respects. But we must have a much more expansive model than what traditional and even contemporary public health institutions and ideals are centered on. And that is far-reaching. There are a lot of elements to that, like politics. We haven't historically talked about policy and politics in public health as underlying contributing factors for health outcomes. But those are probably two of the biggest factors influencing the public's health. Public health, as a system, ought to be focused on understanding policy-making in this way as much as it is on infectious disease surveillance.

Certainly the Department of Defense (DOD) has had a lot of interest in its recruiting and retention. And we've known for some years that the pool of healthy and physically fit recruits is dwindling every year. Back to your point on politics: propensity to serve is tanking as well. So, how can the various levels of government shift this trajectory we're on and encourage healthy choices? Are there any population health approaches that you see that are particularly viable, or societal approaches that are particularly viable for encouraging health and well-being?

In terms of meeting the health requirements for enlistment in the military in the United States, one in four young adults cannot qualify for the military due to overweight or obesity. And that's just weight restrictions alone. That doesn't account for having a history of illicit drug use, incarceration, or other limiting factors that prohibit enlistment, most of which relate to social determinants or deficits in the vital conditions we talked about. Arguably, we're pretty badly off.

We definitely have some best practices and some very good models for communication, in terms of how to help influence healthy behaviors. That includes diet and physical activity, amongst other things. Tobacco use as well. However, the problem isn't necessarily influencing behavior; it's in influencing the opportunities that accommodate behavioral change. To my previous points, those of us on this call right now, we have access to healthy lifestyles, partly because of what we choose to do, but largely because of the circumstances within which we live. And we take it for granted. I want you to think about that at the end of the day, when your head hits your pillow. What about the course of your day — in terms of where you live, learn, work, play, whatever — isn't favoring your ability to make healthy choices? And then think about the average American citizen and their life circumstances.

Yes, we have all of these best practices in communication to help inform nutrition and physical activity and other lifestyle decision-making, but in many instances across this country, people are not going to be able to act on the information. Even with the will to, they're not going to be able to act on it. That might have to do with the lack of a safe environment to go for a walk or the proximity of affordable fresh produce.

I had taught on a monthly basis for about 10 years the last two hours of our Officer Basic course, for newly commissioned public health service officers. And I would often use the anecdote of an impoverished child, say, 10-years-old, stepping off their front stoop in inner city America with \$3 in their pocket. By luck, they have \$3 in their pocket that day. And they have the choice of turning left and going half a block to the corner convenience store or fast-food restaurant. And they could probably get 1,200 calories for the \$3. Unhealthy 1,200 calories. Or they could go two miles to the right, if they're lucky, to find the nearest source of fresh produce. And they can't even afford half a bag of grapes for that \$3.

That's the reality for many Americans. It's not just those living in the inner cities. The same is true for rural communities in our country. You and I don't have that lived experience. So, to answer your question, it really means the best practices are going to be realized in our ability to elevate those life circumstances. And then let people do what's right by themselves.

It's not browbeating them over what they can and should be doing for themselves, because most of their circumstances just don't allow for it.

It does mean really big systems change, though. And we're on the verge of talking about that from a nutrition standpoint. I'm sure you've heard about the White House Conference on Hunger, Nutrition and Health that's coming up in September. My office has a responsibility for assisting the White House in administering the conference. We've been in deliberations with them since late November. What's going to manifest at that conference in September is a national action plan, which is going to have five pillars associated with it that reflect major areas of action that the government and civil society should take to favorably influence hunger, nutrition security, and diet-related disease.

Those five pillars tackle the issues that you're asking me about, including setting the conditions that favor behavioral change in physical activity among Americans. But the actions are going to have to be big and bold. It is going to demand profound collaborative effort. What this national action plan will likely call for, in the way of changes in federal government policy and action, will require legislative changes in some respects. But also, it will require civil society to come to the table and really make some big differences. We know, from the standpoint of nutrition alone, that there is little difference that's going to be made by each and every American being nutritionally literate. With the right amount of investment, we could inform the entire population of this country well, fairly accurately on what it means to eat in a healthy way. However, changes in dietary habits are unlikely, given that most Americans are not going to be able to access the healthy foods necessary to have that healthy diet. Rather, it's going to also demand things like regulatory change on the agricultural industry and a profound revamping of our logistics system affecting the distribution of food. Those are major, major things. And they're going to take a long time to overhaul, but they're imperative if we're really going to make a difference across the board, and we're going to make a difference in an equitable way. Many of the changes we do at a systems level don't benefit a significant proportion of Americans because they're applied with such inequity. That's got to change.



Your office is famously responsible for Healthy People. If you were to speculate and look to the future, what would be the focus areas for Healthy People 2050 or 2100? Where do you think we're headed? What are those new domains that we should be thinking about?

Well, all you have to do is look at the trajectory over the past 40 years. We actually have a briefing slide that depicts this. It shows each decade and the incremental change in the focus of Healthy People, decade in, decade out. What you see is this focus more toward those "upstream," as the public health community likes to call it, or "left of boom," as the military likes to call it — factors that influence our health and well-being. Everything we've just been talking about. Healthy People's objectives have been formulated to focus more and more on the Social Determinants of Health, measuring those things that allow for our access to healthy lifestyles or not, as opposed to those measures of ill health. It used to be that we had this inordinate number of statistics or metrics that were focused on different diseases. We still do have many. We do focus particularly on some of the most important ones, like coronary vascular disease and diabetes. Maternal mortality is more prominent now than it used to be. So, we still have those things, but in terms of the overall proportion of objectives, there is a much greater emphasis now on aspects related to the Social Determinants of Health. That trend is only going to continue.

This iteration of Healthy People 2030 is the first time we've ever had an Overall Health and Well-Being Measure that assesses well-being. A much broader concept than any metric historically in Healthy People. That will also continue. We will very likely continue to amplify broader measures, including resilience and thriving. I should have mentioned that part

of the work that the Federal Interagency Workgroup is doing on the Federal Plan for Equitable Long-Term Recovery and Resilience is related to the definition of resilience and a comprehensive way to measure it.

A lot of that work, I can almost guarantee you, will be incorporated into future iterations of Healthy People, to the point we're going to be expanding on what the aspects of the life experience are that best enable healthy lifestyles.

I think this is the first global pandemic in the era of social media. And we've seen this play out in all kinds of good and bad ways. What sort of strategies can we implement moving forward to better communicate about health, about some of these social resiliency factors and just in general, better communicate during this era of misinformation and public discourse?

That is a very complicated question, and probably one of the most paramount ones in my mind. I'm going to put my disaster responder hat on now and say, in my opinion, one of the most ineffectual things that we did in the past two and half years throughout the pandemic was in risk communications. We did not reach every person with the necessary information in a way that: (1) they could understand, (2) they could relate to their life experience, and (3) they could act on. We really did a horrendous job of risk communication across this country. There were aspects of risk communication that were very effective, but they tended to get diluted by all the other miscommunication and disinformation. And as a result, I think we've suffered tremendously.

What can we do better? We have to figure out a way to not let politics influence communication strategy in public health. I recognize that politics plays a role, and I'm not naive to these things. However, when we're trying to convey information to help individuals, families, and communities mitigate their risk — which is what risk communications is all about — we can't muddy that with factors that don't help mitigate risk or, even worse, add to the risk. It's really that simple. It's that simple in concept; it's not that simple in practice.

If we can continue to focus in that way, hopefully the grander scheme of risk communications at every level of government and outside of government will, in its totality, be better. It'll be more effective, it'll reach more people, and more people will be able to mitigate their risks, chronic and acute, as a result. It'll never be perfect. We live in a diverse of a culture, which makes the challenge of risk communications all the greater. But despite that complexity, we certainly could do a better job than we've done over the past two and a half years with respect to COVID-19 and over decades with respect to all those ongoing factors influencing our health and well-being.





ADDRESSING SOCIETAL FITNESS TRENDS AFFECTING ABILITY TO SERVE

Sarah K. John

Obesity and lack of physical fitness in the United States is not a new issue. Half a century ago, President-elect John F. Kennedy famously penned an open letter, "[The Soft American](#)," highlighting the consistent decline in the physical fitness of American youth and arguing this trend posed a threat to the vitality and security of the nation. His piece concluded with a call for a national action program to address the issue.

Unfortunately, the program, and many subsequent initiatives like it, have failed to make measurable improvements in American youth (or adult) fitness. In fact, we have gone quite drastically in the opposite direction. [The Center for Disease Control and Prevention](#) reports that over the last 60 years, the obesity rate for children (covering those between ages 2 and 19) has increased nearly fourfold from the rate prevailing in the 1960s, to 20%. Over roughly the same period, the number of military-age civilians who satisfy the current military enlistment standards for weight-for-height and percent body fat fell significantly. According to data from the [National Health and Nutrition Examination Surveys](#), the percentage of men who were overweight or obese doubled over this period, while the percentage of women more than tripled. The most [recent data](#) from the Council for a Strong America indicate that nearly one-third of youth between the ages of 17 and 24 are disqualified from military service due to obesity/being overweight, making it the No. 1 cause of ineligibility for military service. When combined with other disqualifying factors, over 70% of American youth are now ineligible to serve. Unsurprisingly, these factors, combined with strong civilian sector employment, have culminated in the worst military recruiting crisis since the 1973 inception of the all-volunteer force. Current forecasts suggest the Army will miss this year's recruiting goal by nearly 20,000 soldiers despite offering record bonuses.

Turning Crisis Into Opportunity

Today our nation is facing a health and fitness crisis that is likely far beyond what Kennedy imagined in 1960. At the same time, the Department of Defense (DOD) has a recruiting crisis that will require addressing the fitness challenge in a tactical and expedient way. In other words, it must identify the most effective mechanisms and programs for improving fitness, which gives DOD an opportunity to do something it needs to do for itself while simultaneously helping the nation.

The Public Health Service and CDC are investing their resources in broad societal initiatives like Healthy People 2030 that have potential to improve population health over the long run by targeting a complex set of factors contributing to obesity: the social determinants of health. Unlike Kennedy, who focused solely on physical activity, these organizations recognize the complexity of the obesity problem — and that complex problems require complex solutions.

DOD is also investing resources in broader health initiatives. But unlike the civilian institutions, it needs to achieve more immediate results. Soldiers who are serving but cannot meet body composition standards are processed for separation if they do not improve, and applicants who cannot meet the standard are turned away. This situation presents a challenge but also an opportunity, given that DOD can more narrowly define its target population and apply more controlled interventions. DOD also has a significant advantage in studying the impact of various interventions, as it tracks the health and fitness of its populations closely.

Some key questions for DOD to explore as it moves forward include what type of programs can be used, how they should be structured, who they should target, and how their effectiveness can be assessed. The effectiveness questions will ultimately be the most important. This is what will enable DOD to separate the programs that work from programs that don't and to assess return on investment for each. Evaluation is the critical capability that the nation requires if we are ever going to achieve victory against the trend of declining American health and fitness. It is also an area where DOD possesses a key advantage over the civilian community.

The remainder of this article highlights several recent and ongoing Army efforts aimed at improving the fitness of serving soldiers and new recruits and discusses how to measure the success of these programs. We conclude with a discussion of how similar programs or lessons learned might be incorporated into the broader whole of government efforts.

Active-Duty Health and Fitness

Like civilians, active-duty service members struggle with maintaining health and fitness. For instance, [Health.mil](#) reported that the obesity rate among active-duty soldiers climbed to roughly 18% in 2019. To combat this challenge along with many others, including injury, sleep disorders, mental health issues and high levels of nondeployability for medical reasons, the Army launched its Holistic Health and Fitness (H2F) system in 2020. The program was designed to create a cultural shift from the Army's historic focus on physical fitness to a broader focus on overall health and wellness. To achieve this goal, the new program targets five readiness domains: physical, mental, nutrition, sleep and spiritual. A key component of the H2F initiative is the outfitting of 110 brigades with H2F performance teams. These teams comprise nearly 40 personnel, including athletic trainers, strength coaches, physical therapists, occupational therapists, dietitians, nutritionists and chaplains. The program began with 28 teams and will begin adding 10 a year in fiscal year (FY) 2023 through FY 2030. When fully implemented, the H2F system will have over 2,300 military, civilian and contractor personnel. Clearly, this is a significant investment: the Army budgeted \$110 million in FY 2021 for the first 28 teams. However, the costs associated with failing to improve health and fitness are also high. For instance, the Army [estimates](#) these conditions result in over 10 million limited-duty days and nearly \$600 million in patient-care costs annually.

Recruit-Focused Programs

Beginning in 2005, the Army granted enlistment waivers at select pilot sites to applicants who exceeded the body fat standards, as long as they could pass a physical endurance, motivation and strength test known as the Assessment of Recruit Motivation and Strength (ARMS) test. A [2011 RAND study](#) of the program found soldiers who enlisted under the ARMS pilot were able to successfully complete their terms of service at the same rate as those who were assessed and met the height and weight standards. The program was suspended in 2009, when the recruiting environment improved. However, it was reintroduced as ARMS 2.0 in September 2019. Under this pilot program, applicants who were up to 2% over the body fat standard could ship to basic training if they met the highest levels of cognitive and physical strength. Initial requirements included:

- Scoring 50 or higher on the Armed Services Vocational Aptitude Battery.
- Passing the Occupational Physical Assessment Test at the "heavy" (black) level.
- Choosing an occupation that falls into the "black" (high) physical demands category.
- Meeting the Army's body fat composition standards no later than 12 months after joining.

Several minor modifications to the test score and occupational choice requirements were introduced in 2022. In addition, the Army is now introducing a new pilot program, the Future Soldiers Preparatory Course (FSPC) that will expand the opportunity to participate in ARMS to applicants who are up to 6% over the body fat standard. Under the new system, applicants who exceed the standard by up to 2% will ship straight to basic training, as before. Applicants who exceed the standard by 2.1% to 6% will attend FSPC at the Army Training Center at Fort Jackson, where they have up to 90 days to meet the ARMS standard). Program participants who do not meet the ARMS standard within 90 days will be processed for separation.

The FSPC program is built on the Army's H2F concept and thus designed to help the trainees improve their health over the long run. The holistic approach is important, as the participants will need to sustain the weight loss they achieve during the FSPC program and go on to meet the full Army body fat composition standard within one year of entering ARMS 2.0. This requirement will demand continued adherence to healthy habits (e.g., physical fitness regimes and nutritious meals) outside of the more controlled environment of FSPC and basic training. If successful, the program will offer a valuable pathway to both military service and health and fitness to individuals who otherwise might have been ruled out.

Measuring Success

It is critical for the Army to assess the effectiveness of various programs under the H2F umbrella and pilots like ARMS 2.0 and the FSPC. These assessments will allow for continued program improvement (e.g., which aspects work and what needs to change) and articulating the return on investment. Reporting on performance-based outcome metrics, such as injury rates, lost duty days, medical readiness, deployability, obesity rates and rates at which recruits and soldiers pass fitness standards, will be essential for gauging whether programs are having an overall impact. The ability to measure the impact of specific program features and processes will also be key. Ideally, program assessments will use logic models that tie a specific program component (e.g., nutrition education) to a mechanism (e.g., improved diet), and ultimately an outcome (e.g., better body composition). These assessments will require strategic data capture (program utilization, behavior before and after the intervention, and so forth) and ideally an experimental framework. The phased rollout of H2F should allow the Army to take advantage of experimental or quasi-experimental methods to maximize learning on the effectiveness of various program components. The holistic nature of the program will make this approach complex, but sound empirical research approaches can nevertheless show the impact of this approach. In the end, a program this large and varied offers an extremely valuable opportunity to uncover some of the deeper mechanisms behind success or failure in improving health and fitness.

The FSPC program offers a key opportunity for evaluation, as the participant population will be well-defined and the cohort can be tracked over time. Initial program metrics will likely focus on the rates at which participants successfully complete the program, complete basic training and initial military training, and meet the full accession standard. Much could also be learned by following participants over longer time horizons and comparing their health and fitness data to cohorts who participated in different programs (or no programs).

Incorporating DOD Efforts With the Broader Whole-of-Government Approach

The lessons that DOD learns from the H2F program and pilots such as ARMS 2.0 and FSPC could offer insights that benefit broader civilian populations. Formal mechanisms should be used to ensure knowledge sharing is maximized. Expanding research collaborations, program partnerships, and joint investments in health and fitness programs could also be explored. DOD will naturally want to target its limited resources toward those currently serving and those demonstrating a high propensity to serve (e.g., current applicants). However, it can certainly benefit from broader efforts targeting children (e.g., improving the nutritional value of school lunches, increasing physical activity in schools, improving access to playgrounds and parks). Investment in such initiatives should be further explored through the sharing of research or the formation of partnerships to study and advocate for policies shown to improve youth health and fitness. An area where DOD may want to make further direct investment would be targeting youth who are nearing service age and demonstrating some interest in service. For instance, if the FSPC proves successful, perhaps some of its curriculum could be introduced in programs like the Junior Reserve Officer Training Corps or even new summer programs for interested high-school students. In the end, moving forward with such initiatives will first require data on the effectiveness of such programs and the return on investment they can offer.

COMMENTARY: THE VITAL CONDITIONS FOR DOMESTIC NATIONAL SECURITY

Janet C. Marroquin Pineda

Using the [Vital Conditions](#) for Health and Well-Being Framework, the [Federal Plan](#) for Equitable Long-Term Recovery and Resilience for Social, Behavioral, and Community Health identifies seven key conditions required for improved community and individual resilience and well-being. The plan calls for a paradigm shift in the federal government’s investment in resilience that extends beyond health and social determinants of health, to center on a whole-of-government approach on the concept of fostering a thriving community.



	BELONGING & CIVIC MUSCLE	<p>Sense of belonging and power to shape a common world</p> <p>Civic agency; civic association; collective efficacy; equitable access to information; freedom from stigma, discrimination, oppression; many opportunities for civic engagement (voting, volunteerism, public work); social support; support for civil rights, human rights; vibrant arts, culture, and spiritual life</p>
	THRIVING NATURAL WORLD	<p>Sustainable resources, contact with nature, freedom from hazards</p> <p>Accessible natural spaces; clean air, water, soil; freedom from extreme heat, flooding, wind, radiation, earthquakes, pathogens; healthy ecosystems able to sustainably provide necessary resources</p>
	BASIC NEEDS FOR HEALTH & SAFETY	<p>Basic requirements for health and safety</p> <p>Freedom from trauma, violence, addiction and crime; fresh air; nutritious food, safe drinking water; routine care for physical and mental health; routine physical activity; safe, satisfying sexuality and reproduction; sufficient sleep</p>
	HUMANE HOUSING	<p>Humane, consistent housing</p> <p>Adequate space per person; affordable costs; close to work, school, food, recreation, and nature; diverse neighborhoods (without gentrification, segregation, concentrated poverty); safe structures</p>
	MEANINGFUL WORK & WEALTH	<p>Rewarding work, careers, and standards of living</p> <p>Family and community wealth; good-paying and fulfilling jobs; job training/retraining; savings and limited debt</p>
	LIFELONG LEARNING	<p>Continuous learning, education, and literacy</p> <p>Career and adult education; continuous development of cognitive, social, emotional abilities; early childhood experiences; elementary, high school, and higher education</p>
	RELIABLE TRANSPORTATION	<p>Reliable, safe, and accessible transportation</p> <p>Active transport; close to work, school, food, leisure; efficient energy use; few environmental hazards; safe transport</p>

While the framework focuses on civil society and steady-state resources, strengthening vital conditions would also strengthen domestic national security against foreign influence activities.

Foreign Influence Activities and U.S. Vital Conditions

In recent years, foreign influence operations have flooded English-language media platforms in an effort to sway U.S. political sentiment and public discourse and undermine public trust in government on a broad range of topics, such as [election security](#), [political conspiracies](#), and [vaccine disinformation](#). These efforts have drawn considerable attention and concern from the U.S. government, given the rise in foreign actor activities and capabilities. However, a lack of federal strategy and coordination to counter influence operation campaigns has [hindered](#) government response. Moreover, [research](#) indicates that foreign influence operations can have cross-cutting impacts from the individual through societal levels, further complicating the delegation of roles and responsibilities among government agencies.

The vital conditions framework offers one approach to understanding and mitigating impacts to domestic national security by addressing resilience at the individual, community and national levels and by emphasizing a holistic definition of well-being. Specifically, strengthening vital conditions could help mitigate the effects of foreign influence in the following ways:

- **Belonging and Civic Muscle:** [Individual factors](#) of vulnerability to social influence, whether positive or negative, are driven by a person's social network and broader social environment. Such social networks can [amplify](#) the effects of economic inequalities and thus the effects of malign foreign [influence](#). Strengthening civic agency and equitable access to information would foster a sense of efficacy in an individual's formation of opinion and decision-making and ensure that a person has adequate exposure to correct information for these processes. Building cognitive resilience at the individual level would thereby encourage the proliferation of well-informed judgement across social networks.
- **Basic Needs for Health and Safety:** Foreign influence operations have aimed to sow distrust of U.S. health institutions and public health measures, most acutely observed and examined during the [COVID-19 pandemic](#). However, such efforts have leveraged [pre-existing](#) narratives and negative public sentiment regarding health science and the U.S. medical system. [Data](#) collected in the dawn of social media platforms suggest that reversing, and perhaps reducing, digital inequalities could facilitate the propagation and acceptance of sound health communication online. Moreover, tailoring community health to meet a range of sociocultural needs would strengthen trust among marginalized populations with longstanding [collective trauma](#) from historical mistreatment by the U.S. medical system.
- **Lifelong Learning:** Education and continuous learning are paramount to ensuring [information literacy](#) and creating resilience against [false information](#), to include foreign influence efforts. Unfortunately, recent societal changes in how Americans [seek information](#), coupled with [polarization](#) of the U.S. public education system, may complicate information literacy interventions. Therefore, a more holistic and equitable approach to supporting lifelong learning would offer greater, longer lasting resilience.
- In addition, the plan's invocation of equitable steady-state resourcing aims to eliminate economic and social disparities in the long term, thereby improving social cohesion and reducing divisions stemming from disparate vital conditions. Such an approach offers the potential of mitigating vulnerability to malign foreign influence activities by addressing the underlying social [inequalities](#) and divisions that fuel them, a more robust form of resilience as compared to mitigating risk alone. In a new era of gray-zone conflict and malign foreign influence campaigns, improving U.S. vital conditions is not only a public health and wellness imperative but also an imperative of domestic national security.