ALLIANCE FOR HEALTHY HOMES

Protecting Children from Lead and Other Environmental Health Hazards

Managing Hurricane Recovery for Healthy and Affordable Communities

A Guide for Organizations, Agencies, and Policy Makers







Founded in 1990 as the Alliance to End Childhood Lead Poisoning, the Alliance for Healthy Homes promotes effective and practical federal programs and standards while helping community advocates, local and state agencies, and other stakeholders strengthen prevention policies.

The Alliance anchors a network of community-based organizations across the nation working on healthy homes, children's environmental health, lead poisoning prevention, and affordable housing. The Alliance and these groups work to find solutions that are affordable and practical for housing in all communities by ensuring that every home is well ventilated; free of pests, high-toxicity pesticides, and dangerous gases; dry; comfortable; and affordable. The Alliance believes that every community can reach these goals through smart construction, good maintenance, and adjusting repair, repainting, remodeling, and renovation practices.

For more information about the Alliance for Healthy Homes, and to access additional electronic copies of this guide, visit www.afhh.org.

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Introduction

The Alliance for Healthy Homes has written this Guide for organizations and agencies that are working with people affected by recent hurricanes—including community development corporations, tenant groups, and other advocates for decent and affordable housing; environmental organizations and environmental justice advocates; public interest lawyers; health advocates; health care and social services providers; other helping organizations; and civic watchdog groups—as well as for policy makers trying to ensure that recovery benefits everyone, not just a privileged few.

While the Guide covers many issues vital to families and individuals struggling to cope with loss of jobs, homes, and other personal property and assets, we have tried to focus on the serious environmental health hazards caused by hurricanes—especially ones related to housing—and how the recovery process can reduce these hazards and hopefully prevent similar consequences in future hurricanes.

The Guide is divided into three parts:

- Part I provides basic information on the array of public benefits that are available to hurricane survivors. Understanding how to access these benefits can be critical for maintaining one's health, including access to health care, and having sufficient resources for short-term basic needs, including food and shelter.
- Part II addresses several short- and medium-term recovery issues. We have attempted to cover topics related to preservation and repair of housing with an emphasis on health and safety issues related to returning to flood-affected areas and properties.
- Part III frames larger, longer-term questions about health and affordability that are intertwined with recovery and rebuilding—questions for which there are not yet clear answers. The Alliance hopes the discussion of these helps point the way for a more democratic and participatory rebuilding process that takes seriously the affordable, healthy housing needs of people.

The Alliance also recognizes the vast real-work experience of those working on the ground in the Gulf Coast region, as well as those who have been involved in past hurricane recovery efforts. Because of this, the Alliance encourages other organizations to share with us practical advice and effective practices that they have found helpful.

Public Benefits—Navigating the Process

PART I—PUBLIC BENEFITS—NAVIGATING THE PROCESS

Part I of this Guide is designed to provide the user with basic information on public benefits available to affected households (throughout this guide, household consists of any configuration, including a one-person household). These benefits include temporary housing, housing assistance, unemployment benefits, Medicaid and Medicare for those who qualify, and more.

Part I also explores potential gaps in coverage and identifies sources of help for eligibility problems.

1. Federal Temporary Housing Assistance

For households left homeless by a hurricane, there are two main forms of housing assistance available through the federal government.

KDHAP

If a household was living in government-funded housing, using Section 8 rental assistance, or was homeless before the hurricane, it may qualify for assistance under HUD's Katrina Disaster Housing Assistance Program (KDHAP, pronounced kay-dee-hap). KDHAP-eligible households are ineligible for FEMA aid, and KDHAP assistance is limited to 18 months. KDHAP will pay only for "fair market rent" (FMR) in the area in which eligible households live—rent amounts that exceed the FMR, separately billed utility costs, and other costs will not be covered by KDHAP. Eligible households should contact their local Public Housing Authority (PHA) and ask for housing assistance from the Katrina program. To find contact information for the local PHA, call toll-free, 1-888-297-8685.

FEMA Temporary Housing Assistance

If a household was not living in federally assisted housing or shelter, temporary housing assistance is only available through FEMA. FEMA will pay for three months of rent at \$786 per month, or a total assistance benefit of \$2,358 paid in a lump sum. If the household still needs help paying rent and cannot move back home after the three-month period, FEMA will still pay part or all of the rent for up to another 15 months, though the amount will vary based on average rents in the community where the household is currently residing. For more information about FEMA Housing Assistance, call toll-free, 1-800-621-3362.

2. Temporary Housing through the American Red Cross

The American Red Cross is making temporary housing available to affected households whose homes were destroyed. See http://katrina.redcross.org/gethelp.html#shelter for more information.

3. Additional FEMA Assistance

In addition to temporary housing assistance described above, FEMA also makes funds available for homeowners to repair or replace homes, and for owner- and renter-occupants to purchase personal property to replace qualified belongings lost in the disaster, such as clothing, furnishings, appliances, and tools for employment.

Long-term Housing Needs

To receive financial assistance from FEMA for housing needs, a household must:

- a. Have owned a home damaged or destroyed in the hurricane
- b. Have been living in the damaged or destroyed home at the time of the hurricane

Public Benefits—Navigating the Process

- c. Have housing losses in a federally declared disaster area
- d. File for insurance benefits and have the damage declared not eligible for insurance benefits
- e. Be a citizen of the United States, a non-citizen national, or a qualified alien
- f. Be unable to live in or reach the home because of the hurricane, or need home repairs or replacement because of damage wrought by the storm

This assistance can come in several forms. FEMA will give up to \$5,000 for emergency home repairs and will offer up to \$10,000 toward the purchase of a new home. The Small Business Administration will also offer low-interest loans of up to \$200,000 toward the purchase of a new home. For those who cannot afford to pay back a loan (see *Why a Small Business Administration Loan Form?* below) and who wish to repair their homes, the Individual and Household Program will provide up to \$25,000 in addition to the emergency repair funds listed above. For more information and to learn how to apply for this assistance, call 1-800-621-3362 or visit www.fema.gov.

Other than Housing Needs (Personal Property)

To receive financial assistance from FEMA for other than housing needs, a household must:

- a. Have other than housing losses in a federally declared disaster area
- b. File for insurance benefits and have the damage declared not eligible for insurance benefits
- c. Be a citizen of the United States, a non-citizen national, or a qualified alien
- d. Have necessary expenses or serious needs because of the disaster
- e. Have sought and accepted assistance from all other sources, including insurance proceeds and Small Business Administration loans, and still be in need of financial assistance.

This assistance will come in the form of a low-interest loan of up to \$40,000. For those who cannot afford to pay back a loan (see *Why a Small Business Administration Loan Form?* below), FEMA's Individual and Household Program will provide up to \$26,200 in assistance to pay for clothing, furnishings, appliances, and tools for employment. For more information and to learn how to apply for this assistance, call 1-800-621-3362 or visit www.fema.gov.

Why a Small Business Administration Loan Form?

Upon applying for financial assistance to repair or replace housing and personal property damaged or destroyed by Hurricane Katrina, households receive an application from the Small Business Administration (SBA). This is a disaster loan application. FEMA has not yet waived this requirement, so all applying for housing or non-housing financial assistance from FEMA must first complete and submit the SBA form *and* be denied an SBA loan. FEMA claims to maintain this requirement because SBA is the primary source of federal funds for long-term recovery assistance for those affected by disasters, and because SBA disaster loans are recoverable. For answers to SBA loan-related questions, call toll-free, 1-800-659-2955.

What should households do to make sure they receive the maximum assistance available to them under law?

- 1. Document all losses as quickly and thoroughly as possible, by photographing damaged property and locating pre-disaster photos and other records documenting the prior condition.
- 2. Apply for assistance as soon as possible.
- 3. Tell the disaster worker about all hurricane-related losses and needs, even if they seem relatively unimportant at the time of the application.
- 4. Keep a disaster-related notebook or journal, recording the FEMA application control number, the date and time of the application, the name of the FEMA person conducting the interview, and everything the FEMA worker stated.

Public Benefits—Navigating the Process

- 5. Save all pre- and post-disaster documents, including rent receipts, leases, and letters to and from FEMA, SBA, and any other agency involved in the household's recovery process.
- 6. Try to be available at the home if and when a FEMA inspector arrives, and ask the inspector to write everything down and be sure to ask for a copy of the inspector's report at the end of the inspection. To be sure the inspector records everything, write down everything the inspector seems to notice and compare those notes with the inspector's report.

4. Unemployment Insurance for Affected Households

Information for Those Eligible for Regular Unemployment Benefits (layoffs, workplace destroyed, etc.) The Federal-State Unemployment Insurance Program provides unemployment benefits to eligible workers who are unemployed through no fault of their own. To find a state's unemployment insurance information, visit http://workforcesecurity.doleta.gov/map.asp.

Individuals who reside in Texas, Louisiana, Mississippi, Florida, and Alabama and those who evacuated to other states may file a claim for unemployment insurance:

- Texas: 1-800-939-6631. For job placement information, call 1-800-735-2988 or TDD at 1-800-735-2989.
- Louisiana: <u>www.laworks.net</u> or 1-800-818-7811. Claimants who were previously receiving benefits, have questions, or need to change their address should call 1-866-783-5567.
- Mississippi: 1-888-844-3577 or by visiting any office of the Mississippi Department of Employment Security. A list of sites that are currently open is available at http://mdes.ms.gov/wps/portal/.
- Florida: 1-866-FLA-2345 (1-866-352-2345).
- Alabama: 1-866-234-5382 or TTY at 1-800-449-2035.

Information for Those Not Eligible for Regular Unemployment Benefits

The U.S. Department of Labor is working with state and local governments in disaster areas and relief sites to issue disaster unemployment assistance for self-employed and newly employed persons who may not be eligible for regular unemployment benefits. For more information, call 1-866-4-USA-DOL (1-866-487-2365) or visit www.doleta.gov/Katrina/LNKDetails.cfm?lnkid=4. Residents of Louisiana can call 1-800-818-7811. All households must file claims for disaster unemployment assistance by November 30, 2005.

5. Other Assistance Potentially Available to Affected Households

TANF

Some states may be extending short-term benefits through the Temporary Assistance to Needy Families (TANF) program. For more information, contact the human services administration in the following states.

Alabama: 334-242-1160
Florida: 850-487-1111
Louisiana: 225-342-7475
Mississippi: 601-359-4480
Texas: 512-463-2800

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Food Stamps

States have been offering disaster food stamps for hurricane-affected households. This initiative was temporary, and some states have already transitioned back to their regular food stamp operations. For more information, see the specific state information below.

Alabama: 1-866-465-2285.
Florida: 1-888-762-2237.
Louisiana: 1-888-524-3578.
Mississippi: 1-866-230-8903.

• Texas: Call 2-1-1 for the location nearest you.

Medicaid and Medicare

Special assistance may be available to households affected by Hurricanes Katrina and Rita who qualify. For more information, visit the Centers for Medicaid and Medicare Services' website (see links below) or call 1-877-267-2323.

• Information specific to Hurricane Katrina: www.cms.hhs.gov/katrina/

• Information specific to Hurricane Rita: <u>www.cms.hhs.gov/rita/</u>

6. Gaps in Access to Assistance

Despite the variety of hurricane recovery assistance programs currently operating, households may find gaps in available assistance. This may be due to the temporary nature of many assistance programs, eligibility requirements that may be difficult to meet, or other circumstances.

7. Who Can Help with Eligibility Problems?

There are several resources available to households who run across eligibility problems with FEMA, SBA, HUD, and other agencies.

The American Bar Association

http://www.abanet.org/katrina/victims.html. Households can also contact the following, state-specific hotlines to receive assistance through the ABA (due to high volume, calls may not go through the first time—keep trying):

Alabama: 1-800-354-6154
Louisiana: 1-800-310-7029
Mississippi: 1-866-255-4495
Texas: 1-800-504-7030

Legal Assistance Web Resources

• Alabama: www.alabamalegalhelp.org

• Florida: www.floridalegal.org/Disaster.htm

Louisiana: <u>www.lawhelp.org/LA</u>Mississippi: <u>www.mslegalservices.org</u>

• Texas: <u>www.texaslawhelp.org</u>

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The National Law Center on Homelessness and Poverty

Households experiencing difficulties with getting the benefits they need, especially from FEMA or HUD, should be encouraged to contact the National Law Center on Homelessness and Poverty. The Center hopes to be able to advocate on behalf of individuals or classes of people whose needs are not being met or whose rights are being violated. It can be contacted at 202-638-2535 or katrina@nlchp.org.

The Public Interest Law Project

<u>www.FEMAanswers.org</u>. This is a website that provides a wide variety of answers to households having trouble obtaining assistance from FEMA. It is a collection of knowledge and experience gained by legal services advocates throughout the Gulf region.

Short and Medium-Term Re-Occupancy and Rebuilding Issues

PART II—SHORT AND MEDIUM-TERM RE-OCCUPANCY AND REBUILDING ISSUES

This part of the Hurricane Recovery Guide provides information to the helping community (various agencies, CBOs, and CDCs) to help them master what they need to know and advocate to help their constituents—tenants and homeowners—to effectively cope and access appropriate resources.

1. Viability of Ownership/Re-occupancy

Uncertainty whether property can/will be taken by eminent domain

From eastern Texas to the Louisiana Bayou Country, from New Orleans to the Florida Gulf coast, public officials are considering whether residential land that remains vulnerable to the ravages of future Category Four or Five hurricanes should be reclassified for purposes other than residential. These may be political decisions motivated less by the soundness and safety of future structures and more by development plans with or without broader economic benefits in terms of jobs and tax revenue.

Nonetheless, owner-occupants permanently dislocated by such policies are entitled to adequate remuneration for seized property that includes priority access to own, and rebuild on, other nearby land, regardless of its past use or relative value.

In the meantime, the duration of temporary housing benefits from HUD, FEMA, the Red Cross, or others must be extended for owner-occupants and tenants whose re-housing plans are suspended by unresolved eminent domain policy deliberations.

2. Advising and Supporting Households Preparing to Return

Funding/Financing for Cleaning/Repairs

In most instances, obtaining a benefit or insurance settlement requires the beneficiary to:

- (a) seek assistance promptly (deadlines vary);
- (b) be available by phone or e-mail to respond to questions; and
- (c) be able to provide access to the property for the designated inspector, claims adjustor, or other representative to verify the loss and potential to repair/rebuild.

Applicants and claimants residing temporarily in remote locations who cannot appear in person will need a third party to provide access to the dwelling for representatives of benefits programs and insurers. Recently, the Department of Homeland Security was leaving notices of attempts to inspect outside vacant homes, noting that eligibility for FEMA Individuals and Households Program assistance is contingent upon inspection of the interior.

Since some insurers allow adjustors to issue a check for losses at the conclusion of an inspection visit, a property owner must provide proxy for their representative to consent to settlement, receive payment, and arrange for secure transmittal of the payment to the insured. Secure direct deposit, electronic transfer, and other automated payment options should be considered by financial institutions for beneficiaries who are not able to be present.

The types of insurance programs to which some property owners and tenants paid premiums include:

Short and Medium-Term Re-Occupancy and Rebuilding Issues

- Homeowner's Insurance (required for private mortgages)
- HUD Mortgage Insurance (required for HUD-insured mortgages)
- Federal Flood Insurance Program (restricted to eligible areas, required by some mortgagors)
- Renter's Insurance

It should be noted that numerous debt-free homes lack any insurance, and many mortgaged homes lacked Federal Flood Insurance because the properties were located outside of the areas eligible for the program. Resources available to owners of uninsured homes are:

- FEMA's Individuals and Households Program (grants of up to \$26,000 to replace household belongings, furniture and appliances; moving; storage; and, if income-eligible, \$5,000 for emergency repairs, \$10,000 toward buying a new home, and \$25,000 for repairs)
- SBA loan (up to \$40,000 to replace personal property and \$200,000 to buy a new home)

See Part I for more details and contact information for the various federal programs operating to help fund cleanup and repairs.

Status of Mortgage Debt in Affected Areas

Those with current mortgages may be able to defer payments without penalty.

- Freddie Mac mortgage relief: Payments for mortgages financed through Freddie waived for September, October, and November 2005; further relief will be offered on a case-by-case basis, and full details are available at www.freddiemac.com/corporate/about/how-we-help/katrina.html.
- Fannie Mae mortgage relief: Suspending payments for mortgages secured by Fannie for up to three months, reducing the payments for up to 18 months, or in more severe cases, creating longer loan payback plans. Also allowing Fannie-affiliated lenders to assess new loan applications based on credit prior to hurricanes. Full details available at www.fanniemae.com/index.jhtml by clicking on "Hurricane Relief Efforts" graphic.

3. All Involved in Recovery Need to be Aware of Measures to Prevent Dispersal of Hazards

Do-It-Yourselfers' and Workers' Needs

Presumably, highly qualified firms and contractors performing repair work will be trained and equipped to protect workers. Do-it-yourself (DIY) occupants and workers need the same level of information about self-protective behaviors and prevention.

Working Safely in Potentially Dangerous Structures

Flood and wind damage have compromised the structural integrity of many homes without prompting collapse—yet. As homes dry out, new structural challenges will surface. It is crucial that persons entering and working in flood-compromised, and therefore potentially dangerous, structures attend to signs of dilapidation. Severe creaking sounds and the rapid expansion of cracks are among the indicators of possible systemic structural integrity problems. Findings for dwelling units inspected by code agencies or insurers should be seriously considered by those planning to do work. *Working Safely around Health Hazards*

Anyone working in homes with potential or documented health hazards needs access to self-protective equipment and garments and should follow guidance for working safely. Generally, workers should be attired in TyvekTM suits or other disposable puncture- and moisture-proof

Short and Medium-Term Re-Occupancy and Rebuilding Issues

garments, gloves, waterproof waders or boots, N100 respirators, and goggles or safety glasses, unless the dwelling has been determined to be environmentally safe for workers. Kits providing these protective materials are crucial to the safety of all involved in cleanup and recovery. Individual acts of bravery, such as working without protection, are not sustainable behaviors because workers will become sick and be unable to work. All workers should adhere to guidance like that provided in the Appendix.

Waste Disposal

Workers and occupants need to be aware that many personal belongings, clothing, furniture, food, appliances, carpeting, and wallboard will have to be thrown out. In most cases, this is because the material became wet and cannot be adequately dried to prevent extreme and unhealthy mold growth. In areas where floodwaters carrying toxic sediments, bacteria, and raw sewage entered homes, personal property and structural components may also be contaminated with various hazardous substances.

Workers and occupants should handle all waste materials following the guidance in the previous Working Safely around Health Hazards section. Workers and occupants should never touch waste with bare skin, and all waste should be sealed in leak-proof plastic bags or other containers. All waste containers should be disposed of properly—waste and waste containers should not be dumped in parking lots, yards, streets, bodies of water, sewer systems, or fields. State and local waste management authorities can be expected to resume waste collection and provide information about proper waste disposal to both professional workers and occupants.

Exterior environmental hazards

Where floodwaters covered land for more than 24 hours, sediment contaminated with toxic chemicals, bacteria, and raw sewage has undoubtedly coated yards and other exterior areas. This sediment could pose significant risks to returning residents, especially to children and anyone with compromised immune systems. Residents and professional workers should take care to stay out of these areas whenever possible, should avoid tracking soil and sediment from yards into homes, and should keep children away from areas coated with sediment and dried sludge.

Occupant-oriented guidance

Residents from hurricane strike zones who choose to return to their homes need to be aware of immediate housing-related health hazards and how to keep themselves safe from harm.

At a very minimum, residents should be warned that significant hazards, including malfunctioning electrical systems, damaged natural gas lines, damaged combustion devices and appliances, insect and rodent infestations, and extreme mold growth may be present in their homes and apartments when they return. Residents should also be cautioned that infectious diseases such as hepatitis A and B can be present in flood zones. Considering that medical assistance may be widely unavailable for many weeks, self-protection is crucial.

Returning residents should also take commonsense precautions. These include entering flood or hurricane damaged property with another person; wearing rubber gloves, rubber boots, and N100 respirators; taking first aid supplies with them; using high-quality, low-toxicity insect repellant; bringing along a supply of fresh water; and making sure that someone outside of the area knows where the resident is going and how long the resident plans to stay.

Short and Medium-Term Re-Occupancy and Rebuilding Issues

In addition to these general pointers, several more detailed and specific healthy homes tips can help returning residents to avoid health problems stemming from carbon monoxide, mold, pest infestations, and damaged lead-based paint. These tips are located in the Appendix. They can also be found at www.afhh.org/res/res-publications-hurricane-aftermath.htm.

4. Immediate and Medium-Term Rebuilding Issues

No Homeowner/Flood Insurance

Advocates and service agencies need to be aware that property owners who did not hold homeowner and/or flood insurance will find it difficult to rebuild their homes. In these instances, advocates and service agencies should work with homeowners to access non-insurance assistance as described in Part I.

Homeowners should be aware that even if their neighborhood is deemed eligible for rebuilding, insurance companies may still refuse to offer flood insurance policies in areas they deem too high-risk of future hurricane and flood damage. Homeowners who begin to rebuild in these areas without knowledge that future coverage is available will do so at their own financial risk.

Ineligible for Settlement

State and local agencies may deem entire areas ineligible for settlement, especially in low-lying, flood-prone locations along the coast. To compensate for this loss of past or potential future residential areas, advocates and service agencies should press state and local governments to create access to other suitable areas for settlement, and to allow increased residential density in existing residential areas. All new residential development must be carried out with effective environmental safeguards, provide healthy and high quality affordable housing, offer moisture resistant, hurricane-proof structures, and safeguard natural storm barriers such as wetlands and barrier islands.

Long-Term Rebuilding Principles and Housing Options

PART III—LONG-TERM REBUILDING PRINCIPLES AND HOUSING OPTIONS

This part of the Guide provides a discussion of long-term rebuilding issues and options for future healthy and affordable housing development along the entire Gulf Coast. There are no existing laws or policies that yet provide clear answers to the biggest questions about rebuilding—who, how, where, and when—in communities hardest hit by recent hurricanes.

Many of the consequences of the hurricanes—particularly the extensive, long-term flooding and consequent evacuation of New Orleans, part of the Mississippi Gulf Coast, and some other locales—are unprecedented in scope and leave us without reliable roadmaps to guide present action. Meanwhile, some people are already beginning to rebuild, and powerful interests are moving quickly to capitalize on and create opportunities to control and profit from as many real estate transactions as possible. This part of the Guide attempts to frame some of the critical choices and issues in a way that is helpful to organizations working with affected residents in the Gulf region, especially in and near New Orleans.

1. Involvement in Decisionmaking by Affected Residents

The "who, how, where, and when" issues about recovery and rebuilding will undoubtedly be settled in the political arena, and it really does matter how quickly and effectively vulnerable populations organize themselves to affect the political outcomes. Decisions about what to demolish, future land use and ownership, and who will receive contracts and jobs for long-term rebuilding could be made outside the public eye unless affected residents organize to influence the outcome. Meanwhile, hundreds of thousands of people have been displaced from their homes and widely dispersed across the country, making public oversight and participation even more challenging than usual.

Community residents are best equipped to shape decisions about recovery and rebuilding of neighborhoods and communities. Determining how to rebuild communities, including land use, zoning, siting of industrial and transportation facilities, and the mix of housing options, must fully involve and empower the residents of the affected communities to ensure that their needs are considered. Special attention should be paid to ensuring the availability of affordable healthy housing within all neighborhoods.

2. Assessing Homes for Viability

Who decides whether properties will be saved or condemned, and on what basis? Normally, evaluations and decisions made by property owners, code enforcement officials, and insurance companies in some combination determine whether a given property damaged by a natural disaster will be demolished or repaired. If demolition occurs, landowners normally decide whether and how to rebuild based on their own wishes and financial ability, subject, of course, to local zoning laws and codes. However, because of the unprecedented scope and severity of recent hurricane damage to property, there is no guarantee that such decisions will not be made, or at least strongly influenced by, legislative bodies, courts, and government agencies using eminent domain powers to take control of properties. It is also possible that these decisions may be made based on laws and codes changed for the specific purpose of addressing the aftermath of these disasters. While some of these hard decisions may ultimately prove necessary or beneficial, it is preferable to be certain that most of the homes in an area are actually not repairable before the bulldozer is used and better to consider the actual benefits to saving and rebuilding a community before the value of

Long-Term Rebuilding Principles and Housing Options

this is discounted by officials making quick judgments about future land use. In the fight to prevent wholesale demolition of salvageable homes, historic preservation groups may be powerful allies.

Indigenous community organizations are well suited to conduct assessments of health hazards in homes. Trained residents working through community, housing, and environmental organizations are best suited to assess homes in partnership with government agencies. Residents can be trained quickly and equipped with simple and rigorous assessment protocols that have been validated by researchers and practitioners. Because community residents have more trusted relationships with their neighbors than do outside contractors or government officials, they will be better able to convince other residents to make their homes available for environmental assessments. Moreover, they have the credibility needed to effectively communicate to occupants the results of these assessments and the necessary action steps.

Because the timing and legal bases for such decisions are uncertain, organizations working to protect the rights and choices of affected residents need to be vigilant and proactive. They must help residents find out about sites and arenas of decisionmaking and insist on meaningful opportunities for residents to participate.

3. Future Land Use—Where Will Rebuilding Occur?

The large-scale impact of Katrina, Rita, and Wilma and the magnitude of the resources expected to be available for recovery make possible a wide range of rebuilding strategies and outcomes. At the two extremes, choices are 1) improving flood control infrastructure and rebuilding existing flood plain neighborhoods, or 2) replacing these communities with new ones in less flood-prone locales. Which of two broad approaches will result in the higher quality of life for people may not be the same in all the affected communities, and residents of different communities may well come to dissimilar conclusions. The answer may well depend not only on economics, but also on how effectively residents are able to assert their right of return and insist on policies and planning that take into account several quality of life issues.

Sustainability in the flood plain

How does the cost of rebuilding residential areas that are below sea level stack up against the benefits of preserving communities and their viable housing and infrastructure? Many people will prefer to return to their original neighborhoods if possible, whether or not their own homes can be repaired. Ultimately, where to rebuild is probably more a political question than one of economics and urban planning.

Some officials have already proposed to demolish and not rebuild entire residential sections of New Orleans and other Gulf Coast communities most vulnerable to hurricanes and flooding, citing cost and public safety benefits of rebuilding in less risky areas. Officials may rezone certain lower-elevation or shoreline areas to prohibit residential use. The more extensive the demolition and replacement plan, the greater the risk that lower-income residents will lose their ability to afford housing in rebuilt communities and the greater the likelihood they will be left out of the "replacement community."

These decisions will be debated in the coming weeks and months in public meetings, letters to the editor, legislative halls, and other arenas. There is no substitute for organized resident involvement and input into these debates for ensuring that irreparable harm is not done to vulnerable populations

Long-Term Rebuilding Principles and Housing Options

and for ensuring that the true human and dollar benefits of allowing continued residential use of areas in the flood plain are actually balanced against the costs of engineering solutions to enable this.

Alternatives: Less Flood-Prone Locations

In some cases, residents may actually prefer to rebuild their neighborhoods in a less flood-prone area to avoid future flooding and negative public health, safety, and property damage impacts, as well as the shared cost of flood control engineering needed for the alternative approach. On the other hand, the cost of land and of building new physical infrastructure for brand new residential communities—including housing, utilities, transportation, schools, recreation, health care, retail and other services—will also be substantial and should be balanced against the long-term savings from avoiding future flooding.

There are several major challenges associated with relocating entire communities. One is the availability of sufficiently large, unused, environmentally safe areas of land appropriate for residential use. Such areas also need to be accessible to jobs and transportation.

A raze-and-replace approach also tears people away from familiar surroundings, neighbors, and community institutions. Such dislocation is especially traumatic for older, ill, and disabled residents and for other people who have lived in one place for a long time.

Obliterating old neighborhoods further creates risk that housing choices for lower-income residents will be reduced if insufficient affordable housing is provided. Already market forces let loose by the shortage of housing have put strong upward pressures on the cost of viable remaining housing in the region. Unwise policies or poor planning can further worsen housing affordability. Housing quality, too, could worsen over time if poor construction standards and unhealthy materials are allowed. Without good planning, new neighborhoods may be sited in ways that disconnect people from well-paid jobs, transportation, and other amenities and services.

If residents decide that the potential benefits of "rebuilding from scratch" actually can outweigh the disadvantages, they may want to give active support to such a plan on a community-by-community basis. In any case, local organizations working with residents must become experts on these kinds of issues, and they must educate and organize their members to ensure that their concerns are taken into account before major decisions are made.

4. Right to Return to Replacement Housing in the Community

One's right and ability to return to replacement housing in his or her original community will depend on the resources available to create replacement housing, the policies set for whether rebuilding will even occur in certain residential neighborhoods and, of course, the ability of any given family to afford replacement housing. Clearly, without government subsidies, lower-income families will be far less able than others to afford to return and rebuild or purchase replacement housing.

5. Standards for Rebuilding

If there is a silver lining to widespread hurricane destruction, it is the opportunity presented to repair, rehab, and rebuild homes to higher standards that protect occupant health and increase durability. The clean-up, repair, and rehab of salvageable homes, as well as the construction of replacement homes, should use construction standards, building materials, and methods that will ensure a healthy living environment for occupants and the durability of the home. Building

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replacement housing provides an opportunity to demonstrate the cost-effectiveness of building homes right so that they are energy efficient, healthy environments for occupants, and a good investment for lenders, insurers, and owners.

6. Economic Opportunities for Residents and Evacuees in Rebuilding and Recovery Activities

Local individuals and companies should be given priority in rebuilding and restoration projects. Because of large-scale job displacement and resulting unemployment, Gulf Coast residents desperately need quality employment in rebuilding and restoring their communities. This provides an important economic development opportunity for local residents and businesses. Workers who take on the dangerous job of cleanup and recovery are entitled to fair wages and to vigorous enforcement of health and safety standards. In communities where HUD funding will be used for rebuilding, repair, and rehab, a federal law (Section 3 of the Housing and Urban Development Act of 1968) provides employment and contracting preferences for low-income residents and businesses that employ them. Also, the Stafford Act, a federal law enacted to set rules for federal assistance after major disasters, requires that preference be given "to the extent feasible and practical" to local organizations, firms, or individuals when federal funds are spent "for debris clearance, distribution of supplies, reconstruction, and other major disaster or emergency assistance activities."

Free healthy homes training should be provided to homeowners, landlords, and contractors. The unprecedented scale of the clean-up, repair, and rehab effort in the Gulf region is luring many well-intentioned but untrained contractors and workers to the area. Moreover, many low-income homeowners will have no choice but to do the work themselves. All of these individuals need training in safe work practices around mold and other hazards, in order to protect themselves and residents and to avoid leaving behind, exacerbating, or even creating hazards that will put residents at risk over the long term. See Part II and the Appendix for more information on safe and healthy cleanup and repair practices.

7. Funding

Assistance to make safe reoccupancy possible should be provided quickly and distributed fairly. Landlords and homeowners will not be able to make needed repairs unless financial institutions, including insurance and mortgage companies, meet their responsibilities to assist their customers. Insurance companies should meet their obligations to policyholders with timely and fair payment of claims and should cover the full range of damage from both the wind and rain brought by the hurricane. Because many residents have lost their jobs, mortgage companies should accommodate homeowners' and landlords' need to defer payments and adjust payment schedules without adverse credit consequences. Federal and state officials should vigilantly oversee these financial institutions and protect the rights of consumers. See Part I for the array of assistance programs available to residents of hurricane strike zones.

Statutes regarding federal disaster-relief programs need to fairly address the needs of low-income renters. The long-term assistance programs presently are weighted in favor of owner-occupants, without equal opportunity for renters to be compensated for their personal property losses or regain their financial footing. Local governments should help rental property owners meet their responsibilities to remediate environmental health hazards and allow renters back into their homes as soon as possible. There is also a need for federal subsidies to help landlords and small property

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management companies replace rental property destroyed by the hurricanes. These subsidies should focus on helping rental property owners construct healthy, high-quality, affordable housing that is close to jobs, public transportation, schools, and other services.

Funding for assistance to affected residents, as well as for cleanup and recovery should not displace funding for prior and continuing social needs, especially in areas where people have relocated. As has been eloquently noted elsewhere, the hurricane disasters dramatically illuminated the extent of poverty, a severe shortage of healthy, affordable housing, and the substandard housing conditions in which many Americans live. It is neither fair nor sensible to further exacerbate these crises for the rest of the country by using disaster relief spending as an excuse to further cut domestic discretionary spending. Our spending priorities must ensure basic dignity and fairness for all Americans.

APPENDIX

1. Preventing Housing-Related Health Problems from Flooding

Flooding and the serious water intrusion that accompanies it is perhaps the most serious healthy homes impact of a hurricane strike. Large and widespread mold infestations, bacterial growth, pest infestations, release of toxic substances from wet building materials, and deteriorated structural integrity can all follow water intrusion of residential buildings. The water itself can carry an unknown mix of toxic chemicals, waste, and bacteria that can contaminate houses and apartments, personal belongings, and yards, even after the flood recedes.

To minimize the impacts of flooding and water intrusion for homes and apartment buildings in which structural integrity has **not** been weakened beyond repair, property owners should take the following steps:

- Before entering any house or apartment building, protect yourself by wearing rubber boots, rubber gloves, goggles, and a respirator.
- Children, the elderly, and persons with compromised immune systems should not return to flood-damaged buildings until all repair and rehabilitation work is completed. People with severe asthma should also avoid flood-damaged structures.
- Remove all standing water as quickly as possible, even if the amount of standing water is small. Standing water can be a breeding ground for bacteria and some pests, it can harbor dangerous contaminants, and it can provide a source of moisture for mold growth.
- Remove all wet materials and personal belongings from the house or apartment building. This includes all wet wallpaper, wallboard, carpeting, throw rugs, bedding, mattresses, box springs, stuffed toys, clothing, and any other wet materials that cannot be adequately dried and wiped clean. All of these materials can become food sources for mold, they can "offgas" significant amounts of toxic chemicals. Inadequate drying of these materials can attract large cockroach infestations. Where possible, professional contractors trained in materials removal and mold clean-up should perform this work.
- Remove all porous materials that demonstrate significant mold growth. Again, where possible, professional contractors trained in these tasks should perform this work.
- Take appropriate measures to dry out the entire structure of the house or apartment building. As soon as safe, reliable power is restored, fans; dehumidifiers; window air conditioners; and undamaged, uncontaminated, properly filtered HVAC systems can be used to dry out a building. All houses and apartments buildings should also have ventilation systems repaired if damaged.
- The scope of the flood damage and resultant mold growth following Hurricanes Katrina and Rita are unprecedented in many areas along the Gulf Coast. However, for those homeowners who suffered only minimal water intrusion from minor flooding or other damage to their homes, cleaning all nonporous, wipeable materials and surfaces with a hot

water and detergent solution can help. If a hot water and detergent solution does not clean these surfaces, a very dilute bleach solution (1 cup bleach to 9 cups water) can be used. Remember that this pertains **only** to homes where mold growth is impacting small, easily contained areas. If using a dilute bleach solution, **NEVER MIX BLEACH WITH ANY OTHER CLEANING PRODUCT OR DETERGENT!**

• Chemical fungicides should be used only as a *last resort* against mold, and only the lowest-toxicity fungicides should be used in these circumstances. Mold removal efforts should focus on a) removing all water-damaged materials from the home, b) removing all materials demonstrating significant mold growth, and c) removing all sources of standing water and excessive moisture from the home.

2. Preventing Housing-Related Health Problems from Carbon Monoxide

Carbon monoxide is a serious health threat to residents returning home following hurricanes and flooding, especially those who live in houses and apartment buildings that use natural gas for heating and cooking. Carbon monoxide can kill through asphyxiation and exposure to sub-lethal doses over time can cause brain and heart damage.

To avoid carbon monoxide poisoning, residents should take the following steps:

- Do not use gasoline-powered generators, open flame camp stoves and lanterns, or charcoal or gas grills in any building. Unvented combustion devices can cause rapid and dangerous increases in carbon monoxide concentrations in indoor air.
- Be sure outdoor generators are operated more than ten feet away from windows, doors, and other openings to houses and apartment buildings.
- If at all possible, buy and install a carbon monoxide detector, commonly available at local hardware stores that have reopened.
- If dizziness, nausea, or weakness present themselves at any time during the course of building repair and cleanup, **seek fresh air immediately**. If symptoms persist, contact emergency medical personnel.

Property owners should:

- Check and, if necessary, repair all damaged water heaters, furnaces, and other combustion appliances such as natural gas-powered ovens and stoves.
- Repair any damaged vents and chimneys, and be sure that all vents and chimneys are clear of debris or other obstructions.

3. Preventing Housing-Related Health Problems from Pest Infestations *Plus How to Use Integrated Pest Management*

Pest infestations often follow in the wake of a natural disaster that damages houses and apartment buildings. Mice, rats, and cockroaches are three common pest infestations that can plague any damaged residential structure.

To prevent pests and to combat pest infestations that have already occurred, property owners should use integrated pest management (IPM) strategies:

- Remove all standing water as quickly as possible, even if the amount of standing water is small. Standing water can be a breeding ground and a source of sustenance for some pests.
- Remove all wet materials and personal belongings from the house or apartment building.
 This includes all wet wallpaper, wallboard, carpeting, throw rugs, bedding, mattresses, box
 springs, stuffed toys, clothing, and any other wet materials that cannot be adequately dried.
 Inadequate drying of these materials can attract large cockroach infestations.
- Take appropriate measures to dry out the entire structure of the house or apartment building. As soon as safe, reliable power is restored, fans; dehumidifiers; window air conditioners; and undamaged, uncontaminated, properly filtered HVAC systems can be used to dry out a building. All houses and apartment buildings should also have ventilation systems repaired if damaged.
- Repair and/or fill all holes, cracks, broken windows and doors, and other points of entry to the house or apartment building.
- Discard all spoiled food, and keep any edible food properly stored in tightly sealed containers.
- If pest infestations are already present, avoid the use of high-toxicity pesticides. Instead, use gel baits and bait stations for cockroaches and ants, and employ traps and tamper-proof bait boxes for mice and rats.
- When baiting rodents, use only those lower-toxicity pesticides that have known and readily available antidotes. *Do not* use bulk rat poison pellets to combat rodents; these pellets are highly toxic and do not contain any bittering agents or other safeguards to prevent children or pets from ingesting them.

4. Preventing Housing-Related Health Problems from Damaged Lead-Based Paint

Damaged and deteriorating lead-based paint can be a concern in hurricane impact zones where houses and apartment buildings were built during or before 1978. Damage to lead-based paint can occur during a hurricane from direct physical impacts to the structure, and rapid deterioration of the paint can stem from water intrusion due to flooding or leaks following roof or exterior wall damage. Lead exposure causes a wide range of serious neurological, physical, and behavioral problems, especially in children.

To protect against poisoning from damaged or deteriorated lead-based paint, property owners should take the following steps:

• If a house or apartment building was constructed prior to 1978, property owners should assume that the structure contains lead-based paint.

- Take appropriate measures to dry out the entire structure of the house or apartment building. As soon as safe, reliable power is restored, fans; dehumidifiers; window air conditioners; and undamaged, uncontaminated, properly filtered HVAC systems can be used to dry out a building. All houses and apartment buildings should also have ventilation systems repaired if damaged. Inadequate drying can lead to the rapid deterioration of lead-based paint.
- Avoid all contact with paint dust, and keep children away from areas where paint has been damaged.
- If paint has been damaged, remove it using lead-safe work practices such as wet scraping and wet sanding. Be sure to seal off any areas where repair work is being done, and cover the entire floor with plastic sheeting. Make sure to wear clothing you can dispose of after repair work is completed, and be sure that all areas have been cleaned with hot, soapy water.
 Never use sandblasting to remove paint from houses or apartment buildings constructed before 1978, never use heat guns or torches, and never use dry sanding or power sanding methods unless the equipment is properly fitted with HEPA-filtered vacuum devices. Where possible, use contractors specifically trained in lead-safe work practices.
- Following any repair, renovation, or remodeling work, ensure the house or apartment building has been properly and thoroughly cleaned, and ensure that a lead dust test has been conducted to ensure that invisible hazards do not remain.
- During any repair, renovation, or remodeling work, temporarily relocate all building occupants to ensure their safety.

ALLIANCE FOR HEALTHY HOMES Protecting Children from Lead and Other Environmental Health Hazards

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