THE FEDERAL RESPONSE TO HURRICANE KATRINA: LESSONS LEARNED

EXECUTIVE SUMMARY
PREPARED FOR BIOSURVEILLANCE WORKGROUP

> *"…We must expect more catastrophes like Hurricane Katrina—and possibly even worse. In fact, we will have compounded the tragedy if we fail to learn the lessons —good and bad—it has taught us and strengthen our system of preparedness and response. We cannot undo the mistakes of the past, but there is much we can do to learn from them and to be better prepared for the future…."*
>
> *"…Finally, the National Preparedness System must emphasize preparedness for* all hazards*. Most of the capabilities necessary for responding to natural disasters are also vital for responding to terrorist incidents. Yet for a variety of reasons, much of the Federal government, Congress, and the Nation at large have continued to think about terrorism and natural disasters as if they are competing priorities rather than two elements of the larger homeland security challenge.*
>
> *"The lessons of 9/11 and Hurricane Katrina are that we cannot choose one or the other type of disaster. We must be prepared for all hazards. "*
>
> CHAPTER SIX: TRANSFORMING NATIONAL PREPAREDNESS

On February 23, 2006, the Assistant to the President for Homeland Security and Counterterrorism submitted the subject Report to the President. Consisting of 228 pages, it described what happened, what went wrong and what went right. The lessons learned from that experience have wide applicability for the Biosurveillance Workgroup. If past is prologue, we would be remiss if we did not heed the lessons and recommendations contained in this Report.

Note: In an effort to avoid reiterating the complete Report, the author of this summary extracted those parts he thought particularly relevant to our charge. In so doing, he has left out much information others may find useful. To gain the full value of this Report one should read the original report in its entirety. It can be found at: http://www.whitehouse.gov/reports/katrina-lessons-learned/

TABLE OF CONTENTS OF THE FULL REPORT

- Letter to the President from Frances Fragos Townsend
- Foreword
- Chapter One: Katrina in Perspective
- Chapter Two: National Preparedness - A Primer
- Chapter Three: Hurricane Katrina - Pre-Landfall
- Chapter Four: A Week of Crisis (August 29-September 5)
- Chapter Five: Lessons Learned
- Chapter Six: Transforming National Preparedness
- Chapter Seven: Epilogue
- Appendices
  - Appendix A – Recommendations
  - Appendix B – What Went Right
  - Appendix C – List of Acronyms
  - Appendix D – Staff Page
  - Appendix E – Endnotes

AN EXTRACT OF RECOMMENDATIONS AND LESSONS LEARNED

CHAPTER TWO: NATIONAL PREPAREDNESS - A PRIMER

1. Disaster response in America traditionally has been handled by State and local governments, with the Federal government playing a supporting role. As we discuss the breakdowns in delivering Federal support and capabilities in response to Hurricane Katrina, the need for a flexible Federal response and a larger Federal role in catastrophic contingency planning becomes clear.

2. In February 2003, the President issued Homeland Security Presidential Directive 5 (HSPD-5). Homeland Security Presidential Directives are presidential orders that establish national policies, priorities, and guidelines to strengthen U.S. homeland security. In HSPD-5, the President specifically directed the Secretary of Homeland Security to: (a) create a comprehensive National Incident Management System (NIMS) to provide a consistent nationwide approach for Federal, State, and local governments to work effectively together to prepare for, respond to, and recover from domestic incidents, regardless of cause, size, or complexity, and; (b) develop and administer an integrated *National Response Plan* (NRP), using the NIMS, to provide the structure and mechanisms for national level policy and operational direction for Federal support to State and local incident managers. The NIMS and the NRP were completed in 2004 and provide the foundation for how the Federal government organizes itself when responding to all disasters, including Hurricane Katrina.

3. Under the Stafford Act, requests for major disaster declarations must be made by the Governor of the affected State. The Governor's request must be based on "a finding that the disaster is of such severity and magnitude that effective response is beyond the capabilities of the State and the affected local governments and that Federal assistance is necessary." Emergency declarations can be made in the same manner or, in limited circumstances, can be made by the President unilaterally.

4. The system for providing Stafford Act assistance, set forth in the NRP and FEMA regulations, reflects the American system of federalism, allocating roles and responsibilities between levels of government by utilizing a layered system that requires local governments to first request assistance from their State. States, in turn, must use their own resources, if available, before requesting Federal assistance.

5. Emergency vs. Major Disaster -- Under the Stafford Act, the President can designate an incident either as an "emergency" or a "major disaster." Both authorize the Federal government to provide essential assistance to meet immediate threats to life and property, as well as additional disaster relief assistance.

6. Ultimately, when a *catastrophic incident* occurs, regardless of whether the catastrophe has been a warned or is a surprise event, the Federal government should not rely on the traditional layered approach and instead should proactively provide, or "push," its capabilities and assistance directly to those in need. When the affected State's incident response capability is incapacitated and the situation has reached catastrophic proportions, the Federal government alone has the resources and capabilities to respond, restore order, and begin the process of recovery. This is a responsibility that must be more explicitly acknowledged and planned for in the NRP, and we must resource, train, and equip to meet this obligation when such a contingency arises. It is also important that we work with State and local governments to ensure they are better prepared to respond immediately, until Federal resources can arrive.

CHAPTER FIVE: LESSONS LEARNED

7. Effective incident management of catastrophic events requires coordination of a wide range of organizations and activities, public and private. Under the current response framework, the Federal government merely "coordinates" resources to meet the needs of local and State governments based upon their requests for assistance. These limitations proved to be major inhibitors to the effective marshalling of Federal, State, and local resources to respond to Katrina.

8. The Federal government cannot and should not be the Nation's first responder. State and local governments are best positioned to address incidents in their jurisdictions and will always play a large role in disaster response. But Americans have the right to expect that the Federal government will effectively respond to a catastrophic incident.

9. In terms of the management of the Federal response, our architecture of command and control mechanisms as well as our existing structure of plans did not serve us well. The National Response Plan's Mission Assignment process proved to be far too bureaucratic to support the response to a catastrophe. Melvin Holden, Mayor-President of Baton Rouge, Louisiana, noted that, "requirements for paper work and form completions hindered immediate action and deployment of people and materials to assist in rescue and recovery efforts." Far too often, the process required numerous time consuming approval signatures and data processing steps prior to any action, delaying the response.

10. At the most fundamental level, part of the explanation for why the response to Katrina did not go as planned is that key decision-makers at all levels simply were not familiar with the plans. This lack of understanding of the "National" plan not surprisingly resulted in ineffective coordination of the Federal, State, and local response. Additionally, the NRP itself provides only the 'base plan' outlining the overall elements of a response: Federal departments and agencies were required to develop supporting operational plans and standard operating procedures (SOPs) to integrate their activities into the national response. In almost all cases, the integrating SOPs were either non-existent or still under development when Hurricane Katrina hit. Consequently, some of the specific procedures and processes of the NRP were not properly implemented, and Federal partners had to operate without any prescribed guidelines or chains of command.

11. The final structural flaw in our current system for national preparedness is the weakness of our regional planning and coordination structures. Guidance to governments at all levels is essential to ensure adequate preparedness for major disasters across the Nation. To this end, the Interim National Preparedness Goal (NPG) and Target Capabilities List (TCL) can assist Federal, State, and local governments to: identify and define required capabilities and what levels of those capabilities are needed; establish priorities within a resource-constrained environment; clarify and understand roles and responsibilities in the national network of homeland security capabilities; and develop mutual aid agreements.

12. **Hurricane Katrina created enormous public health and medical challenges**, especially in Louisiana and Mississippi—States with public health infrastructures that ranked 49th and 50th in the Nation, respectively. But it was **the subsequent flooding of New Orleans** that **imposed catastrophic public health conditions on the people of southern Louisiana and forced an unprecedented mobilization of Federal public health and medical assets. Tens of thousands of people required medical care. Over 200,000 people with chronic medical conditions, displaced by the storm and isolated by the flooding, found themselves without access to their usual medications and sources of medical care. Several large hospitals were totally destroyed and many others were rendered inoperable. Nearly all smaller health care facilities were shut down.** Although public health and medical support efforts restored the capabilities of many of these facilities, the region's health care infrastructure sustained extraordinary damage.

13. Most local and State public health and medical assets were overwhelmed by these conditions, placing even greater responsibility on federally deployed personnel. **Immediate challenges included the identification, triage and treatment of acutely sick and injured patients; the management of chronic medical conditions in large numbers of evacuees with special health care needs; the assessment, communication and mitigation of public health risk; and the provision of assistance to State and local health officials to quickly reestablish health care delivery systems and public health infrastructures.**

14. **In coordination with the Department of Homeland Security and other homeland security partners, the Department of Health and Human Services should strengthen the Federal government's capability to provide public health and medical support during a crisis. This will require the improvement of command and control of public health resources, the development of deliberate plans, an additional investment in deployable operational resources, and an acceleration of the initiative to foster the widespread use of interoperable electronic health records systems.**

15. The Department of Health and Human Services should coordinate with other departments of the Executive Branch, as well as State governments and non-governmental organizations, to develop a robust, comprehensive, and

Disclaimer: The information contained in this extract represents only the analysis of its author and not that of the Biosurveillance Workgroup Chairs, its members or the Office of the National Coordinator

integrated system to deliver human services during disasters so that victims are able to receive Federal and State assistance in a simple and seamless manner. **In particular, this system should be designed to provide victims a consumer oriented, simple, effective, and single encounter from which they can receive assistance.**

CHAPTER SIX: TRANSFORMING NATIONAL PREPAREDNESS

16. Today there is a national consensus that we must be better prepared to respond to events like Hurricane Katrina. While we have constructed a system that effectively handles the demands of routine, limited natural and man-made disasters, our system clearly has structural flaws for addressing catastrophic incidents. But we as a Nation—Federal, State, and local governments; the private sector; as well as communities and individual citizens—have not developed a shared vision of or commitment to *preparedness:* what we must do to prevent (when possible), protect against, respond to, and recover from the next catastrophe. Without a shared vision that is acted upon by all levels of our Nation and encompasses the full range of our preparedness and response capabilities, we will not achieve a truly transformational *national* state of preparedness.

17. **A useful model for our approach to homeland security is the Nation's approach to *national security*.** Over the past six decades, we have created a highly successful national security system. This system is **built on deliberate planning that assesses threats and risks, develops policies and strategies to manage them, identifies specific missions and supporting tasks, and matches the forces or capabilities to execute them.** Operationally organized, it stresses the importance of unity of command from the President down to the commander in the field. **Perhaps most important, the national security system emphasizes feedback and periodic reassessment.** Programs and forces are assessed for readiness and the degree to which they support their assigned missions and strategies on a continuing basis. Top level decision-makers periodically revisit their assessments of threats and risks, review their strategies and guidance, and revise their missions, plans, and budgets accordingly. This national security system was not created overnight. It has taken almost sixty years to build and refine.

18. **Our National Preparedness System must also have appropriate feedback and assessment mechanisms to ensure that progress is made and that our goals are being realized.** As called for in the *Interim National Preparedness Goal*, we must establish a readiness baseline for capabilities at the Federal, State, and local levels. This baseline should include an inventory of our preparedness assets as well as a metrics-based assessment of current capabilities. Thereafter, we must assess the gap between our present and target levels of capability. Over time, we must track our progress in closing these gaps.

19. **An effective National Preparedness System requires that management and response personnel, especially those in the field, are well versed in their missions**. At all levels of government, we must build a leadership corps that is fully educated, trained, and exercised in our plans and doctrine. Training is not nearly as costly as the mistakes made in a crisis. Equally important, this corps must be populated by *leaders* who are prepared to exhibit innovation and take the initiative during extremely trying circumstances.

20. One model for the command and control structure for the Federal response in the new National Preparedness System is our successful defense and national security statutory framework. In that framework, there is a clear line of authority that stretches from the President, through the Secretary of Defense, to the Combatant Commander in the field. When a contingency arises, the Combatant Commander in that region executes the missions assigned by the Secretary of Defense and the President. Although the Combatant Commander might not "own" or control forces on a day-to-day basis, during a military operation he controls all military forces in his theater: he exercises the command authority and has access to resources needed to affect outcomes on the ground.

21. **Over the long term, our professional development and education programs must break down interagency barriers to build a unified team across the Federal government.** Just as the Department of Defense succeeded in building a joint leadership cadre, so the rest of the Federal government must make familiarity with other departments and agencies a requirement for career advancement. Where practicable, interagency and intergovernmental assignments for Federal personnel must build trust and familiarity among diverse homeland security professionals. These assignments will break down organizational stovepipes, advancing the exchange of ideas and practices. At a minimum, we should build joint training and educational institutions for our senior managers in homeland security-related departments and agencies. These Federal professional development and

Disclaimer: The information contained in this extract represents only the analysis of its author and not that of the Biosurveillance Workgroup Chairs, its members or the Office of the National Coordinator

education programs must integrate participants from other homeland security partners—namely, State and local governments as well as the private sector, non-governmental organizations, and faith-based organizations.

22. **The success of the National Preparedness System over time will depend upon the quality of its metrics-based assessment and feedback mechanisms. In particular, the System must possess the means to measure progress towards strategic goals and capability objectives. It must systematically identify best practices and lessons learned in order to share them with our homeland security partners throughout the Nation. It must also have an effective process for conducting corrective or remedial actions when a system challenge is identified.** With common goals and performance metrics, the new National Preparedness System must first provide us with the capacity to create a national preparedness baseline that, at a minimum, serves as an inventory of our capabilities. More importantly, the baseline will tell us how prepared we are *today* in each of our jurisdictions and nationally. Reviewed at the Federal level and compared against the National Preparedness Goal, the System must also identify gaps in our national capabilities. These gaps can then serve as the priority targets for the homeland security grant process. In turn, the grant process must be tied to performance metrics that assess progress toward meeting national objectives. The President's Management Agenda has proven an effective tool applied to Federal department and agency performance that has recently, as a result of this review, been extended to include State and local homeland security programs that are federally funded. Furthermore, this National Preparedness System must be dynamic. Like the national security system described above, we must routinely revisit our plans and reassess our capabilities.

23. **The second element of our continuing transformation for homeland security perhaps will be the most profound and enduring—the creation of a Culture of Preparedness**. A new preparedness culture must emphasize that the entire Nation—Federal, State, and local governments; the private sector; communities; and individual citizens—shares common goals and responsibilities for homeland security. In other words, our homeland security is built upon a foundation of partnerships. And these partnerships must include shared understanding of at least four concepts: a) the certainty of future catastrophes; b) the importance of initiative; c) the roles of citizens and other homeland security stakeholders in preparedness; and d) the roles of each level of government and the private sector in creating a prepared Nation.

24. **Today, we operate under two guiding principles: a) that incident management should begin at the lowest jurisdictional level possible, and b) that, for most incidents, the Federal government will generally play a supporting role to State and local efforts. While these principles suffice for the vast majority of incidents, they impede the Federal response to severe catastrophes**. In a catastrophic scenario that overwhelms or incapacitates local and State incident command structures, the Federal government must be prepared to assume incident command and get assistance directly to those in need until State and local authorities are reconstituted.

25. Our continuing transformation is not a choice but an absolute necessity.

26. **The objectives of this dialogue must be first to establish reasonable expectations of what government can and cannot do in response to catastrophes.** Our citizens need to know what to expect from their government, in order to make sure they do everything possible at their level to protect themselves and their loved ones. **Second, this dialogue must develop a shared understanding of the need for active Federal management of the National Preparedness System**, to include: a) setting metrics for State, local, community, and individual preparedness; b) developing and implementing a system to assess that preparedness as well as to establish clear responsibilities and accountability; and c) identifying the circumstances under which the Federal government will push capabilities independent of request. **Finally, this dialogue must result in a shared understanding of roles and responsibilities in preparedness for catastrophic events**, to include those of: a) the Federal government; b) State governments; c) Local governments; d) the private sector (including non-governmental organizations and faith-based organizations); and e) communities and individual citizens.

AGENCY-SPECIFIC RECOMMENDATIONS

Critical Challenge: Public Health and Medical Support

***Lesson Learned:* In coordination with the Department of Homeland Security and other homeland security partners, the Department of Health and Human Services should strengthen the Federal government's capability to provide public health and medical support during a crisis. This will require the improvement of command and control of public health resources, the development of deliberate plans, an additional investment in deployable operational resources, and an acceleration of the initiative to foster the widespread use of interoperable electronic health records systems.**

Recommendations:

57. **HHS should lead a unified and strengthened public health and medical command for Federal disaster response.**
    a. **HHS should develop a comprehensive plan to identify, deploy and track Federal public health and medical assets (human, fixed and materiel) for use during a catastrophic event.** HHS should assume primary control of the public health and medical support effort, coordinating the activities of supporting agencies from a central location. The Secretary of HHS should be aware of, and in charge of coordinating, all Federal medical and public health assets available for use. All Federal departments must support and facilitate HHS in the execution of its responsibilities to coordinate all Federal public health and medical assets. Medical operations are highly dependent on efficient inter-agency cooperation and the successful completion of tasks is dependent on a fully integrated Federal effort.
    b. **HHS in coordination with OMB and DHS should draft proposed legislation for submission to Congress, to transfer NDMS from DHS to HHS.** As the agency charged in HSPD-5 with the overall coordination of disaster response in America, DHS should clearly articulate the operational requirements for disaster medical assistance. HHS should then be responsible for building and maintaining the appropriate operational capability: it should guide, direct, and develop the NDMS and integrate it into other HHS operational elements. NDMS is a critical component to the success of any Federal disaster response requiring medical support. As such, public health professionals and emergency medical responses should be managed and overseen by HHS which has the greatest health experience and expertise. Thus, NDMS should be returned to the direct command of HHS. It should be understood that the development of these capabilities will take time and in most cases will be grown to full capacity incrementally.
    c. **HHS should organize, train, equip, and roster medical and public health professionals in pre-configured and deployable teams.** These personnel should be comprised of officers of the Commissioned Corps of the U.S. Public Health Service, the Medical Reserve Corps (MRC), the NDMS, health care providers within DOD and the VA, and volunteer health professionals from the private sector. This is consistent with the HHS efforts to enhance the medical and public health response to meet future challenges by transforming the United States Public Health Service Commissioned Corps. This will enable a critical emergency response resource to address public health challenges more quickly and efficiently. The Commissioned Corps will increase its ranks, streamline its assignment and deployment process, and increase its ability to recruit the best and the brightest to defend the Nation's public health. HHS announced administrative steps toward this end. HHS has also drafted legislation in this area and forwarded it to OMB for Administration review and clearance. HHS should be given appropriate authorities to carry out this responsibility and should establish and test a system to quickly and efficiently identify, credential and assign personnel to missions.

58. **HHS should ensure coordination and oversight of emergency, bioterrorism, and ongoing public health preparedness needs.** In a public health emergency, the Secretary of HHS should have the integrated support of the public health and public health emergency preparedness programs. Within HHS, two Staff Division and seven Operating Division Assistant Secretary level positions oversee some aspect of public health programs, many of which have overlapping functions in an emergency response. The Secretary of HHS should review this issue and determine how best to ensure the integration of all relevant HHS information and functions during a public health emergency.

59. **The Surgeon General should routinely communicate public health, as well as individual and community preparedness guidance to the general population.** While there are other prominent and capable Federal health officials, the Surgeon General's stature and credibility should be used to repeatedly and proactively deliver a consistent public health preparedness message to the public. This will not only help to increase personal, community and national disaster preparedness, it will also make the Surgeon General a more effective and credible source of guidance during public health emergencies.

60. **Create and maintain a dedicated, full time, and equipped response team composed of Commissioned Corps officers of the U.S. Public Health Service.** The size of this team would be determined by the Corps' senior leadership, and be sufficient to meet the response needs as set forth by the Secretary. This team, overseen by the Surgeon General, could rapidly and effectively deploy to any event requiring medical and public health expertise and remain on station as long as needed. Other Corps officers, NDMS, the MRC, and the private sector could augment the team under the Surgeon General's command as required.

61. **DHS and HHS should look for the means to increase the capacities and capabilities of local and State health infrastructures.** Local and State health departments are the foundation upon which the National public health preparedness

rests. HHS and DHS provide Federal grants to local and State health departments, but additional funding is needed in view of the threats to the Nation from: weapons of mass destruction; biological agents; pandemic influenza and natural disasters. Grant funds from HHS and DHS should be synchronized to maximize the benefit to local and State health departments. Furthermore, all grant funding must be targeted toward increasing needed capabilities and then be reviewed to grade State and local performance according to the Presidential Management Agenda.

62. **Accelerate the HHS initiative to foster widespread use of interoperable electronic health (EHR) records systems, to achieve development and certification of systems for emergency responders within the next 12 months** . The adoption of interoperable EHR systems will support first responders and health providers and dramatically improve the quality and efficacy of care to displaced patients across a population. The President signed an Executive Order, *Incentives for the Use of Health Information Technology and Establishing the Position of the National Health Information Technology Coordinator,* on April 27, 2004, that provides guidance for the development of a nationwide interoperable health information technology.

Critical Challenge: Human Services

Lesson Learned: **The Department of Health and Human Services should coordinate with other departments of the Executive Branch, as well as State governments and non-governmental organizations, to develop a robust, comprehensive, and integrated system to deliver human services during disasters so that victims are able to receive Federal and State assistance in a simple and seamless manner. In particular, this system should be designed to provide victims a consumer oriented, simple, effective, and single encounter from which they can receive assistance.**

Recommendations:

63. **Assign HHS the responsibility for coordinating the provision of human services during disasters.** HHS should serve as the single Federal coordinating agency, with full situational awareness across agencies, and manage the delivery of services by other Federal departments. HHS working with DHS should review and, as appropriate, amend the NRP to ensure a single point of contact for victims to access all applicable Federal human services in an emergency and a capable deployment plan to enable this effort.
    a. **Federal agencies with an ongoing role in delivering human services should be prepared to do so in a disaster environment.** In addition to HHS, other Federal agencies have responsibility for providing human services. All Federal agencies responsible for the administration of human service programs should plan and prepare for the delivery of services in a disaster env ironment, with HHS coordinating and authorizing reimbursement for their respective disaster-related expenditures. Federal agencies that routinely deliver human services should build on established relationships with State and local agencies and private sec tor organizations, but also create contingency plans to assure the independent delivery of Federal assistance when necessary.

64. **HHS should inventory all Federal human services. As part of this effort HHS should:**
    a. **Inventory the range of human services programs of the Federal government.** There are thousands of human service programs across the interagency, many of which are jointly administered by State and local agencies. A catalogue of available programs will facilitate the prioritization and delivery of services, especially during emergency situations.
    b. **Identify current statutory authorities that permit the waiver of impediments to the delivery of services during an emergency.** Knowing which regulations can be waived will help responding agencies to more effic iently deliver services in emergency settings when speed is a high priority. Agencies should identify current waiver authority and impediments to service delivery and should provide HHS with suggested threshold criteria for triggering waiver authority. Agencies should also identify current authority for reimbursing disaster-related administrative costs and related impediments to reimbursing service providers for legitimate costs.

65. **HHS should develop a simple, comprehensive, and efficient means for disaster victims to enroll for all available human services at a single encounter.** Many important human service programs have wide variation in eligibility requirements. HHS' coordination and integration role is vital in helping to simplify access to complex and varied human service programs. Upon completion of the inventory of programs and available Federal facilities, HHS should prioritize the delivery of human service programs and develop plans to establish "one-stop" centers where disaster victims would enroll in Federal, State, local, and non-governmental human assistance programs. These "one stop" centers should complement the continued and expanded use of simplified telephone and internet-based registration modalities. The goal should be for the victim to go to one physical location, encounter one person who gathers all the necessary data and inputs it into a database that is shared and transparent among all human service providers at the Federal, State and local level as required. This will likely increase efficiency, reduce frustration of evacuees and expedite the delivery of services for eligible recipients.
    a. **Task the appropriate Federal agencies to develop processes to assess disaster victims' needs and process their applications for assistance within consolidated "one-stop" centers.** These processes should avoid duplication of effort, employ streamlined in-take and case management strategies and foster the interagency administration of human services in a disaster area.
    b. **HHS working with DHS should work to include faith-based, community, and non-profit organizations in the emergency planning, preparedness, and delivery of human services.** These private sector organizations contributed greatly to the Hurricane Katrina response. They should actively participate in all phases of a Federal disaster response and HHS should specifically facilitate access to their services in all "one-stop" centers.
    c. **HHS in coordination with DHS should oversee the development of deployable interagency teams to assess human service needs and deliver assistance.** Created before the disaster, these teams can be deployed

immediately to the disaster area to begin coordinating access to human services. These teams should be composed of knowledgeable and experienced Federal employees as well as personnel from State and local agencies and the private sector, as appropriate. They should serve in the "one stop" centers and also visit shelters and other locations necessary to facilitate the deliver of human services.

d. **HHS working with DHS and the Department of Labor should inventory existing Federal infrastructure and resources which could be utilized for provisions of consolidated services to affected areas.** Contingency plans should be developed for the utilization of Federal facilities, equipment such as phones, computers, and personnel on short-notice to provide consolidated services in response to a crisis. These plans should be exercised and evaluated on a routine basis.

66. **HHS and DHS should jointly work with the private sector to encourage the development of a capacity to voluntarily store and retrieve personal identifying information.** Encourage the private sector development of a capability for individuals to voluntarily submit their personal identifying information for virtual storage that citizens and their families could access during emergencies. The capability is best thought of as a 21st century version of a bank vault, with virtual safe deposit boxes for information. Disaster victims could access the virtually stored data to apply for Federal assistance, medical treatment, or insurance benefits. Because of the sensitivity of the personal data stored, strict privacy limitations and protections would be required. HHS should consider how their experience with Electronic Health Records (EHR) might inform such an effort.

67. **Existing Federal sources of information should be identified which might assist Federal authorities upon an emergency or disaster declaration by the President.** While numerous current Federal information sources exist (such as those maintained by SSA, DHS, VA, Treasury and the Department of Defense), they are not designed to identify or track individuals. Limited emergency access to existing Federal information sources should be considered and evaluated for their potential value in improving the Federal response. The development and deployment process must account for privacy, security, scalability, and compatibility

NOTE: Additional Federal agency-specific recommendations are included in the full Report and its extract (attached). Because they appeared to have a more Katrina-specific focus, many of which addressed issues associated with the Department of Homeland Security, they are not included in this summary. Other readers may differ with this interpretation, however, and are urged to read the original Report in its entirety to ensure they agree with the above synthesis.

* * *