

**Report on the Risks of Heat-Related Illness and  
Access to Medical Care for Death Row Inmates  
Confined to Unit 32, Mississippi State  
Penitentiary, Parchman, Mississippi**

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**REPORT OF SUSI VASSALLO, M.D., F.A.C.E.P., F.A.C.M.T.**  
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I am board certified in Emergency Medicine and Medical Toxicology and have been on the Faculty of the New York School of Medicine / Bellevue Hospital Center since 1987. I have been retained by the National Prison Project of the ACLU to render an opinion concerning the risks of heat-related illness and access to medical care for Death Row inmates confined to Unit 32, Mississippi State Penitentiary. I attached my curriculum vitae to the July 12, 2002 Declaration I previously submitted in this case. This report supplements my July 12, 2002 Declaration, and describes the conditions I observed and the opinions I formed during my August 8, 2002 visit to Death Row, Mississippi State Penitentiary, Parchman.

I arrived at the facility at 9:00 am on August 8, and departed at 10:30 pm. During this visit I focused on the medical conditions of the prisoners on Death Row, the prisoners' access to health care, and the effects of the physical environment on the Death Row prisoners. I spoke with many of these inmates and many corrections staff, including health care providers. I went inside the Death Row cells to experience for a brief time the conditions within. I toured the medical clinic serving Unit 32 and the hospital on the grounds of Parchman, Unit 42. I did a very limited review of inmate medical records. I reviewed data regarding temperatures and humidity in the prison cells. I observed access or lack of access to such basic cooling measures as showers, water, ice, fans, and air conditioning. I took photographs, which are attached here, of the conditions I observed.

Before and after the tour, the ACLU supplied me with a number of documents which I reviewed in connection with this case, including the Affidavits and documents mentioned in my July 12 Declaration; a summary of the average temperatures, days above 90 ° F, and consecutive days above 90° F for the months of June, July, August and September of the years 1997-2001; and temperature data from May, 2002 through August 14, 2002. During our visit to Unit 32, other documents were made available for review, including the medical records of most of the Death Row inmates. I have also reviewed the report submitted by James Balsamo containing his findings and the temperature, humidity and other environmental health and safety measurements he took during the August 8 tour.

I found that the descriptions of conditions on Death Row provided by the inmates in their Affidavits, to which I referred in my July 12 Declaration, were essentially accurate.

Based on my observations as a physician during the August 8 tour, I formed two medical opinions:

First, it is predictable that the excessive heat and other shocking conditions I observed in Unit 32-C will result in illness, permanent disabilities, and premature death to prisoners incarcerated there. Many prisoners are likely to become critically ill with conditions that would never have progressed in an individual allowed reasonable health measures.

Second, although I had limited time to review documents and would need more information to fully evaluate Parchman's system for delivering medical care to Death Row inmates, it was evident from my interviews with staff and inmates and my review of documents that there are significant and dangerous delays in access to medical care for these inmates.

## **CONDITIONS CREATING MAJOR RISKS OF HEAT DEATH AND SERIOUS HEAT-RELATED ILLNESSES**

As I explained in my July 12, 2002 report, heat-related illnesses occur when the body's temperature control system is overloaded. The risk for heat-related illnesses soars when air temperatures exceed 90 degrees, especially with high relative humidity. Persistent heat stress may lead to heat stroke, a severe medical emergency. In heat stroke, the body's temperature rises rapidly. Very high body temperatures damage the brain and other vital organs. Heat stroke can cause death or permanent disability if emergency treatment is not provided. In several studies, the mortality from heatstroke is 30-80%. Survivors of heatstroke may have significant heat-related morbidity, such as inability to walk and talk. Permanent neurological damage occurs in up to 17 % of survivors. Although heat stroke is the most well known illness that results from a hot environment, death from all causes increases during prolonged heat stress. Individuals with illnesses such as coronary artery disease and hypertension, or pulmonary diseases such as asthma, are much more likely to succumb to these conditions when under heat stress.

Also, as I previously noted, heat-related illness is a preventable disease, and the risks are well known. Classical heat stroke is most common among those who have no access to air-conditioning during heat waves. People who are frail or elderly, confined or socially isolated, or having a preexisting medical condition such as heart or kidney disease or a serious skin condition are especially predisposed to heat induced illness and heatstroke. In addition, many medications can predispose the patient taking them to severe heat-related illness. These medications include common antihypertensive drugs and drugs used after heart attacks, such as Beta-blockers, calcium channel blockers, and diuretics; drugs that cause vasoconstriction (narrowing of the blood vessels), including common decongestants and over the counter cold remedies; "anticholinergic" drugs (those that inhibit sweating), such as antihistamines, cyclic antidepressants and Vistaril (hydroxyzine); and other drugs that are anticholinergic and affect the hypothalamus, including phenothiazines (i.e. Thorazine) and butyrophenones (i.e. Haldol), and other psychiatric drugs.

All of the Death Row inmates have one or in some cases multiple high-risk factors for heat stroke. Nevertheless, in spite of widespread public health warnings about heat stroke and heat death and the extensive medical literature regarding heat illness, the physician on duty in the clinic serving Unit 32 on August 8 was surprised to learn of the risks of heat illness that were relevant to the population he was serving. When I asked him if he sometimes encountered prisoners with medical complaints that might result from or be exacerbated by the temperatures on death row, he replied that he did not think

so. When I explained that, because of the medicines that they are taking, many of the prisoners are at great risk for heat related illness and exacerbations of their underlying medical conditions, he replied, "I never thought of that."

An individual free to respond to the stress created by a hot environment would normally take steps to cool his body. If no air conditioning were available, he would at least respond by seeking a cooler location, blocking out radiant heat from the sun by positioning himself in the shade or screening himself from the sun, maximizing evaporation by wetting his body and clothes with water and using fans to create cross-ventilation, and moving away from physical structures which absorb and radiate heat.

None of these natural survival responses to excessive heat are available to the Death Row prisoners. The prisoners' cells, especially Willie Russell's Plexiglas covered cell, are stifling hot yet prisoners have to close their windows and cover their bodies at night despite intense heat in order to protect themselves from mosquitoes and other insects. Many of the prisoners have no access to fans, either because they are too poor to buy fans or because their fans have been confiscated as punishment. They have infrequent access to cooling showers, and sometimes, even access to water is extremely limited. The prisoners are not allowed to shade their windows from direct sunlight. They have extremely limited access to the outdoor exercise-pens and in any event those pens provide no relief from the heat because they are not shaded. When I went outside to tour the exercise area I observed that each cage contained one prisoner; there was nothing to do and nothing to see except prisoners standing in the cages. I asked the Warden why there were no basketballs or any kind of equipment. He said the prisoners might hit each other on the head with it. Since each prisoner was isolated in his own completely enclosed cage, this explanation seemed farfetched. Although I am a Texan who loves the heat, the heat generated by the direct sun on the cement area around the exercises cages was so unbearable that the corrections officers and I quickly retreated to an air-conditioned area.

It is my opinion, based on my observations during my visit to Unit 32-C, Death Row and on my training, experience, and familiarity with the extensive body of medical literature on the subject of thermoregulation, that all of the inmates on Death Row are at high risk of heat stroke and heat-related illness. In the extremely hot environment I experienced in Unit 32, and as confirmed by the temperature and humidity measurements taken by environmental expert James Balsamo, even individuals without any underlying medical conditions would be expected to suffer heat-related illness. However, many of the prisoners are at particularly heightened risk of serious heat-related illness and permanent injury. For example:

Willie Russell takes Remeron (mirtazipine), which puts him at heightened risk for heat stroke. Mr. Russell has described that when the afternoon sun shines directly into his cell, making it like an oven, he has trouble breathing. I can corroborate this description, because Mr. Russell was removed from his Plexiglas-covered cell so that I could enter it. When I closed the Plexiglas door, it was like getting into a car parked in the hot Texas sun and sitting with the windows rolled up. I needed to breath deeply just to feel that I

was getting enough air. I was immediately reminded of the reports of Mexican nationals dying in closed boxcars as they tried to cross into the United States. I realized as I stood there that it was one thing to have heard about this Plexiglas cell at my desk in my office, and quite another to experience it, even for a few minutes: I could not understand how anyone could be locked up in that hot box for any length of time without losing control. James Balsamo confirmed that the temperature is dangerously hot in Mr. Russell's cell, and even hotter than other Death Row cells, which don't have Plexiglas coverings.

Mr. Russell described in an affidavit a recent incident in which there was no water on Unit 32-C for a week. Mr. Russell stated that the sewage backed up in every cell and people started to throw their wastes out into the hall. It was hard to breathe with the stench. No one cleaned the tier. They inmates were given only a small amount of liquid to drink three times a day; he stated, "It wasn't enough for me to take my medicine. And it wasn't enough to live on, especially in this heat. I felt myself drying out and getting weaker. My mouth was cracked and my throat was rough. It was getting hard to concentrate. I couldn't think of anything but getting water, but there was no way I could get any. I started losing my balance. It was affecting everyone." Such a situation would be life-endangering situation for Mr. Russell and the other inmates on Unit 32-C.

John Nixon is 74 years old. He has asthma and emphysema and has trouble breathing in the heat. His age, medical conditions and cardiac medicines put him at high risk for heat illness or illness due to cardiopulmonary disease. He demonstrated that, by draping a Tee shirt over a portion of the window of his cell, he could divert a little air down to his bed, but it is a rules infraction to cover the window even partially and this would subject him to punishment.

Alan Rubenstein has a history of coronary artery disease, which predisposes him to heat related illness. He has had a coronary artery bypass graft. He told me that when he recently complained of chest pain he was asked, "Are you turning blue?" When he stated no, he was told to throw water on himself.

Gerald Holland has multiple high-risk factors for heat stroke. He is 65 years old and has hypertension. He is taking clonidine, captopril and hydrochlorothiazide. Clonidine and captopril interfere with the heart's ability to respond to heat stress by increasing cardiac output. Hydrochlorothiazide is a diuretic and results in dehydration and decreased cardiac output. Mr. Holland keeps his window closed as protection from the mosquitoes and insects.

William Holly takes Celexa and Hydroxyzine. Hydroxyzine is an anticholinergic medicine and will impair the ability to sweat. Celexa is citalopram, a selective serotonin reuptake inhibitor. One of the complications caused by this class of antidepressant is an increase in serotonin and resultant hyperthermia. Mr. Holly describes feeling dizzy, a sign of heat illness.

Paul Woodward is obese. He has hypertension and takes clonidine, Zaroxyn and Zestril. Clonidine depresses myocardial function; Zaroxyn (metolazone) is a diuretic resulting in

decreased cardiac output and Zestril (lisinopril) is an antihypertensive resulting in decreased cardiac reserve. He is at high risk for heat stroke.

Stephen McGilberry is on Celexa and Elavil. He told me he keeps his windows closed because of the insects and mosquitoes. He complained that the shower was very hot and would not turn off. He described being stuck in the shower for 30 minutes when the shower room was filled with steam and very hot. He talked about how the corrections officers have to let you out of the shower and it may take some time before this happens.

Richard Jordan has hypertension and takes Atenolol, a B-blocker, and hydrochlorothiazide, a diuretic. His medical conditions and medicines put him at high risk.

Leroy Lynch is taking Haldol and Cogentin. These psychiatric drugs put him at high risk for heat-related illness.

Quintez Hodges has asthma, which puts him at high risk for heat-related illness. He recently had an asthma attack; it took him four days to get seen by medical staff.

Gary Carl Simmons has psoriasis and is on hydrochlorothiazide, and Flexeril (cyclobenzaprine) among other medications; these constitute risk-factors for heat stroke.

Howard Neal was recently taken to Unit 42 and described in a note in the chart was unconscious. He was diagnosed with anxiety. There were other notations indicating that he had trouble breathing, which is a symptom of heat illness.

Thomas Laden's medical records contain a Mental Health note that read, "The water has been shut for 5 days." Another observation was made that the prisoner was "sleeping a lot due to heat".

Jimmy Mack has asthma and hypertension; Jan Michael is on B-blockers; Xavier Brown is on Tenormin, and has hypertension and Hepatitis C; Jeffrey Davis is on blood pressure medications; Roger Thorson is on Prozac; Rickey Chase has asthma; Anthony Doss is on psychiatric medicines which caused a dystonic reaction; William Wiley is on hydrochlorothiazide; Linox Walker is on hydrochlorothiazide. All of these prisoners are at heightened risk for heat illness. It is highly likely that a complete review of the inmates' medical charts would reveal that a great many of the other Death Row inmates are at high risk for heat-related illness.

## **SIGNIFICANT AND DANGEROUS DELAYS IN ACCESS TO MEDICAL CARE**

The prisoners told me of significant delays in medical care, and during my limited time with the medical records I saw several examples of such delays.

Willie Russell told me that there were two situations that would get medical attention and said that these were if the guards “see blood or someone’s not breathing”. Interestingly, one of the corrections officers also told me that the seeing of blood is one of the criteria for urgent treatment.

Kelvin Dycus submitted a sick call form on May 14, 2002 that said, “Need to see psychiatrist for depression and anxiety”. A May 20 entry in the medical record said, “Referred to Dr. Glenn”. On May 24 the notation read, “Due to the number of patients and time constraints, this patient is being rescheduled.” Mr. Dycus filled out a sick call form on June 23, 2002 that said, “ My heart begins to hurt bad with jogging”. The record shows that he was not evaluated for this complaint until June 27.

Rodney Gray filled out a sick call form on June 16, 2002. He wrote that he had already seen a doctor on June 2 but “haven’t gotten meds”. There was no response in the chart as of June 24.

Clyde Smith filled out a sick call form on June 20. On June 28 the notation in the medical record says, “Smith is being rescheduled for Dr. Glenn.”

From talking to the prisoners and staff and reviewing the situation in Unit 32, it seems clear that a prisoner could have a medical emergency and no one would know. There is no triage system by which someone with medical training talks to the prisoners to evaluate the urgency of a sick call request for serious complaints such as chest pain

## **RECOMMENDATIONS**

All inmates whose medical condition or age, as discussed above, puts them at especially high risk for heat related illness, should be housed in a cool environment whenever the ambient air temperature or the Heat Index (apparent temperature based on combined heat and relative humidity) exceeds 88 degrees. During a heat wave, air conditioning is not a luxury but a lifesaver, especially for individuals at heightened risk for heat-related illness. Having a working air conditioner has been associated with an 80 % reduction in the risk of death due to heat and cardiovascular disease and a 66% reduction in mortality due to cardiovascular disease. The CDC recommends that people who cannot afford air conditioning in their homes should spend at least some time each day during hot weather in an air conditioned environment: exposure to air conditioning for even a few hours a day will reduce the risk of heat-related illness.

Short of providing air conditioning, which should be viewed as a medical necessity for inmates at especially high-risk for heatstroke, all other inmates must be provided other means for cooling their bodies whenever the temperature or Heat Index exceeds 88 degrees F. They must be allowed access to showers at least once a day; the CDC recommends frequent cool showers, if exposure to heat cannot be avoided. They must be provided an ample supply of drinking water at all times; when the weather becomes extremely hot and humid, the inmates should be provided ice several times a day. It is

critically important that adequate mosquito and pest control be implemented so that inmates are not forced to keep their windows closed and their bodies completely covered during hot weather. All inmates, whatever their age or medical conditions, should be provided electrical fans. The CDC stresses that fans provide insufficient protection from extremes of temperature and humidity, but they do provide some degree of relief in all but the hottest weather. The prison must provide fans for indigent inmates who cannot afford to buy them. Inmates should never be punished for rules infractions with confiscation of fans.

The exercise pens should be shaded with an awning, and prisoners should be allowed access to drinking water in the exercise pens.

Medical staff, and also correctional staff, should receive training in prevention, symptoms, and emergency treatment of heat-related illness.

An independent expert in correctional medical care should be appointed to review the delivery of medical care to the Death Row inmates and to make specific recommendations regarding triage and methods for ensuring timely access to care.

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