



Building
Performance
Institute

Healthy Housing Principles **Knowledge Testing List**

Assessment Scope (applies to all domains unless noted):

Candidates will be expected to identify, recognize, explain, compare, and select appropriate options within the listed topics at the Recall/Application level using one-best-answer multiple-choice items.

DOMAIN 1: INTRODUCTION

Topic: 1.1 The Foundations of Healthy Housing

Knowledge Areas:

- Definition of a healthy home
- House as a System
- Integrated healthy housing approach – 8 principles
- Interconnections and systems thinking
- Occupant signs and symptoms
- Routes of exposure,
- Connections between health and housing

Topic: 1.2 Codes, Standards and Regulations

Knowledge Areas:

- Zoning, building, and housing code differences
- IPMC and local applications
- National Healthy Housing Standard, EPA and other federal guidelines

Topic: 1.3 Equity & Vulnerable Populations

Knowledge Areas:

- Vulnerable groups (children, seniors, disabled etc.)
- Environmental justice and disparities
- Home Health Exposure Triangle
- Social determinants of health

Topic: 1.4 Community Context & Survey Data

Knowledge Areas:

- Data driven insights (eg. American Housing Survey)
- Importance of neighborhood and infrastructure. (Codes, zoning, resources)
- Economic impacts of housing on health
- Climate and weather impacts

DOMAIN 2: KEEP IT CLEAN

Topic: 2.1 Cleanliness and Health Impacts

Knowledge Areas:

- Health effects of dust, allergens, pets and pest excrement
- Contaminants in dust (allergens, dander, lead, chemicals, smoke byproducts)
- Clutter and hoarding impacts
- Risks of antibacterial product overuse

Topic: 2.2 Particle, Dust & Allergen Control

Knowledge Areas:

- Breathable and invisible particles
- Dust mite characteristics and locations
- Controlling humidity & reducing dust
- Importance of vacuuming, washing,
- Allergen reduction strategies
- Cleanable surfaces (flooring types, back splashes etc)

Topic: 2.3 Cleaning Methods and Considerations

Knowledge Areas:

- Vacuum types and features
- Wet and dry cleaning techniques and frequency
- Product concerns and recommendations
- PPE
- Special cleaning considerations, eg. rodent droppings, lead dust, asbestos, mold

Topic: 2.4 High-Bacteria Areas & Their Relevance

Knowledge Areas:

- Types of bacteria – bad (germs) and good bacteria
- Top locations in homes where germs may be found
- Why routine cleaning is critical

Topic: 2.5 Entry Dust Control

Knowledge Areas:

- 4-part strategy to reduce tracked-in dust
- Benefits of walk-off mats and shoe removal

Topic: 2.6 Air & Mechanical Systems

Knowledge Areas:

- MERV 11-13 filter benefits and limitations
- Mechanical system cleaning guidance
- Importance of sealed ducts

Topic: 2.7 Environmental & Occupant Practices

Knowledge Areas:

- Reducing exposure on high-smog or pollen days
- Clutter management, hoarding and organization strategies
- Use of clutter rating tools with clients
- Importance of Cultural sensitivity

DOMAIN 3: KEEP IT DRY

Topic: 3.1 Moisture and Health Impacts

Knowledge Areas:

- Health effects of chronic dampness
- The role of moisture in respiratory illness
- Vulnerable populations

Topic: 3.2 Moisture Sources

Knowledge Areas:

- Exterior Sources:
 - Bulk water
 - Vapor
 - Airborne droplets
- Interior Sources:
 - Plumbing leaks
 - Occupant behavior – eg. cooking, breathing, showers

Topic: 3.3 Moisture Transfer in Building Materials

Knowledge Areas:

- Moisture through porous materials
- Capillary suction
- Crawl space impact

Topic: 3.4 Moisture and Temperature

Knowledge Areas:

- Relative humidity, condensation and dew point
- Dew point and surface moisture
- Insulation and condensation issues

Topic: 3.5 Mold Growth Factors

Knowledge Areas:

- Mold growth conditions
- Food sources and surfaces
- Dead mold concerns
- Mold misconceptions, and occupant anxiety

Topic: 3.6 Safe Mold Cleanup

Knowledge Areas:

- Safe cleanup size (<10 sq ft or 3' x 3')
- Mold cleanup
- EPA multi-step process

Topic: 3.7 Building Moisture Controls

Knowledge Areas:

- Gutters, downspouts, leaks
- Crawl space ground covers
- Grading around foundations
- Impact of air sealing on moisture

Topic: 3.8 Mechanical Moisture Control Systems

Knowledge Areas:

- Ventilation fans and standards
- Dehumidification
- Dryer vent cleaning

Topic: 3.9 Occupant Moisture Control Practices

Knowledge Areas:

- Drying spills
- Discarding wet items
- Promoting airflow

DOMAIN 4: KEEP IT PEST-FREE

Topic: 4.1 Pest Indicators & Health Impacts

Knowledge Areas:

- Definition of a pest
- Signs of pest presence
- Pest identification
- Common pest behavior
- Health effects of pests (roaches, rodents, bedbugs)
- Other household pests and unwelcome guests

Topic: 4.2 Integrated Pest Management Principles

Knowledge Areas:

- Pest Management Triangle for Housing concept
- IPM process and steps
- IPM goals and benefits
- Pesticide use reduction

Topic: 4.3 Pesticide Awareness & Monitoring Practices

Knowledge Areas:

- Pesticide definition, application and storage
- Health effects of pesticides
- Labeling requirements, signal words, facts vs. marketing.
- Rodent and insect monitoring tools
- Ineffective, dangerous or misleading products

Topic: 4.4 Effective Pest-Management Methods

Knowledge Areas:

- Roach management
- Rodent management
- Bedbug management
- Dust mite management

Topic: 4.5 Actions for a Pest-Free Environment

Knowledge Areas:

- Pest exclusion strategies
- Humidity control
- Occupant behavior, cleaning habits, storage
- PPE and contamination-prevention practices for home visitors

DOMAIN 5: KEEP IT CONTAMINANT-FREE

Topic: 5.1 Contaminants and Health Impacts

Knowledge Areas:

- Common contaminants in homes
- Health effects of smoke, VOCs, s fine and ultrafine particles (PM2.5, 10)
- Second and third-hand smoke concerns

Topic: 5.2 Sources & Exposure Pathways

Knowledge Areas:

- VOC sources, off gassing and indoor concentrations
- Smoke and particulate exposure (tobacco, vaping cooking, combustion etc.)
- Persistent pollutants (microplastics, PFAS etc.)
- Exposure pathways of contaminants

Topic: 5.3 Product Safety & Ventilation Strategies

Knowledge Areas:

- Strategies to reduce chemical use
- Role of ventilation
- Awareness of outdoor air contaminants and infiltration pathways
- Third-party green certifications

Topic: 5.4 Healthy-Exposure-Reduction Actions

Knowledge Areas:

- Low-VOC paints and materials
- Furnace filter replacement
- Safe product disposal
- Issues with Air fresheners, incense, scented cleaners and candles
- Limited value of indoor air monitors

DOMAIN 6: KEEP IT SAFE

Topic: 6.1 Safety and Health Impacts

Knowledge Areas:

- Preventable injury vs. accident
- Leading causes of injury deaths
- Vulnerable populations

Topic: 6.2 Poisoning Hazards

Knowledge Areas:

- Common household poisons
- Signal words on product labels
- Safe chemical storage
- Food safety considerations

Topic: 6.3 Fire and CO Safety

Knowledge Areas:

- Placement of smoke/CO alarms
- Fire and burn prevention
- Space heaters
- Fire safety planning and devices; exits, blankets, ladders

Topic: 6.4 Falls, Tip-Overs & Choking

Knowledge Areas:

- Fall prevention strategies
- Tip-over prevention
- Safe play areas and choking risks
- Safe storage and decluttering

Topic: 6.5 Electrical Safety

Knowledge Areas:

- GFCIs and circuit safety
- Preventing electrical shock

Topic: 6.6 Safe Access and Mobility

Knowledge Areas:

- Universal design features that enhance safety
- Safe exterior access and emergency egress
- Assistive devices and home retrofits
- Lighting

Topic: 6.7 Additional Safety Items

Knowledge Areas:

- Recommended Water heater temperature ranges
- Visible Exterior House Numbers
- Safety glass and window guards
- Firearm storage safety
- Water safety and home swimming pools
- Intruder deterrence

DOMAIN 7: KEEP IT VENTILATED

Topic: 7.1 Ventilation and Health Impacts

Knowledge Areas:

- Health effects of poor ventilation
- Pollutants reduced by ventilation

Topic: 7.2 Ventilation Principles and Systems

Knowledge Areas:

- Airflow and pressures
- Importance of adequate airflow in tight homes
- Types of mechanical ventilation; supply, exhaust, balanced
- Other exhausting fans; clothes dryers etc
- Importance of proper installation; noise, serviceability, H&S
- Whole house and local ventilation

Topic: 7.3 Combustion By-Product Risks

Knowledge Areas:

- Health effects of CO and NO₂
- Sources of combustion by-products
- Spillage risks

Topic: 7.4 Filtration & Air Cleaning

Knowledge Areas:

- MERV ratings and installation
- Filter performance factors
- Portable air cleaners: CADR, HEPA filters
- Problems with room purifiers
- DIY Filtration boxes

Topic: 7.5 Airflow Improvements in Homes

Knowledge Areas:

- Ventilation Strategies
- Air sealing as control strategy
- Properly sealed and insulated ductwork
- Occupant education; fan run times, outdoor air

DOMAIN 8: KEEP IT COMFORTABLE

Topic: 8.1 Thermal Comfort and Health Impacts

Knowledge Areas:

- Definition of thermal control
- Health effects of heat/cold exposure
- Vulnerable populations

Topic: 8.2 Heat Transfer & Comfort

Knowledge Areas:

- Heat transfer mechanisms
- Occupant v Building comfort factors
- Climate-zone design factors

Topic: 8.3 Air Sealing & Insulation

Knowledge Areas:

- Role and sequence of air sealing
- Necessity of continuous air barrier & insulation
- Air movement and pollutant control

Topic: 8.4 Energy Insecurity

Knowledge Areas:

- Affordability
- Energy burden
- Power outages

Topic: 8.5 Comfort Strategies

Knowledge Areas:

- Impact of insulation and air sealing on comfort
- HVAC systems (sizing, ducts, registers, maintenance etc)
- House as a system and comfort
- Occupant behavior and education

DOMAIN 9: KEEP IT MAINTAINED

Topic: 9.1 Maintenance Health Impacts and Basics

Knowledge Areas:

- Health effects of poor maintenance
- Vulnerable populations
- Importance of maintenance
- Link to indoor air quality and contaminant control

Topic: 9.2 Routine Maintenance Needs

Knowledge Areas:

- Inspections, cleaning, repair and replacement
- Building structure (eg roofing) and property
- Systems: HVAC, electrical and plumbing etc

Topic: 9.3 Lead Hazards

Knowledge Areas:

- Lead and health
- Sources in homes;
 - Lead based paint:
 - RRP Rule requirements,
 - Lead Disclosure Rule
 - Lead water service lines

Topic: 9.4 Asbestos

Knowledge Areas:

- Asbestos and health
- Sources in homes
- Friable materials
- Safe handling guidance

Topic: 9.5 Radon

Knowledge Areas:

- Radon and health
- Radon entry
- Testing and mitigation methods

Topic: 9.6 Sewer Gas

Knowledge Areas:

- Sewer gas and health
- Sewer gas entry
- Sources and control of sewer gas