




City of Austin

P.O. Box 1088, Austin, TX, 78767

Memorandum

AUSTINCODE
DEPARTMENT

TO: Mayor and Council Members

FROM: Jose G. Roig, Director, Austin Code Department 

DATE: September 3, 2021

SUBJECT: Update on Mold and Rental Housing Response (Resolution No. 20210506-040)

The purpose of this memo is to provide an update on Resolution No. [20210506-040](#), which directed the City Manager to improve the City's response to addressing health and safety issues related to mold and rental housing, provide a report on health and safety issues related to mold and rental housing, and take the steps necessary to implement recommendations as needed to improve the City's response. On August 9, 2021, an [extension of due date memo](#) was requested to allow staff until September 1, 2021 to analyze the topic and provide recommendations to report back to Council.

City staff from the Austin Code Department, Austin Public Health, Housing and Planning, and Homeland Security and Emergency Management have collaborated to produce the attached report. Austin Code will continue to move forward with design and implementation of the recommendations as described. Please do not hesitate to contact me should you have questions.

cc: Spencer Cronk, City Manager
CMO Executive Team
Rosie Truelove, Director, Housing and Planning
Adrienne Stirrup, Interim Director, Austin Public Health
Juan Ortiz, Director, Homeland Security and Emergency Management

Attachment:

Staff Report – Health and Safety Issues Related to Mold in Rental Housing, September 2021

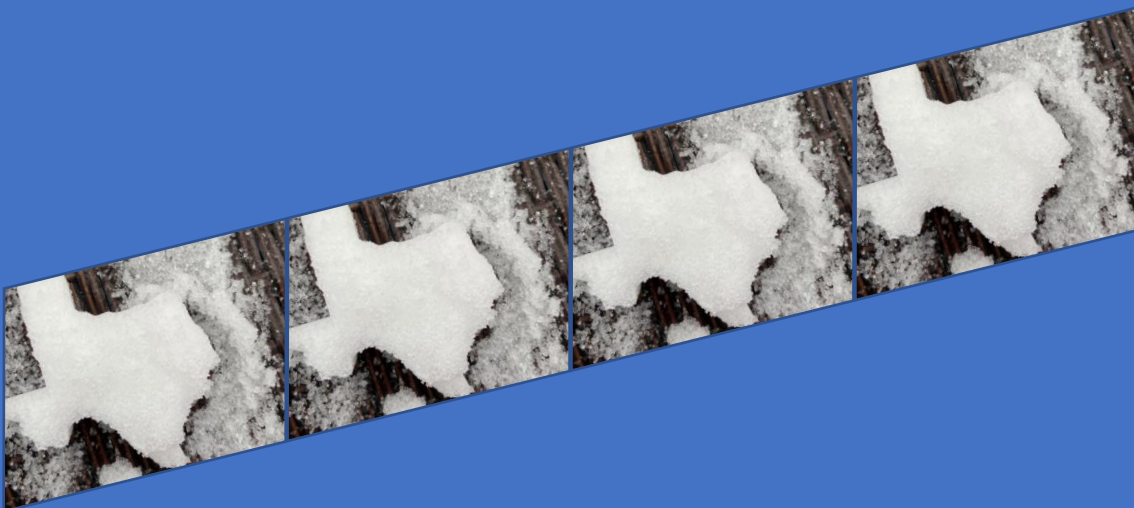


Health and Safety Issues Related to Mold in Rental Housing

City of Austin Code Department

Staff Response to City Council Resolution No. 20210506-040

September 3, 2021



Staff Response to City Council Resolution No. 20210506-040

Background

On May 5th, 2021, the Austin City Council passed [Resolution No. 20210506-040](#), asking the city manager to improve the City's response to health and safety issues related to mold in rental housing. This report is intended to provide background regarding the current practices of Austin Code inspection staff, an overview of the landscape of existing regulations related to mold, a summary of research into how other jurisdictions address mold concerns, and recommendations on how the City of Austin can best improve its response to mold growth in rental housing.

Executive Summary

The City of Austin routinely receives complaints regarding water damage or moisture intrusion, but damage from the 2021 winter storm created a spike in these types of complaints. Currently, the Austin Code Department inspects for the source of moisture that could lead to mold growth.

Research into the landscape of regulation of mold through housing or property maintenance codes indicates that there is not an established best practice for designing ordinances or laws specific to the presence of mold. The State of Texas regulates the industry involved with the sampling, identification, and remediation of mold growth, but does not establish regulations related to the types or quantity of mold in buildings. Additionally, the Centers for Disease Control (CDC) and the Environmental Protection Agency (EPA) do not establish any regulations regarding indoor mold growth, and do not recommend mold testing.

The City of Austin's Housing and Planning Department (HPD) administers several programs that can provide financial assistance to property owners for repairs to housing, which would include work related to mold remediation and prevention. Private renters' insurance also covers expenses a tenant may incur due to a water intrusion issue, including loss of use of the dwelling or materials destroyed by broken pipes or leaks. Homeland Security and Emergency Management reports that the Federal Emergency Management Agency (FEMA) funding is generally not available for repairs to private rental housing.

Based on the findings, City staff provides five recommendations to improve the City of Austin's response to mold in rental housing:

- **Increase access to renters' insurance**
- **Provide additional funding could be provided to the Rental Housing Development Assistance program**
- **Improve inspection practices related to moisture intrusion in rental housing**
- **Establish general repair guides related to water damage**
- **Educate stakeholders regarding utilization of licensed mold assessors and remediators**

To enact the improvements to inspection practices, the Austin Code Department will need to identify funding for approximately \$44,000 for one-time expenses and an estimated \$7,500 in annual expenses.

Health Effects of Mold

Mold is a type of fungus that naturally exists all around us. Mold spores can be found in the air and inside our homes. All that is necessary for mold to grow are moisture and nutrients. Nutrients are generally freely available as any type of organic matter. Wood, paper, dust, and other materials located in buildings provide for surfaces sufficient for mold spores to grow. However, the mold spores will not grow if moisture is not present.¹



People that spend time in damp buildings are more likely to report health problems, including respiratory symptoms, development or worsening of asthma, bronchitis, and eczema.² Given this, it is imperative that rental housing providers and occupants remove any visible mold growth, and take action to prevent conditions that are conducive to mold growth. Additionally, infants, children and seniors may be more susceptible to these potential health issues than adults.³

Current Landscape of Austin Code Enforcement Practices

The Austin Code Department (ACD) responds to all complaints received regarding mold growth in rental housing. ACD issued a memorandum to all code inspectors on July 26, 2020 to improve consistency in responses to these complaints. When investigating a mold growth complaint, the code inspector is expected to look for the source of the water intrusion that is creating an environment conducive to mold growth. However, the code inspector cannot explicitly determine whether mold is present. Visible growth is referred to as a



“mold-like substance” to avoid any complications related to the legal process in identifying the presence of mold. Inspectors look for structural openings or gaps that might allow water to penetrate the interior of a structure, such as around siding, windows, or doors. Other possible sources, such as mechanical equipment or plumbing are also inspected to seek the potential source of water.

¹ A Brief Guide to Mold, Moisture, and Your Home, Environmental Protection Agency, EPA 402-K-02-003.

² NIOSH [2018]. Dampness and Mold Assessment Tool for General Buildings - Form & Instructions. Cox-Ganser J, Martin M, Park JH, Game S. Morgantown WV: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Institute for Occupational Safety and Health, DHHS (NIOSH) Publication No. 2019-115, <https://doi.org/10.26616/NIOSH PUB2019115>.

³ Health & Housing: Mold and Moisture, The University of Texas at Austin Dell Medical School, 2021.

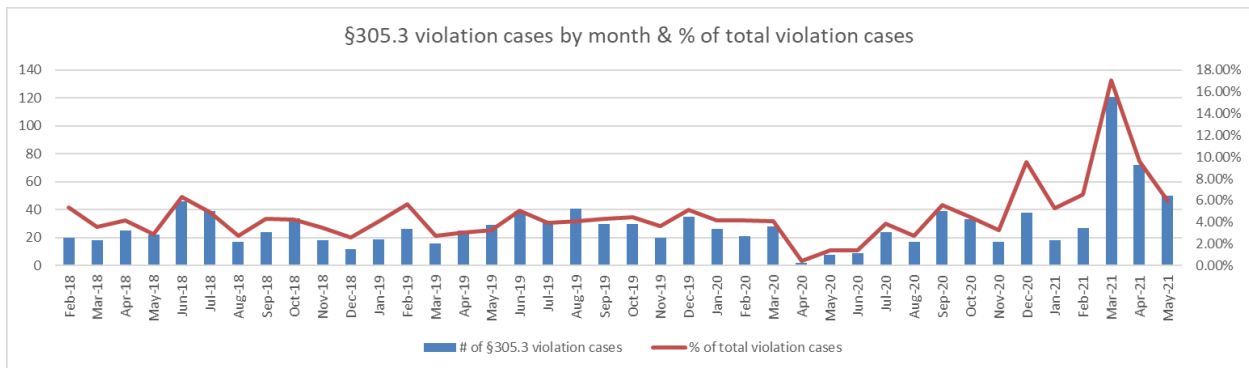
If the inspector can verify a violation, the inspector creates a “Notice of Violation” and the department sends this notice to the property owner via regular and certified mail. The notice contains a reference to the specific code section that is in violation, a recommended remedy to come into compliance, and a timeframe to comply. If the owner fails to correct the violation in a timely manner, and the inspector is not seeing a good-faith effort to comply, the inspector will escalate the violation to an appropriate venue for legal action.



There are three primary venues for legal action available to a code inspector: administrative hearings, municipal court, and the Building and Standards Commission. The type of violation and the severity of the violation help to determine the appropriate venue for legal escalation. A property owner may be financially penalized for the failure to comply with the City of Austin’s codes and ordinances related to property maintenance and sanitation.

Austin Code Data

Water damage to interior surfaces, such as sheetrock, ceilings, subflooring, and cabinets is generally cited under Section 305.3 (Interior Surfaces) in the Property Maintenance Code. Over the last three years, violation cases citing §305.3 average 29 cases per month, which constitutes 4.62%, on average, of the overall violation cases each month.



Source: AMANDA Database, queries dated June 29 and July 1, 2021

As noted in the above chart, the Austin Code Department experienced a sharp increase in the both the number of violations and the percentage of overall cases related to interior surfaces in the months immediately following Winter Storm Uri.

Existing Regulatory Environment

Policymakers have tackled certain indoor air quality issues, such as lead-based paint and carbon monoxide.⁴ However, the regulatory environment for certain indoor air quality issues, including mold, is not well-developed. There are no national or state standards for a “safe” level of mold.⁵ Moreover, the Centers for Disease Control does not recommend routine sampling of molds.⁶



The State of Texas does not directly regulate mold, nor is it included in Texas’ minimum standards for sanitation and health protection measures that are set out in Chapter 341 of the Texas Health and Safety Code. However, the State of Texas regulates companies that engage in mold assessment or mold remediation. Chapter 1958 of the Texas Occupations Code establishes requirements under which a person must hold a license to engage in work related to mold assessment or mold remediation, education and testing necessary to obtain or maintain a license, and liability limitations for property owners that receive certificates of mold remediation.

A land owner is not required to hold a license to perform mold assessment or remediation on residential property if the property contains fewer than ten dwelling units. Additionally, an owner is not required to hold a license if the surface area of mold contamination is less than 25 contiguous square feet.

The City of Austin follows the International Property Maintenance Code® (IPMC®), which is a model code that regulates the minimum maintenance requirements for existing residential and commercial buildings. The IPMC® does not establish any regulations specific to the presence of mold.

Jurisdictional Survey

The Austin Code Department reached out to multiple cities in Texas to inquire about how other jurisdictions address complaints related to mold. Both large cities and smaller, local jurisdictions were researched.

Large Cities (population > 100K)

- Arlington
- Corpus Christi
- Dallas
- El Paso
- Fort Worth
- Frisco
- Garland
- Houston
- New Braunfels
- Round Rock
- San Antonio

⁴ Indoor Air Quality in Rental Dwellings: State Laws Addressing Radon, Mold, and Secondhand Smoke, Environmental Law Institute, April 2021.

⁵ Consumer Mold Information Sheet, Texas Department of Licensing and Regulation.

⁶ Homeowner’s and Renter’s Guide to Mold Cleanup After Disasters, Centers for Disease Control and Prevention (CDC), June 2015.

Small Cities (population < 100K)

- Bastrop
- Buda
- Burnet
- Cedar Park
- Dripping Springs
- Elgin
- Georgetown
- Kyle
- Lago Vista
- Lakeway
- Leander
- Manor
- Marble Falls
- Pflugerville
- Hutto
- San Marcos

The research finds that no jurisdiction in Texas surveyed performs mold testing or cites the presence of mold as a violation. In fact, of all the cities surveyed, only two have the word “mold” written into their respective housing or property maintenance code: Frisco and Garland. Conversations with managers of both jurisdictions revealed that departments, as a matter of practice, cite other provisions within their respective codes and ordinances to address the moisture intrusion, rather than the mold provision itself.

Some states regulate businesses that perform mold assessments, testing, and remediation in a manner similar to that of Texas, including Florida, Tennessee, and Louisiana. Some local jurisdictions in other states place language into their respective housing or property maintenance codes prohibiting persistent “dampness,” though the language used is generally vague and lacking specific actionable targets of measurement. The City of Seattle, for example, requires that all building components be reasonably “damp-free,” however, no definition or actionable measurement is codified.

Staff was unable to locate any regulations related to moisture intrusion, mold growth, or dampness that differentiated between rental and non-rental property. Generally, housing and property maintenance codes apply across all types of property, including residential, commercial, or industrial property.

ChangeLab Solutions, a non-profit organization that provides legal information on public health matters, suggests explicitly identifying the presence of visible mold as a violation of local codes.⁷ However, given the state regulations in Texas around the qualifications and processes required to identify a substance as mold, this approach is not feasible to implement at the local level.

Existing Resources

Staff was unable to locate any jurisdiction that provides relocation assistance to tenants during mold remediation work. The Housing and Planning Department currently administers a variety of programs that help to address substandard living conditions for low-income renters and homeowners.

HPD administers a range of home repair programs that provide assistance to low- and moderate-income homeowners. The three programs mentioned below are for homeowners with households at or below 80% median family income within the corporate city limits of the City of Austin. Eligible repairs include mold remediation.

⁷ Mold & Moisture in the Home, Strategies for Local & State Government, ChangeLab Solutions, 2014.

GO Repair! Program: The program provides financial assistance to make repairs that will eliminate health and safety hazards and make the property as safe and healthy as possible for all potential occupants. The program addresses 29 primary Health and Safety Hazards, including mold remediation. The amount of assistance provided is up to \$20,000 per home.

Minor Home Repair: The program provides repairs that make the property healthy, safe, affordable, and sustainable. Services provided under the program are designed to alleviate actual risk to life, health or safety. The program seeks to preserve the existing housing stock and improve quality of life, thereby allowing owners to remain in their homes. The program is currently administered by the Austin Area Urban League. The amount of assistance provided is up to \$5,000 per home.

The Emergency Home Repair Program: The purpose of the program is to provide emergency home repairs to those impacted by 2021 Austin Winter Storm Uri. The program provides financial assistance to make repairs for the replacement or repair of systems/fixtures that have been damaged and require immediate action to protect the health and/or safety of the occupants. Eligible repairs include repair or replacement of water lines and plumbing fixtures. The amount of assistance provided is up to \$10,000 per home.

HPD's Rental Housing Development Assistance (RHDA) program provides loans to non-profit and for-profit developers of affordable housing. Subject to the requirements and limitations of the sources of program funding, RHDA provides financing for the acquisition, rehabilitation, or new construction of affordable rental housing developments. RHDA loans could be used for the acquisition and rehabilitation of substandard properties. RHDA loans require long-term affordability, subject to a restrictive covenant, and income restrictions to households at or below 50% Median Family Income (MFI).

RHDA program guidelines are available on HPD's website: <http://www.austintexas.gov/page/affordable-housing-development-funding>. Applications are accepted on a quarterly basis.

The Role of Renters' Insurance

One option available to tenants to help protect themselves from some of the financial impacts related to damage from sudden events that cause water damage is renters' insurance. In Texas, renters' insurance policies generally cover personal belongings such as furniture, clothing, electronics and spoiled food. Additionally, renters' insurance policies will generally cover additional living expenses incurred if the tenant has to leave the rented dwelling during repairs, including hotel and added food expenses.



The average renters' policy in Texas costs about \$20 a month.⁸ While some carriers have credit history and employment requirements, the Texas Fair Plan Association is required to provide a policy to those that have been denied coverage by at least two insurers. The Texas Department of Insurance has created Helpinsure.com as a resource where Texans can compare policies and see sample rates for renters' insurance. While renters' insurance is one of the more affordable policy types in the insurance

⁸ Libby Camp Elliot, Texas Department of Insurance, email to author, June 29, 2021

market, even \$20 a month can represent a significant expense to members of our community on fixed incomes, especially given the housing market continues to become less and less affordable to those on the lower end of the income scale.

FEMA

Homeland Security and Emergency Management (HSEM) evaluated existing Federal Emergency Management Agency (FEMA) programs to determine if any exist that assist with mold remediation.

FEMA Public Assistance is likely not a feasible funding source for mold remediation at private rental housing facilities. Under FEMA PA, mold remediation is considered as an emergency repair or stabilization measure (PAPPG Chapter 7:II.X.3, page 136). Eligible emergency repair or stabilization costs are restricted to eligible public facilities, e.g., a facility that the City of Austin owns or has legal responsibility for maintaining. Rental properties are typically considered private properties; thus rendering associated mold remediation costs as ineligible under FEMA PA.

Additionally, FEMA Individual Assistance is likely not a feasible funding source for mold remediation at private rental housing facilities. Under FEMA IA, mold remediation is considered under home repair assistance as a measure to "make the damaged home safe, sanitary or functional" (IAPPG Chapter 3 IV: E, page 86). However, housing financial assistance is limited to owner-occupied primary residences, and in cases of multi-family facilities, limited to the owner-occupied unit.

Staff Recommendations

Based on these findings, staff does not recommend creating regulations specific to the presence of mold, as there are no standards or levels established to use as a basis for designing such ordinance language. However, there are steps the City of Austin can take to improve our response to mold issues in rental housing. City staff recommends the following actions to improve our response to mold issues in rental housing:

- **Increase access to renters' insurance**

The City of Austin could explore the potential of either creating a funding program for qualified tenants to assist with the cost of premiums, or look to foster a non-profit entity that could provide premium assistance or low-cost or no-cost insurance policies to certain tenants.

- **Provide additional funding to the Rental Housing Development Assistance program**

HPD's Rental Housing Development Assistance (RHDA) program is funded through multiple sources, including both federal and local resources. The RHDA program is currently oversubscribed, and funds are awarded through an extremely competitive process. Increasing funding would allow more rental housing providers to leverage programs to make repairs that are supportive of reducing the presence of mold and moisture intrusion in rental housing.

Capital improvements such as roof and siding replacement, window replacement, and plumbing repairs can help make older buildings water tight. Additionally, upgrading HVAC equipment can help control humidity levels, which also decreases the likelihood of interior mold growth.

- **Improve inspection practices related to moisture intrusion in rental housing**

The IPMC® requires that repairs be executed in a workmanlike manner. An identified weakness in the current inspection practice exists in regard to the quality of repair work performed in instances of water damage to walls, ceilings, flooring, and cabinetry. Currently, inspectors identify the presence of water damage, issue a notice of violation, and then perform a follow-up inspection to ensure the repair was completed.

However, it is not known to the code inspector whether the repair conforms to industry best practices related to water extraction and drying. In instances where water damage exceeds 32 square feet (for



commercial structures) or 64 square feet (for single family structures), a building permit is required for the repair of gypsum board. The Development Services Department (DSD) performs inspections on these building permits to ensure compliance with the relevant building codes. When the area in need of repair is below the amount required for permitting, there is not an inspection procedure available to witness the repair process. This creates a situation where repair methods can fail to adequately address the presence of moisture in wall cavities or other concealed areas.

The Austin Code Department researched various tools to help identify areas of abnormally high moisture content. Pinless moisture meters use an electromagnetic sensor pad to measure moisture content up to ¾” of an inch below the surface. For use with non-solid wood materials, such as gypsum board, pinless moisture meters can provide a relative measurement of moisture content compared to a known “dry” area of the same material.

Given the convenience and the avoidance of material damage, the Austin Code Department recommends the utilization of pinless moisture meters to enable code inspectors to take relative moisture content readings of repaired, water-damaged areas to assist in determining if an area was adequately dried before being concealed and closed. The Austin Code Department has engaged the Texas Mold Assessors and Remediation Association (TMARA) to request guidance with developing inspection procedures for Austin Code inspectors related to the appropriate usage of pinless moisture meters and the identification of elevated relative moisture content in porous materials.

- **Establish general repair guides related to water damage**

The Austin Code Department will seek the assistance of TMARA to develop a general outline of steps to be taken when water damage or moisture intrusion occurs. This guide will be made available as an education tool for both housing providers and tenants, so general expectations are clear.

- **Educate stakeholders regarding utilization of licensed mold assessors and remediators**

The Austin Code Department recommends engaging with stakeholders to increase awareness around Chapter 1958 of the Texas Occupations Code as it relates to the required engagement of licensed mold assessors and remediators when mold contamination exceeds 25 contiguous square feet on properties

with ten or more dwelling units. This level of contamination is not a common occurrence, but it will help ensure the appropriate professionals are utilized when required.

Resource Requirements

Moisture Meters

When the Austin Code Department needs to take enforcement action against property owners, inspectors rely on lab-calibrated equipment that provide reliable and accurate results. Unfortunately, that requires the department purchase pinless moisture meters that are more expensive than the standard models available in home improvement stores. Base models in home improvement stores can cost as little as \$40 per unit. However, for lab-calibrated models, the cost will increase to roughly \$500 per unit.

To outfit all code inspectors with this equipment will require a one-time cost to the department of approximately \$40,000. Most models have warranty periods from 5 to 7 years, so the department will need to refresh these devices as they exit the warranty periods to maintain the reliability of the readings obtained.

Due to the budgetary impact, ACD recommends a phased implementation approach where equipment is purchased in batches over the course of the next 2 to 3 years. This will spread the cost across multiple years and allow for the cycled refresh of these devices over time rather than large, one-time outlays. This approach will also allow the department to test the implementation of inspection procedures to identify any gaps or problems before the full equipment purchase is made.

Training

The Institute of Inspection Cleaning and Restoration Certification offers a certification as a Water Damage Restoration Technician (WRT). This training provides concepts of water damage, its effects, and techniques for the drying of structures. The course provides background regarding procedures for dealing with different types of water damage, from potable water to grey and black water. The three-day course costs \$400 for each participant. ACD recommends sending our most experienced inspectors to this training to help improve our internal training practices around this issue.

The one-time cost would be approximately \$4000, with ongoing yearly costs of roughly \$800 to account for attrition and promotions.

