

Sample Single-Family Housing Rehabilitation Specifications, Including Green Specs



About this Tool

Description:

The Sample Single-Family Rehabilitation Specifications is a comprehensive library of housing rehabilitation specifications. The specifications are intended to be used in rehab work write-ups incorporated in contract documents. A quantity-per-item format helps assure that cost estimating and cost proposals are as accurate as possible for both the rehab program and the rehab contractors. It includes a number of green building items and corresponds to two other documents in the NSP Resource Exchange: the Sample Housing Rehabilitation Checklist and the Sample Single-Family Housing Rehabilitation Standards. This three-document set includes green building performance standards and specifications.

How to Adapt this Document:

This document should not be used as-is. Customization is required to make the individual work specifications relevant for your housing program. In the process of customization, users should adapt this document to the local climate, housing stock and program goals. These sample specifications are designed to be used with one-to four-unit dwellings of three stories or less. Many of the specifications might apply to multifamily properties, but multifamily properties are generally subject to more stringent life-safety code and other code requirements, and often have more complex requirements for egress, fire ratings, common areas, parking and mechanical systems, among other differences.

Source of Document:

The work specifications in this document were adapted from a template created and used by Community Development Software LLC and Livable Housing, Inc., a consulting and training firm. Specifications with the suffix [GREEN SPEC] were added with the assistance of Enterprise Community Partners and intended to be used to specify "green-build" improvements that follow accepted national green building standards such as LEED and the Green Communities Criteria.

Disclaimer:

This document is not an official HUD document and has not been reviewed by HUD counsel. It is provided for informational purposes only. Any binding agreement should be reviewed by attorneys for the parties to the agreement and must conform to state and local laws.

This resource is part of the NSP Toolkits. Additional toolkit resources may be found at www.hud.gov/nspta

Sample Door & Window Specifications from the Sample Single-Family Rehabilitation Specifications

2775 SASH LOCK EA \$12.00

Screw a brass plated sash lock on double hung window to tightly draw sash together.

2785 SASH CORDS PR \$50.00

Install nylon reinforced cotton sash cords or chain to sash and counterweights.

2795 WINDOW REPAIR EA \$50.00

Repair window without replacing sash. Replace broken and cracked glass with double strength glass. Remove loose glazing compound and reglaze. Repair and adjust window to open and close smoothly, with brass plated lifts and locks, and sash chains or nylon reinforced cords. Raise the top sash, secure it in place with exposed finish nails or screws and caulk.

2810 GLASS REPLACE, WOOD SASH

EA \$70.00

Remove broken pane of glass, glazing and points. Install double strength glass, points and glazing compound ready for paint.

2830 GLASS BLOCK SF \$65.00

Install 4" thick glass block in opening, per manufacturer's specs, tool joints, install expansion spacers around perimeter and mortar to existing foundation or framing. Trim exterior and interior to match existing.

2840 TRIM, WINDOW SET, INTERIOR

EA \$57.00

Trim window including header, stops, casings, stool and apron in 2-1/2" wide finger jointed pine.

2875 WOOD SASH, SINGLE GLAZED

EA \$110.00

Field measure, order and install a single glazed replacement sash matching existing mullion configuration, including vinyl replacement channels. Prime both sides.

2880 WOOD SASH, DOUBLE GLAZED

EA \$165.00

Field measure, order and install a double glazed replacement sash that matches the existing million configuration including vinyl replacement channels. Prime both sides.

2885 WINDOW, WOOD DBL HNG/SGL GLZ

EA \$265.00

Dispose of and replace a wood, double hung, single glazed, one-over- one window and jamb, complete with screen, snap-in mullion, hardware, weatherstripping, interior stool, apron, casing, and outside casing. Prime before installing. Repair all walls disturbed by removal and installation. Paint enamel both sides. Clean glass. In bathroom, use obscure glass.

2887 WINDOW, WOOD DBL HNG/DBL GLZ

EA \$265.00

Dispose of window unit and install a wood, double hung, double glazed, one-over-one window and jamb complete with screen, snap-in mullion, hardware, weatherstripping, interior stool, apron, casing, and outside casing. Prime before installing. Repair all walls disturbed by removal and installation. Paint acrylic both sides. Clean glass. In bathroom, use obscure glass.

2888 WINDOW, WOOD DBL HNG/DBL GLZ, REPLACEMENT PAC EA \$265.00 Replace existing window unit with a wood, exterior aluminum clad, double hung, double glazed, one-over-one replacement window kit complete with 2 sash, insulated and weather stripped vinyl jamb liners, screen, hardware, and weather-stripping. Use Marvin Tilt Pac Kit or Kolbe and Kolbe Classic Replacement Sash Kit. Repair all walls disturbed by removal and installation. Clean glass. In bathroom, use obscure glass.

2890 WINDOW, WOOD BASEMENT UNIT

EA \$70.00

Dispose of basement window unit. Install a single-lite window, plumb and level, back primed, caulked. Repair masonry as necessary to complete installation. Provide screen and storm insert.

2980 WINDOW, VINYL DOUBLE HUNG/DOUBLE GLAZE

EA \$300.00

Field measure, order and install a vinyl, double hung, double glazed, one-over-one window and jamb including screen, caulk, interior casing and exterior trim. Install half screen.

3010 STORM WINDOW, ALUMINUM

EA \$90.00

Field measure, fabricate, caulk and install an enameled, white aluminum, double hung, triple track storm window with fiberglass screen. Storm window meeting rails must align with meeting rails on prime window and weep holes must drain.

3065 DOOR, REWORK EXTERIOR

EA \$90.00

Plane, sand, adjust and/or repair exterior door and jamb to assure weather tight, smoothly operating door and lock set.

3075 DOOR CASING, REPLACE

LF \$3.00

Dispose of all cracked, split or damaged door casing. Install casing to match existing as closely as possible. Include drip cap.

3120 DOOR, REPLACE ENTRANCE HARDWARE

EA \$125.00

Replace exterior door mortise lock with a "Weslock Modernizer" or equal. Install double cylinder mortised deadbolt. Locks shall be keyed alike. Provide 2 sets of keys to the owner.

3145 DOOR, EXTERIOR FLUSH, SOLID CORE

EA \$315.00

Install a 1-5/8" solid core, flush panel, exterior wood door with entrance lock set, and mortised dead bolt keyed alike. Include three 3"x4" butt hinges, vinyl bulb threshold, spring metal weather-stripping, and wide angle peep sight. Prime and topcoat.

3150 DOOR, EXTERIOR PANELED

EA \$435.00

Install a 1-5/8" 4-panel, exterior wood door with entrance lock set and mortised dead bolt keyed alike. Include three 3"x4" butt hinges, interlocking threshold, spring metal weather-stripping, and wide angle peep sight. Prime and top coat.

3185 DOOR, PRE-HUNG METAL ENTRANCE

EA \$475.00

Dispose of door and frame. Install a pre-hung metal, insulated, 6-panel entrance door and jamb including interior and exterior casing, spring metal weather-stripping, interlocking threshold, one entrance and one mortised deadbolt keyed alike. Prime and top coat.

3190 DOOR, CRAWL SPACE ACCESS

EA \$65.00

Install a 3/4" CDX plywood access door in a 2"x 4" preservative treated frame. Provide galvanized iron hinges and hasp.

3205 SCREEN DOOR-WOODEN

EA \$105.00

Replace screen door with wood framed screen door, wood paneled lower half, screen on top half. Include closer and screen door type latch-set. Prime and paint.

3210 STORM DOOR, ALUMINUM

EA \$200.00

Install an aluminum combination storm and screen door with white baked enamel aluminum finish and top chain.

3255 DOOR, REMOVE

EA \$22.00

Dispose of interior door. Remove butts. Fill holes in jamb. Sand smooth.

3260 RE-WORK INTERIOR DOOR

EA \$45.00

Re-hang door. Adjust door and lock set to operate properly. If door rubs carpeting, trim bottom of door to clear carpeting.

3275 PASSAGE LOCK

EA \$20.00

Install a brass-plated, 2-1/2" back-set door knob set.

3280 LOCKSET, BEDROOM

EA \$28.00

Install a back-set, brass plated privacy lock set.

3285 LOCKSET, BATHROOM

EA \$29.00

Install a back-set, privacy lock set with a brass plated exterior knob and a chrome plated interior knob.

3300 DOOR STOP, BASEBOARD MOUNT

EA \$10.00

Install a baseboard mounted, solid metal door stop.

3310 TRIM, DOOR SET FINGER JOINTED

EA \$60.00

Trim both sides of interior door, including header, stops, and casings. Use 2-1/2" wide clamshell, finger-jointed pine.

3315 TRIM, DOOR SET 1"X4"

EA \$60.00

Trim both sides of interior door, including header, stops and casings. Use 1"x4", #2 grade pine or better.

3345 DOOR, FLUSH INT, HOLLOW CORE

EA \$112.00

Install flush, hollow-core, door on existing jamb. Include privacy lock set and 2 butt hinges.

3360 DOOR, PRE-HUNG PASSAGE

EA \$160.00

Install a 1-3/8" pre-hung, flush, luaun door and split jamb including casing both sides, 2 butt hinges and a privacy lock set.

3375 DOOR, WOOD BIFOLD

EA \$190.00

Hang a flush, hollow core, wood bifold door including overhead track, all hardware and casing on one side, plumb and centered within the opening.

3420 ATTIC ACCESS EA \$100.00

Cut and frame an attic access hatch of 3/8" plywood at least 74"x24". Trim with casing to match room, prime topcoat, weather-strip with closed cell foam and insulate with 1" closed-cell polystyrene.

Owner-Occupied Home Improvement Contract

	Address:		
	Owner:		
	Contractor:		
	Contract for Home Impro Your Housing Development,		
THIS A	GREEMENT made this	day of	, 20,
by and be	GREEMENT made thisetween	hereinafter referred to as '	'Contractor",
and	ddress is	hereafter referre	d to as owner;
whose ac	ddress is		
	WITNES	SETH.	
performe Contractonereby as terms and Contractoneres supervisioneres	cknowledge and agree that the work to ed in accordance with all requirements for are subject to the contractor's compassigns Your Housing Development Cod conditions of the contract for rehabitor to do all the work and provide all lation, services, etc., necessary for the reference with the plans and specifications we expressly incorporated herein by reference.	of the Program and that all pliance with program require orp. to serve as Agent and to litation. Owner does hereby abor, security, materials, tool habilitation of the property ker the total sum of \$	payment to ments. Owner execute all employ the ls, machinery, known as, all in Attachment
A. T te T	CONTRACT TERM The Contractor agrees to begin work to en (10) calendar days from the date the Che work to be performed under this cound substantial completion shall be achieved.	is Contract is signed by the Contract shall commence on _	Contractor.
e: tł	Failure to complete work within the nuextension granted thereto, shall entitle the Contractor as " Liquidated Damag lay of delay in the completion of work	the owner to deduct from the es" an amount of \$100.00 fo	e monies due to

2. SCOPE OF WORK

- A. The Contractor does hereby agree that he will perform the work, in accordance with the plans and specification in Attachment A; diligently and in a good workmanlike manner, using the materials specified or materials of at least equal quality.
- B. The Contractor shall be responsible for obtaining all necessary permits for the work to be performed, and the work being done or any part thereof shall not be deemed completed until the Owner and Agent has accepted it as satisfactory.
- C. The Contractor shall, on a daily basis, keep the premises clean and clear of debris resulting from his contract work and the work of any and all subcontractors who may be used by the Contractor to complete this work. Upon completion of the work and final cleaning, all debris shall be removed from the construction site and the premises left clean. The cost of any clean up and removal of debris is the sole responsibility of the Contractor and is concluded within the fixed price of the work to be performed under this Agreement. The Contractor shall be responsible for boarding up all units not completed at the conclusion of each workday. The total cost of boarding up all units including the cost of materials is the sole responsibility of the Contractor and is included within the fixed price of the Contract. If the Contractor fails to board up or clean-up the units within a reasonable time after receipt of notice, the HDC shall have the right to remedy the failure or defect at the Contractor's expense. The Contractor shall be liable for any damages to the property. Your Housing Development shall understand the Contractor's refusal or failure to board up, or clean-up debris to constitute a breach of contract.
- D. When adjacent property is affected or endangered by any work done under this contract, it shall be the responsibility of the Contractor to take whatever steps are necessary for the protection of the adjacent property and to notify the Owner thereof of such hazard.

3. ASSIGNMENTS AND SUBSTITUTION

- A. The Contractor hereby agrees not to assign or sublet this contract without the written consent of Your Housing Development. Request for the assignment shall be addressed to the Director of Your Housing Development, Corp.
- B. In the event of any breach of this contract, the Agent may engage the services of another contractor to complete the work and deduct the cost of such completion from any amount due the Contractor hereunder.

4. **INDEMNIFICATION**

The parties understand and agree that HDC is a non-profit entity working solely in an administrative capacity to coordinate the work and to disburse funds in accordance with the home improvement loan program, and that HDC shall not be responsible for the respective performance or non-performance of the Owner or the Contractor under this agreement. The parties understand and agree that all services provided by HDC shall not in any manner limit or other wise alter the respective obligations of the parties hereunder, nor create any liability on the part of HDC to either party for any failure or oversight by HDC in providing such services. The parties certify that they have fully reviewed any and all documents, papers, plans, calculations and other materials provided by HDC for accuracy, completeness, and compliance with all applicable codes, laws, rules and regulations. Owner and Contractor, jointly and severally, covenant and agree to and do hereby indemnify and hold harmless and defend the Agent, Your Housing Development, Corp., and the U.S. Department of Housing and Urban Development, their agents, servants of employees, from against any and all loss, claims for injuries, or damages to persons or property, of whatever kind of character, whether real or asserted, arising out of this agreement of the work to be performed hereunder. The Owner and Contractor hereby assume all liability and responsibility for injuries, claims or suits for damages, to persons or property of whatever kind or character, whether real or asserted, occurring during the time the work is being performed and arising out of the performance of same. Further, the parties agree that all costs and expenses, including attorneys' fees in a reasonable amount, incurred by HDC in connection with the resolution of any dispute which may arise under this agreement shall be borne by the Owner and or Contractor and shall be apportioned by the authority resolving the dispute, taking into account the relative fault of the Owner and Contractor with regard to such dispute.

5. **INSURANCE**

A. Neither the Contractor nor any subcontractor shall commence work under this agreement until all insurance required under this paragraph has been secured and such insurance has been approved by the Agent (attach insurance certificate).

B. Worker's Compensation Insurance

The Contractor shall take out and maintain during the life of this contract Worker's Compensation Insurance for all his employees at the site of the project and, in case any work is sublet, the Contractor shall require the subcontractor similarly to provide Worker's Compensation Insurance for all the subcontractor's employees.

Employer's Liability	\$100,000	Each Accident
	\$500,000	Disease – Policy Limit
	\$100,000	Disease – Each Employee

C. Public Liability and Property Damage Insurance

The Contractor shall take out and maintain during the life of this contract such public liability and property damage insurance as shall protect him and any subcontractor performing work covered by this contractor from claims for damage or personal injury, including accidental death, as well as from claims for property damage which may arise from operation under this contract, whether such operation by himself or by one directly or indirectly employed by either of them; and the amount of such insurance shall be as follows:

D. The Contractor shall carry or require that there be carried Manufacturer's and Contractor's Public Liability Insurance in an amount not less than One Hundred Thousand Dollars (\$100,000) for injuries including accidental death to any one person and for one accident, and protect the Contractor and his subcontractors against claims for injury or death of one or more than one person because of accidents which may occur or result from operations under the contract. Such insurance shall cover the use of all equipment including but not limited to excavating machinery, trenching machines, cranes, hoists, rollers, concrete mixers and motor vehicles in the construction of the rehabilitation embraced in this Contract. The Contractor shall carry during the life of the contract property damage insurance in the amount not less than Fifty Thousand Dollars (\$50,000) to protect him and his subcontractors from claims for property damage, which might arise from operations under this contract.

E. Automobile Liability

Including owned, non-owned and hired autos (as applicable), in an amount of not less than One Million Dollars (\$1,000,000) per occurrence, combined single limit, written on an occurrence form.

6. WALL CONDITION

The Contractor shall remove any and all crackling, scaling, peeling, chipping and loose paint and repaint all surfaces using two (2) coats of non-lead based paint. Where the paint film integrity of the applicable surface cannot be maintained, the paint shall be completely removed or the surface covered with a suitable material such as gypsum, wallboard, plywood or plaster before any repainting is undertaken. The Contractor agrees to comply with Federal Regulation 37 CFR 22732-3, which prohibits the use of lead-based paint in residential structures undergoing federally assisted construction or rehabilitation.

7. WARRANTS

The Contactor hereby warrants and guarantees the improvements herein provided for a period of one year from the date of final acceptance of all work required by this contract. It is further agreed that the Contractor will furnish the Agent with all manufacturers' and suppliers' written guarantees and warranties covering materials and equipment furnished under this contract.

8. **PROGRESS PAYMENTS**

Payment to the Contractor for work completed shall be made upon approval from HDC's Construction inspector and City's Inspector (if applicable) as provided in Exhibit B.

9. FINAL PAYMENT/LIENWAIVERS

The Contractor shall, upon completion of the work, and upon final payment by the Owner, furnish an affidavit certifying that all charges for materials and any other expenses, incurred by the Contractor pertaining to the execution of this contract have been paid in full, to the end that no liens of any kind or character (save and except those between the parties hereto) may be affixed against the above described property. Final payment of the contract amount will be made only after final inspection and acceptance of all work to be performed by the Contractor and the Contractor's satisfactory releases of liens or claims for liens by the Contractor, subcontractors, laborers, and materials suppliers.

10. **TERMINATION**

- A. The Agent (with notice to Homeowner) may, at any time, terminate the Contract for the Agent's convenience and without cause. Upon receipt of written notice from the Owner of such termination, the Contractor shall cease operations as directed by the Agent in the notice; take actions necessary for the protection and preservation of the work; and terminate all existing Subcontracts, except for work directed to be performed prior to the effective termination date.
- B. In the case of such termination, the Contractor shall be entitled to receive compensation for approved work completed through the date of termination.

11. ENTIRE AGREEMENT

This instrument constitutes the entire agreement between the parties and no written oral agreement of any kind exists to charge the provisions hereof. No other work shall be done, nor additional monies paid unless provided for in a previously written contract, approved in writing by the Agent.

12. **CONFLICT OF INTEREST**

No member of Your Housing Development, Corp. staff shall share any part of this contract or receive any benefit from this contract.

<u> </u>	REPORTING The Contractor agrees to submit to the Agent upon request any information concerning work performed or to be performed under this contract.				
Executed at	this	day of	, 20		
Contactor	_	Owner			

CERTIFICATIONS

I,	, on behalf of		, certify that I am the
(Name)	, on behalf of	(Company)	
(Title)	of the corporat	ion named as Con	tractor herein, that
(Name of Signer)	who signed this	Agreement on be	half of the Contractor
was of said corporation; powers.	that said Agreement was	s and is within the	scope of its corporate
Contractor			
Funding Approval: Your Housing Developm \$ to	nent hereby approves fur to complete the work des		nt of
s w	complete the work des	cribed herein.	
Signed, Your Housing D	evelopment Corp.		

Small Remodeling Project Sample

Sample Draw Schedule: Small Remodeling Project

	Work Completed	Amount
Draw 1	Demolition	\$3,000
Draw 2	Framing, wiring and plumbing rough-in, insulation.	\$6,000
Draw 3	Drywall, windows, cabinets.	\$6,000
Draw 4	Patch exterior, painting, flooring, fixtures, cleanup.	\$5,000

	Work Completed	Amount
Draw 1 Foundation	Plans and specifications, permits, excavation, footings, foundation.	\$37,500 (15%)
Draw 2 Rough Framing	Wall and roof framed and sheathed. Subflooring, interior partitions.	\$37,500 (15%)
Draw 3 Dry In	Asphalt shingle roofing, wood siding, windows, exterior doors.	\$37,500 (15%)
Draw 4 Rough In	Rough HVAC, electrical, plumbing. Set tubs and shower. Insulation. Flatwork.	\$30,000 (12%)
Draw 5 Trim Out	Drywall, interior doors, cabinets, countertops, interior trim, <u>finish</u> flooring.	\$50,000 (20%)
Draw Substantial Completion	Exterior trim, gutters, water and sewer hookups, finish plumbing and electric, carpeting, garage doors.	\$45,000 (18%)
Draw 7 Retainage	Substantial Completion	\$12,500 (5%)

Sample Lien Waiver

SAMPLE UNCONDITIONAL LIEN WAIVER AND RELEASE UPON FINAL PAYMENT

The undersigned hereby acknowledge	es that the sum of
	Dollars (\$
as received from(OWNER)	
(OWNER)	
as Full and Final Payment for the follow	ving goods and service:
performed at the property described a	s:
mechanics lien, stop notice, or any righ	eration, does hereby waive and release any right to a t against a labor and material bond on the work at the disputed claims for extra work in the amount of
\$	
Dated	_
COMPANY NAME	COMPANY ADDRESS
SIGNATURE OF DULY AUTHORIZED COMPANY REPRESENTATIVE	SIGNATURE OF WITNESS/Notary

Sample Change Order Change Order Agreement Your Agency/Program

Owner: <name>

Original contract date: 3/20/2014 Contractor: Hava Hart Contractors Original contract sum: \$28,740.00

Proposed change order amount: \$1,568.00

New contract sum total: \$30,308.00

Reason for change order: <rotted bathroom sub floor>

It is understood by the Owner and the Contractor that by signing this form they agree to the additional scope of work and the quote provided by the contractor. The owner also agrees that these repairs were due to an unforeseen circumstance, that these additional repairs are necessary for the safety and health of the occupants and that these repairs must be finished in a timely fashion as to not delay completion of this project.

A revised contract will be prepared and executed and as a result, the **lien on the property or Grant agreement>** will increase.

The Construction Period End date will be extended to an additional <20> days to <insert date> to accommodate above work.

Owner	Contractor
Date	 Date

Homeowner's Approval

YOUR LETTERHEAD
Rehab Specialist Approval
Compliance of Completed Work
MEMO TO FILE
Re: <address></address>
Owner name: <name></name>
Grant number: < or program>
I attest that the <rehab> work on the above mentioned property has been completed as per</rehab>
the Owner Contractor Agreement between <owner> and <contractor> dated <date> and the work meets with the approval of the <your agency=""> <pre> <pre> <pre></pre></pre></pre></your></date></contractor></owner>
Date:
Your Name
Your Title

Rehab Specialist's Approval

The Healthy Homes Program Guidance Manual

July 2012







Figure 6.1 Elements of a Logic Model

- **Resources or inputs** can be financial, human, organizational, system-oriented or community-based—the factors needed to support program activities.
- Activities include services such as education, home visits, environmental assessment and home intervention.
- Outputs are counts of activities related to recruitment/intake, education, completed housing interventions and case management.
- Outcomes and impact are changes in short, intermediate and long term measures, such as health or housing conditions.

Figure 6.2 A Proposed Logic Model Related to Healthy Homes

Program Focus	Inputs	Activities	Outputs	Short Term Outcomes	Mid-Term Outcomes	Long-Term Outcomes
Asthma Healthy Homes Pilot	Health Department Staff Home Visiting Programs Home Inspectors Community Organizations Advocacy Organizations Rental Property Owners Pest Management Professionals Contractors Elected Officials Clinicians Health Insurers Foundations Funding Equipment Supplies	Educate families about environmental triggers in the home Conduct visual assessments Provide supplies for dust control and pest management Interventions including integrated pest management (IPM), moisture control, lead hazard reduction, etc. Refer families to smoking cessation programs Refer families to housing rehab services to address issues beyond program scope Refer housing units to code enforcement	Number of home visits completed Number of referrals to partner organizations Counts of supplies delivered Number of visual assessments for pests, mold, and moisture completed Number of homes receiving specific interventions such as IPM Number of housing inspections for housing code violations	Increased use of mattress and pillow covers, IPM supplies after one month Improvement in family Knowledge, Information, and Behavior (KIB) scores in one month Increase number of units where family limits smoking in the home	Reduction in counts of pests in units after three months Reduction in the reported number of symptom days after 3 months Reduction in the number of asthma triggers Reduction in ER and hospitaliztions at 12 months Increased number of units enrolled in housing rehab programs	Reduction in mold and moisture conditions observed at 12-month visual assessment Families show long term improvement on KIB scores Health insurers reimburse or pay for home visits and low cost environmental interventions Property owners adopt preventive policies

Figure 6.6 Common Program Outputs

- Program Outreach and Community Education
 - Number and type of presentations
 - Audience (health care personnel, parents, contractors, educators, community, rental property owners, tenants, owneroccupants). Audiences can be divided into public and professional.
 - Number of individuals reached
 - Number of health fairs
 - Number of interactions (participants, names recorded on sign in sheets, requests for follow up information)
 - Pieces of literature distributed
 - Number of housing units reached through door-to-door canvassing
 - Number of media events
 - Paid vs. unpaid
- Program Referrals
 - Number of referrals from medical providers
 - Number of referrals from community-based organizations
 - Number of requests for information and enrollment associated with different media placements
 - Number of referrals by healthy housing programs to other housing programs
 - Number of referrals by healthy housing programs to other health or social service programs
- Families/Individuals Recruited
 - Demographics of participants and nonparticipants
 - Level of housing risk in units of participants and non-participants

- Case Management/Care Coordination and Education
 - Number of children tested for lead exposure
 - Number of home visits
 - Number of families receiving educational intervention
 - Number of referrals provided to families for supportive health and social services
 - Number of referrals to other services completed and not completed
 - Number of families receiving cleaning supplies
- Home Assessment
 - Number of questionnaires administered
 - Number of homes with assessments conducted
 - Number of homes with environmental samples collected
 - Number of environmental samples collected
- Housing Unit Remediation
 - Number receiving enhanced ventilation and moisture control interventions
 - Number receiving integrated pest management
 - ▶ Number receiving lead hazard reduction
 - Number of fire alarms and carbon monoxide detectors installed
- Work Force Development Activities
 - Number of contractors recruited
 - Number of contractors recruited from the target population and area
 - Number of individuals trained

Use of a control group provides a stronger basis for analyzing program effects. Control groups are groups of housing units or individuals that are comparable in terms of location, condition, residential characteristics or demographics but do not receive program services or interventions. Randomized control trials, in which participants are randomly selected and assigned to a treatment or control group, are the "gold standard" for experimental research designs.

Use of control groups and randomized designs is generally confined to research and is rarely used for evaluating programs. Ethical issues associated with the use of control groups in housing intervention research are reviewed in a publication by the NAS/IOM.

Health and Well-Being Outcomes

Health outcomes commonly tracked by healthy homes programs are listed in Figure 6.7.