Introduction: Pediatricians Providing Sophisticated Care Under Extreme Conditions
Carden Johnston and Irwin Redlener

Pediatrics 2006;117:S355-S356
DOI: 10.1542/peds.2006-0099B

The online version of this article, along with updated information and services, is located on the World Wide Web at:
http://www.pediatrics.org/cgi/content/full/117/5/S2/S355
Pediatricians Providing Sophisticated Care Under Extreme Conditions

Carden Johnston, MD, FAAP, FRCP*, Irwin Redlener, MD, FAAPbc

*Department of Pediatrics, University of Alabama at Birmingham, Birmingham, Alabama; bThe Children’s Health Fund, New York, New York; cMailman School of Public Health, Columbia University, New York, New York

Key Words: Hurricane Katrina, transport medicine, emergency medicine, hurricane, disaster, flood

Abbreviations: AAP, American Academy of Pediatrics

doi:10.1542/peds.2006-0099B

Accepted for publication Jan 25, 2006

Address correspondence to Carden Johnston, MD, FAAP, FRCP; Department of Pediatrics, University of Alabama at Birmingham, 1600 7th Ave S, Birmingham, AL 35233; E-mail: cjohnston@aap.org

PEDIATRICS (ISSN Numbers: Print, 0031-4005; Online, 1098-4275). Copyright © 2006 by the American Academy of Pediatrics

KATRINA. THE WORD now brings up images of news reports of the disaster caused by the flooding after the hurricane. The news was bad, with people stranded in their homes or hospitals, not being able to eat, bathe, or drink water, and a slower-than-desirable rescue. There is a lot of good news as well and a lot of heroes, who have stories to tell about what they did and how they did it during the disaster. Many were recounted at the 75th anniversary meeting of the American Academy of Pediatrics (AAP) in Washington, DC, just over 1 month after the storm. These were experiences that needed recognition, that needed telling publicly, and needed to be in print and in the archives. The editors of Pediatrics are providing an opportunity with this supplement, and donors (thank you very much) are making it happen.

This supplement will report some of the experiences of pediatricians and others who cared for children in New Orleans, Louisiana, who were impacted by Katrina. Yes, there are other disasters, natural or man made, affecting children, and yes, there are other hurricanes, and yes, there were other parts of our country impacted by weather in 2005. However, the devastating flooding of New Orleans and an extraordinary 90,000 square miles of disaster impact on the Gulf Coast made Hurricane Katrina the most costly natural disaster in the history of our country. Because of the huge impact of this particular disaster and because of the thousands of contributions of pediatricians and others who care for children in the affected communities (and because of limited space in this supplement), we are focusing on just one small aspect of just one disaster.

The criticism of this supplement we expect to hear is that too many contributions are omitted. This is true. Although there may be a disproportionate focus on neonates, their stories too have huge omissions. So, the reader will want to know, where are the other stories? What about the transport teams relating what happened in their vehicles? What about the hematologists who called patients and communicated what phase of what protocol they were on so their chemotherapy could be continued at a remote center? What about the pulmonologists who provided continuing care to their children on ventilators as well as children with chronic lung disease? What about the cardiologists who were preparing children for cardiac surgery in the next few days? What about the pediatric surgeons who were set to provide life-saving and enhancing surgery to children in need? What about the hospital staffs (housekeeping, social service, food service, maintenance, security, etc) who kept care going even while their own families were in harm’s way? The list goes on and on and on. All were omitted from this supplement, but those stories, too, need to be recorded.

Almost every pediatrician in the South has a story to tell, and with evacuees going to at least 48 states, there are stories of importance from all of those states. We cannot include all experiences. We have chosen to highlight just a few of our compadres’ compassionate, concerned care of children under extreme circumstances,
and these are incomplete as well. However, the AAP is encouraging all pediatricians to document how Katrina impacted them and send the information to:

John O’Brien
AAP, PO Box 927
Elk Grove Village, IL 60009–0927
jobrien@aap.org

These stories will be read, some will be put on a Web site, and all will be archived for disaster-management planners and historians to access.

Even the longest article in this supplement is woefully incomplete. There are chapters buried in just a sentence. For example: “the pediatrician could not find transport, so they drove the neonates in their cars”; “elevators in the hospital are not working, thus requiring hand transport of a patient and 500-lb VAD [ventricular assist device]”; and “the pilot said there was no room for the Isolette.”

Fortunately, we were able to get some wonderful reports into this supplement and into pediatricians’ libraries. Most of us will vicariously relive the experiences of our peers. This supplement is just a blink of time in a drama that continues to unfold. We worry about the omissions that should be, but are not, contained in this supplement.

The underlying purpose of a document such as this is, of course, to learn. Already the AAP, federal, state, and local governments, foundations, research people, and disaster planners are going over the lessons that Katrina taught us. Most will be applicable to other disasters that affect children regardless of whether they are man made or caused by nature.

Now a challenge lies before us: how do we assimilate all of those experiences into our lives to an advantage for children who will be impacted by disasters later? The AAP is having conferences, workshops, and committees work on disaster planning. There will be a focused presentation at the 2006 National Conference and Exhibition as part of the “Pediatrics in the 21st Century” series.

As we read about Katrina and the care that the children received, we have to be extremely proud of our colleagues. Incredibly, there is no documentation that we know of thus far of hospitalized or transported children who died in association with the effects of the hurricane, the flood, or the rescue. In situations without lights, without power, and without water, mistakes in dosing of medications should increase exponentially. Equipment is put down in unfamiliar locations and then cannot be found when critically needed. Injuries occur with the staff getting hurt by running into objects, stepping on dropped equipment, falling over unseen material, etc. The heat and humidity cause germs to grow more easily, especially with the lack of clean water and cleansing materials. Staff morale becomes low with the stress of working without food, water, or an end in sight. Yet with all of those stressors, the pediatricians, the staff, the hospital employees did what was needed when needed.

Although we know of 3 unfortunate children who did not survive until out-of-state hospital discharge, there have been no reports of a hospitalized child dying during the storm or transport. This is an incredible testimony to the skills, commitment, education, and dedication to those who work with and love children. They put themselves at risk. More importantly, their patients were put at risk, not only by the disaster but also by the process of evacuation. Our peers were forced to make decisions to violate standard protocols for the right reasons, constantly having to decide which action or situation is less risky for the child. These decisions were made under dire—literally life-or-death—circumstances. The consistency of correct decisions made is more than remarkable: it is close to miraculous.

We stand in awe of the pediatricians and other colleagues who met the challenge of maintaining care of ill children during a major disaster even while their hospital was being evacuated and while improvising and facilitating mass transport. The challenge in front of us is how to be sure that the children whose families have been impacted economically, medically, and emotionally by Hurricane Katrina and the aftermath of the disaster will attain their optimal mental, physical, and emotional health. That is our goal and the mission of the AAP. Pediatricians who rose to the acute need of children during Hurricane Katrina will be rising to the chronic needs of children over the next decade, helping those children become the best adults they can be.

That is what pediatrics is all about.
## Introduction: Pediatricians Providing Sophisticated Care Under Extreme Conditions

Carden Johnston and Irwin Redlener

*Pediatrics* 2006;117:S355-S356

DOI: 10.1542/peds.2006-0099B

<table>
<thead>
<tr>
<th>Updated Information &amp; Services</th>
<th>Updated Information including high-resolution figures, can be found at:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><a href="http://www.pediatrics.org/cgi/content/full/117/5/S2/S355">http://www.pediatrics.org/cgi/content/full/117/5/S2/S355</a></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Subspecialty Collections</th>
<th>This article, along with others on similar topics, appears in the following collection(s):</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Emergency Medicine</strong> <a href="http://www.pediatrics.org/cgi/collection/emergency_medicine">http://www.pediatrics.org/cgi/collection/emergency_medicine</a></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Permissions &amp; Licensing</th>
<th>Information about reproducing this article in parts (figures, tables) or in its entirety can be found online at:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><a href="http://www.pediatrics.org/misc/Permissions.shtml">http://www.pediatrics.org/misc/Permissions.shtml</a></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Reprints</th>
<th>Information about ordering reprints can be found online:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><a href="http://www.pediatrics.org/misc/reprints.shtml">http://www.pediatrics.org/misc/reprints.shtml</a></td>
</tr>
</tbody>
</table>