

Welcome



HAMILTON COUNTY
PUBLIC HEALTH

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Housing and Nuisance with a Focus on Vectors

Tucker Stone, RS
Registered Sanitarian/Supervisor
tucker.stone@hamilton-co.org
(513) 946-7833
www.hamiltoncountyhealth.org

Who Are We?

- Hamilton County Public Health serves 475,000 residents and 46 jurisdictions.



Inspector Job Duties

- Food Service Operations
- Swimming Pools
- Smoke Free Ohio
- Nuisance and Housing
- Education
- School Inspection
- Public Accommodations
- Campgrounds
- Mobile Home Parks
- Mosquito Surveillance

Housing and Nuisance

- Who has authority?
- Is zoning in play?
- Does local health have a housing/nuisance program?
- What are the limitations of enforcement?
- Today we will discuss:
 - Pest Control
 - Hoarding

Abatement - ORC Authority

3707.01 Powers of board - abatement of nuisances.

The board of health of a city or general health district shall abate and remove all nuisances within its jurisdiction. It may, by order, compel the owners, agents, assignees, occupants, or tenants of any lot, property, building, or structure to abate and remove any nuisance therein, and prosecute such persons for neglect or refusal to obey such orders. Except in cities having a building department, or otherwise exercising the power to regulate the erection of buildings, the board may regulate the location, construction, and repair of water closets, privies, cesspools, sinks, plumbing, and drains. In cities having such departments or exercising such power, the legislative authority, by ordinance, shall prescribe such rules and regulations as are approved by the board and shall provide for their enforcement.

The board may regulate the location, construction, and repair of yards, pens, and stables, and the use, emptying, and cleaning of such yards, pens, and stables and of water closets, privies, cesspools, sinks, plumbing, drains, or other places where offensive or dangerous substances or liquids are or may accumulate.

When a building, erection, excavation, premises, business, pursuit, matter, or thing, or the sewerage, drainage, plumbing, or ventilation thereof is, in the opinion of the board, in a condition dangerous to life or health, and when a building or structure is occupied or rented for living or business purposes and sanitary plumbing and sewerage are feasible and necessary, but neglected or refused, the board may declare it a public nuisance and order it to be removed, abated, suspended, altered, or otherwise improved or purified by the owner, agent, or other person having control thereof or responsible for such condition, and may prosecute him for the refusal or neglect to obey such order. The board may, by its officers and employees, remove, abate, suspend, alter, or otherwise improve or purify such nuisance and certify the costs and expense thereof to the county auditor, to be assessed against the property and thereby made a lien upon it and collected as other taxes.

Effective Date: 10-01-1953

Local Authority - HCPH

- Authority granted by HCPH Environmental Sanitation Regulation No. 1-67
 - A regulation establishing minimum standards of hygiene and sanitation governing the condition, maintenance, and space occupancy of dwellings; establishing minimum standards governing supplied utilities and facilities and other physical things and conditions essential to make dwellings safe, sanitary, and fit for occupants of dwellings; establishing minimum standards governing the condition of dwellings offered for rent; fixing certain responsibilities and duties of owners and occupants of dwellings; authorizing the inspection of dwellings and the condemnation of dwellings found to be unfit for human habitation.
 - Whereas, in the Hamilton County Health District there are, or may in the future be, dwelling structures which are so dilapidated, unsafe, dangerous, unhygienic, or insanitary as to constitute a menace to the health and safety of the occupants thereof and of the people of the Hamilton County Health District

Vectors of Concern

- Integrated Pest Management
 - Roaches
 - Flies
 - Bedbugs
 - Rodents
 - Raccoons
 - Fleas



Pest Infestation

- Integrated Pest Management
 - Deny pest entry
 - Door sweeps
 - Window screens
 - Drain covers
 - Inspect inventory when it comes in
 - Talk to employees about good practices

Pest Infestation

- Deny food and harborage
 - Remove cardboard boxes from facility
 - Provide a place for teacher's food and enforce that it is stored there
 - Remove all cracks and crevices from you facility
 - Keep the school clean and sanitized and keep all food away during off hours; food should not be stored there over night

- Work with your licensed PCO
 - Do not apply any pesticides within your facility
 - Follow the PCO if possible
 - PCO should place multiple monitoring stations throughout your facility; you need to check frequently

Oriental Cockroaches

- Oriental cockroaches are often called water bugs because of their preference for dark, damp, and cool areas such as those under sinks and washing machines, and in damp basements. This species, which is less wary and more sluggish than the others, is of concern because it often travels through sewer pipes and lives on filth.



American Cockroaches

- American cockroach adults are 1 and 1/2 inches long (38mm), making them the largest of the house-infesting cockroaches. With reddish brown, fully developed wings, the American cockroaches have a yellowish margin on the thorax or body region behind the head. When disturbed, they may run rapidly and adults may fly. Immature cockroaches resemble adults except that they are wingless.



German Cockroaches

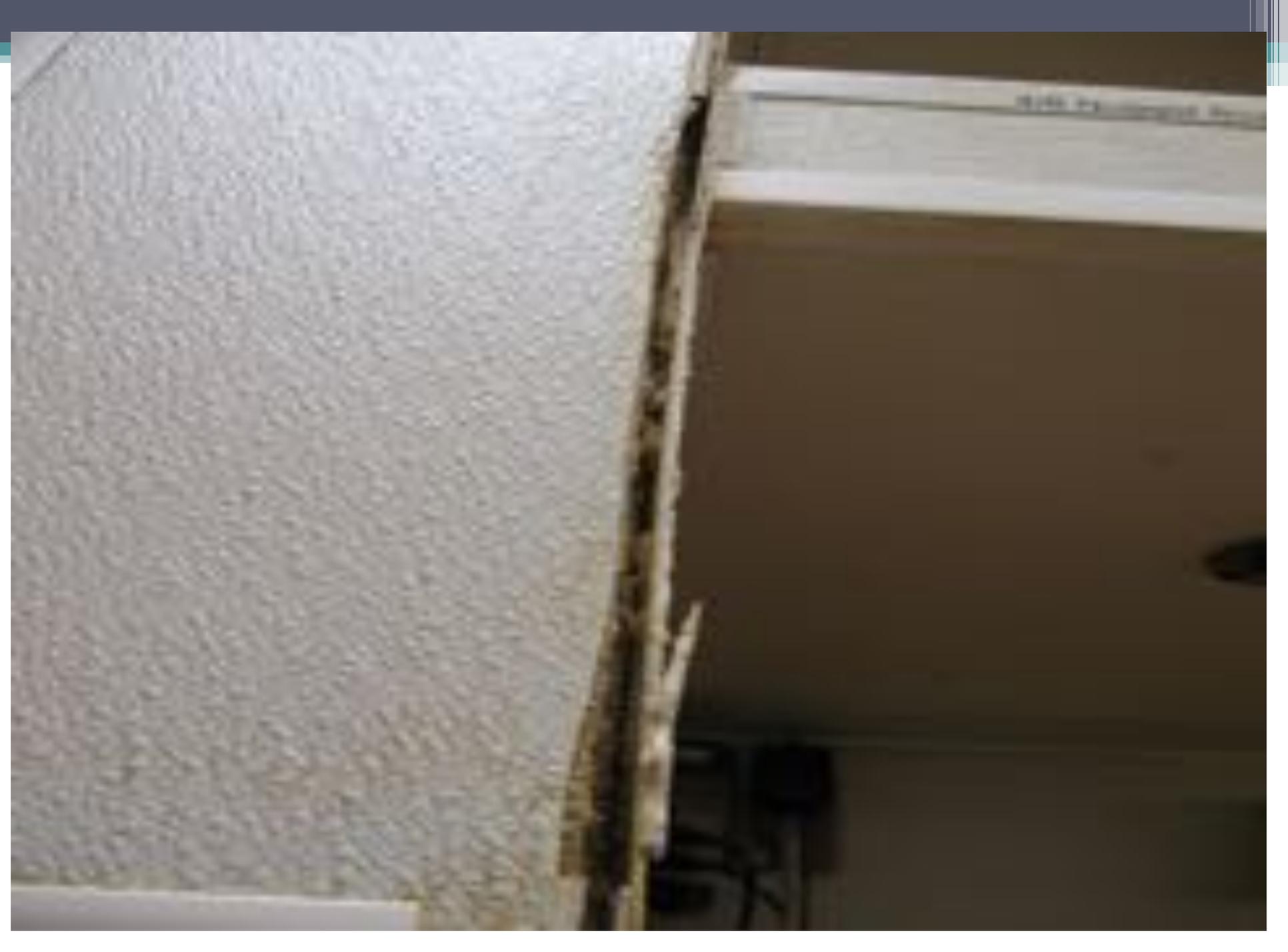
- Adult German cockroaches are 1/2 to 5/8 inch long and tan to light brown (Fig. 1). Although they have fully developed wings, they do not fly. Nymphs are similar in appearance to adults except that they are smaller and lack wings. The German cockroach is best identified by its small size and by two dark parallel lines running from the back of the head to the wings. It is usually found in kitchens (near dishwashers, stoves, and sinks) and in bathrooms of homes.





Blattella germanica







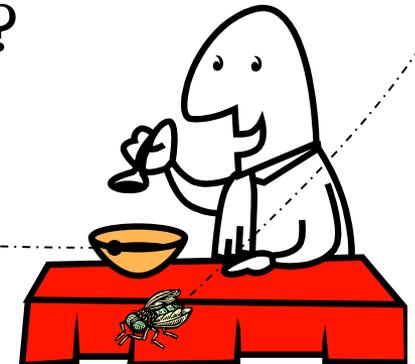
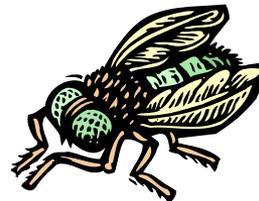


What happens when a fly lands on your food?



- Flies can't eat solid food, so to soften the food, they vomit on it.
- Then they stomp on the vomit-food combination, mixing in some good germs.
- When the mixture is nice and runny, the flies suck it all back in again, along with dropping some excrement at the same time.
- And when they are done eating, guess what?

• **ITS YOUR TURN**



Fly Prevention

- Use screens on all windows and other openings
- Identify and clean up the source of insect attraction and breeding
- Physical traps (sticky paper)
- Fly food attractants



TOWELS
ONLY
↓







FLY SWATTING TALLY

TOM: 1 (capture & release)

Jillie: IIII

Heidi: III

emily: $\frac{1}{2}$ |

Corie: III

Kristen: IIII

anna: 1

valerie: 1

dolaney: II

Buck: II

aire: 1

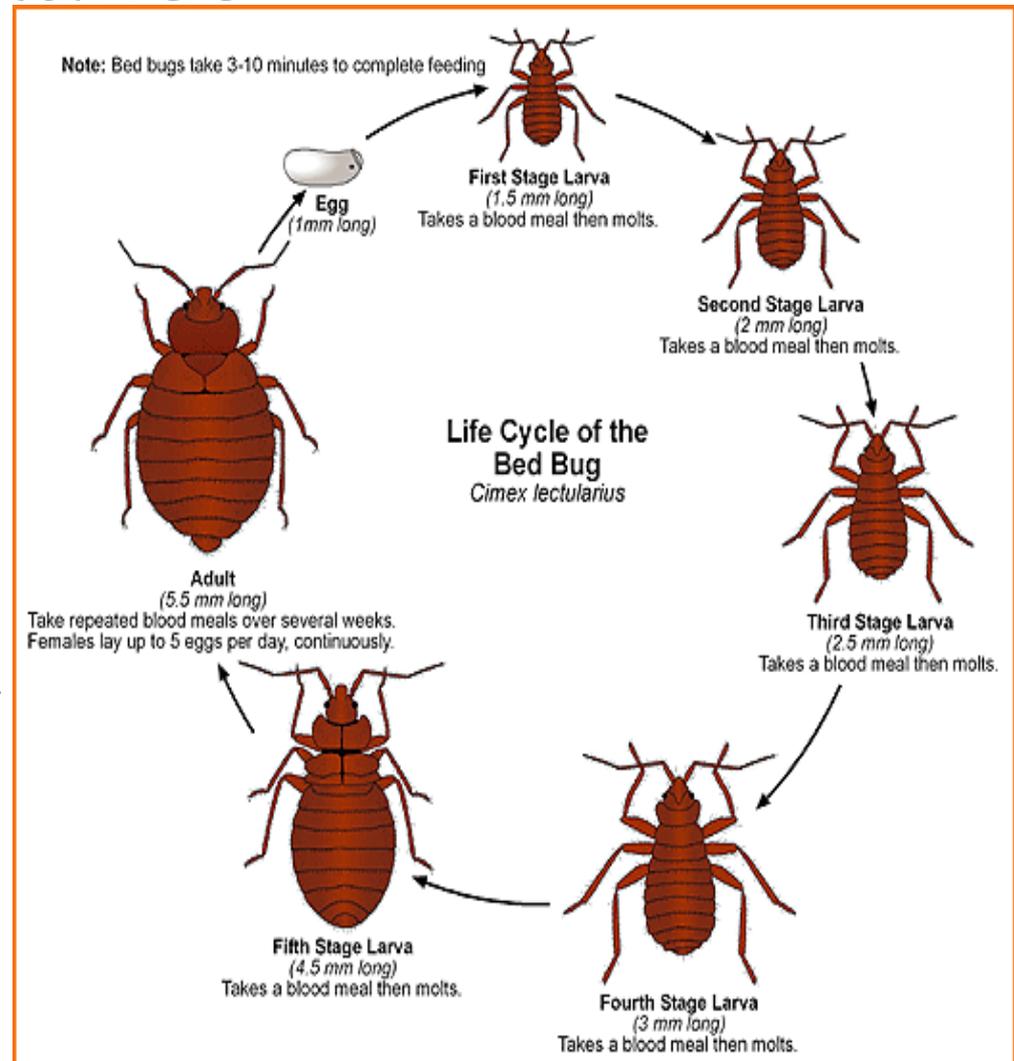
Kevin: II

Clayton: II

Chandler: 1,000,000 . . .

Bed Bugs at a Glance

- *Cimex lectularius*
- Life Cycle
 - Egg
 - 5 Nymphal Stages
 - Adult
- Adults are 1/4 inch in length
- Insect that feeds on blood



Bed Bugs at a Glance

- Body is flat with bristles
- Orange/rust color (adult)
- Opaque color with red spot (Nymphs)



Bed Bug Life Cycle

- Can live up to 2 years without feeding
- Females can lay 3 to 12 eggs/day
- Eggs develop in 21 to 120 days
- Depends of temperature

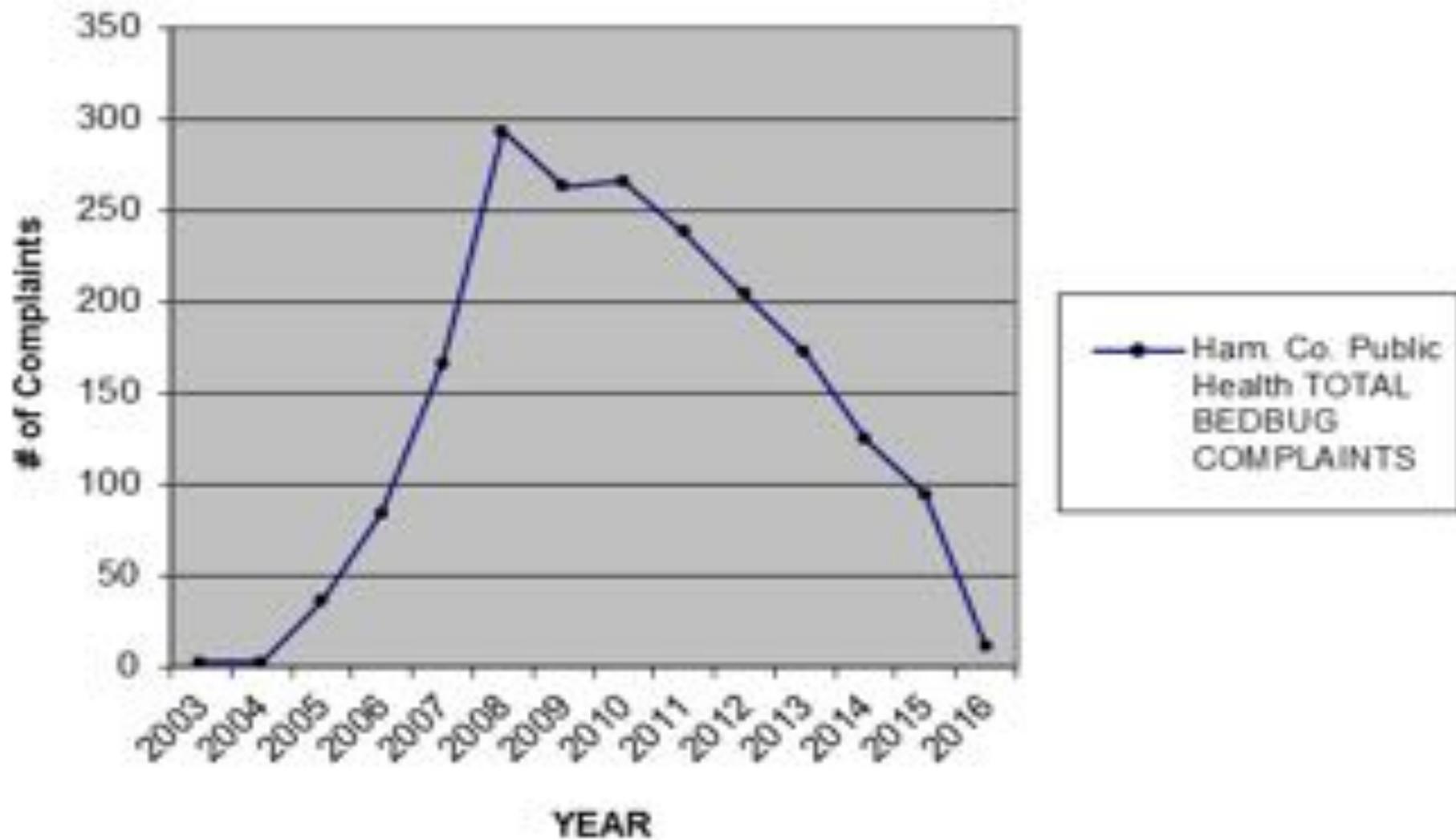




Bedbugs.....



Ham. Co. Public Health TOTAL BEDBUG COMPLAINTS 2003 to 2016



A Bed Bug's Environment

- Harbor on/ in furniture, bedding, wall voids, carpet, etc.
- Will feed on animals (i.e. pets, raccoons, etc...)
- Can living in nesting material of pets/ animals



How Do They Spread?

- Second hand furniture
- Transportation of new furniture
- Under doors, through electric outlets, under walls
- Transient residents
 - Personal affects
- Visiting infested places (clothes, affects)



Density Perspective

If **40** bed bugs are in a room that is maintained at 70° F on August 17, there will be **5905** bed bugs by February 17.



Medical Importance

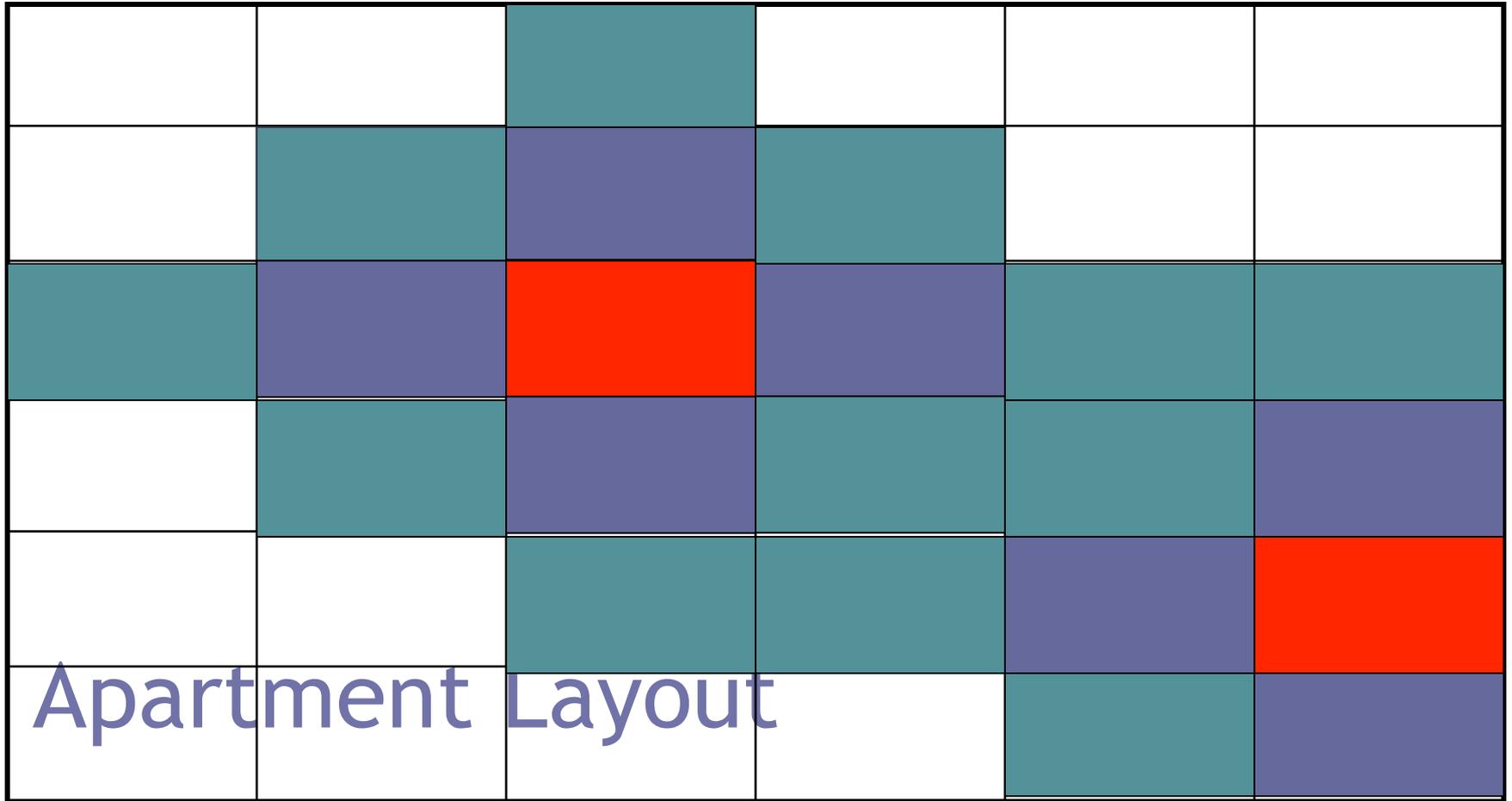
- Detect us through CO₂ emission.
- Never proven to transmit any pathogens to humans
- Bites can cause the following conditions: Erythema, Pruritus, Insomnia, Nervousness, Anxiety, Anemia
- Bites will be on the exposed skin on the body



Apartment Treatment

- Multiple units
- Treatment plan
- Coordination of residents and exterminator
- Exterminator fees
 - Who pays?
 - Legal Aid Society of Cincinnati
- Dumpster control





Home Environment

- Look for signs of bedbugs
 - Live bugs
 - Exoskeletons
 - Fecals
- Bites on body



Bed Bug Control Measures -

- Treatment
 - Commercially licensed exterminator
- Vacuuming
 - Emptying vacuum
- Steam heat (120° F to 140° F)
- Mattress and box spring covers
- Laundering clothes and linens



Things to Avoid

- Spraying alcohol
- Self treating
- Avoiding the issue
- Lots of visitors
- Second hand furniture
- Clutter



1 Hurt, 14 Displaced By Colerain Twp. Apartment Fire Most Damage Contained To One Unit

POSTED: 8:15 am EDT October 13, 2009

UPDATED: 8:40 am EDT October 13, 2009

COLERAIN TOWNSHIP -- One person was injured and more than a dozen others forced from their homes after an apartment fire in Colerain Township early Tuesday.

The fire broke out at 311 Wexler Court just after 3 a.m. in an upstairs apartment.

Firefighters said the residents had been spraying for bugs with an alcohol-based solution when one of the residents lit a cigarette. The resulting flash fire ignited the room's contents.

The residents were able to escape along with their 4-month-old baby. Firefighters and sheriff's deputies helped evacuate several people from upper floor apartments.

One person was treated for smoke inhalation. Another 14 had to stay out of the their apartments until the fire and smoke were cleared.

Damage is listed at \$20,000.

Bed Bug Control Measures

- Professional extermination
- Discard furniture (only if exterminator recommends)
- All involved **must** work together to solve issue
- Avoid picking up disposed furniture
- Carefully inspect second hand furniture before bringing into your home
- Perform luggage and room inspections while traveling
- Perform routine inspections, if unable to do so install monitoring traps
- Be aware of signs of bed bugs and act quickly to resolve
- Be aware of surroundings and who is visiting your home
- Be aware where you have visited and what you take with y

Bedbug Monitoring Traps





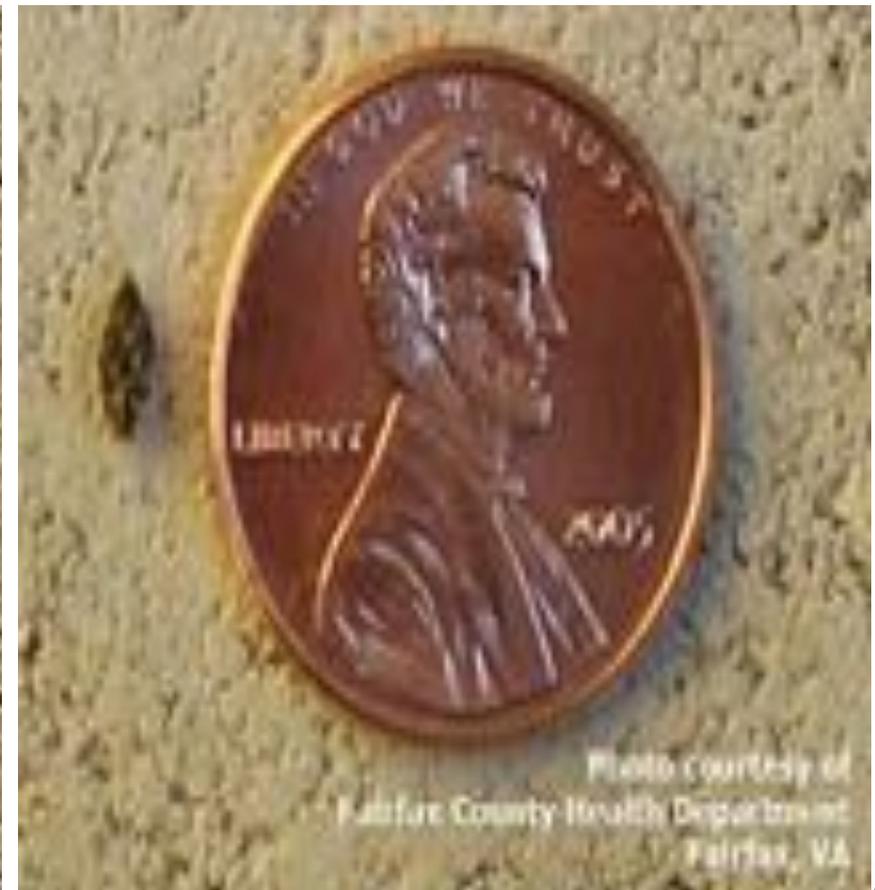


Rodents

Mice and Rats

- Seal off all entry points (if you can fit your thumb)
- Store food in sealed containers (rodent proof)
- Check for burrows
- Remove foods
- Snap traps
- Monitoring traps
- Bait

Rat vs. Mouse















Raccoons

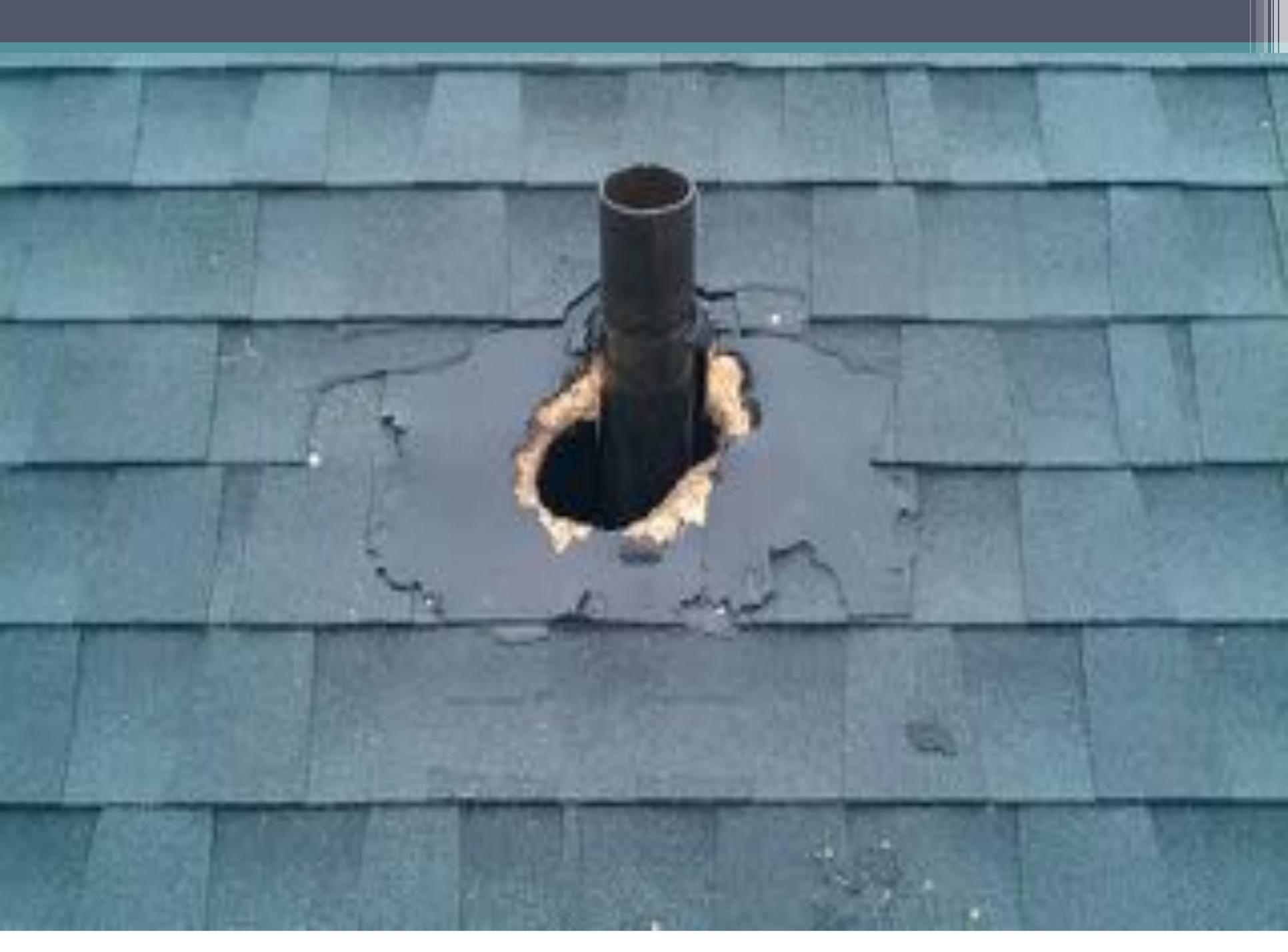
- Nocturnal
- Reproduction begins in late winter, where the female will give birth to 1-6 kits in April or May
- Raccoons possess amazing skills with the ability to open doors, jars, bottles and latches; they are also great climbers
- Typically enter homes through soffits, vents or at the roof edge



- It is illegal to transport a potential Rabies carrier in the state of Ohio
- It is illegal to euthanize any animal in an inhumane way









Fleas

- Identification
 - 1/8 inch long
 - Dark reddish / brown
 - Wingless
 - Flattened laterally
 - Excellent jumpers
- Female will lay 15 to 20 eggs a day
- Eggs hatch in 2 to 14 days
- Adult fleas feed on blood

Flea Control Measures

- Inspection of your pets
- Sanitation , vacuuming with strong vacuum and removing all pet hair
- Fleas control methods for your pets
 - Best to obtain through your veterinarian
- Pesticide
 - Pesticide should only be used after all other interventions have been completed







Hoarding and Condemnations

- Authority by ORC 3701.01
- Local authority – Environmental Sanitation Regulation No. 1-67, Section 6.0:

SECTION 6.0 – DESIGNATION OF UNFIT DWELLINGS AND LEGAL PROCEDURE OF CONDEMNATION

6.1 Any dwelling or dwelling unit which shall be found to have any of the following defects shall be condemned as unfit for human habitation and shall be so designated and placarded by the health commissioner.

- (a) One which is so damaged, decayed, dilapidated, insanitary, unsafe, or vermin infested that it creates a serious hazard to the health or safety of the occupants or of the public.
- (b) One which lacks illumination, ventilation or sanitation facilities adequate to protect the health or safety of the occupants or of the public.
- (c) One which because of its general condition or location is insanitary, or otherwise dangerous to the health or safety of the occupants or of the public.

6.2 Any dwelling or dwelling unit condemned as unfit, for human habitation, and so designated and placarded by the health commissioner, shall be vacated within a reasonable time as ordered by the board of health and shall remain vacant until written approval is secured from the board of health.

Local Authority - HCPH

- Enforce regulation based on complaints
 - Landlord – tenants
 - Police/ fire/ jurisdiction officials
 - Job and Family Services
 - Care takers
 - Family members
 - Neighbors/ public

Types of Complaints (5 day response)

- Hoarding/Accumulation of belongings
- Insects and rodents
 - Mice, rats, bedbugs, roaches
- Pet/ Human Waste
- No Heat
- No Utilities
- Mold/ Flooding
- Leaks
- Mosquitoes/ stagnant water
- AC/ appliances furnished
- Plumbing back-ups
- Odors
- Other Animals (Wildlife)
- Unsecure Structures

Types of Hoarders

- Organized Hoarders
- Disorganized Hoarders
- Specific Collectors
- Non-specific Collectors
- Animal Hoarders
- Savers
- Buyers

Health and Safety of Hoarding

- Disease/ Death
- Fire/ Health Hazard
 - Life and safety
- Trip Hazards
- Goat Paths
 - Live saving stretcher
- Mental Capacity
- Structural Issues
 - Load in home
- Effect on Neighbors/ Caretakers
- Social Wellbeing
 - Visitors/ family

Goat Path/ Disorganized



Fire Hazard



Tips & Strategies

- Encourage Social Support
- Demonstrate the value of environmental change can increase social visitation in the house.
- Make referrals, communicate with, and work collaboratively with other agencies for enforcement
- Explain the limitations of your authority to any referring organizations before you enter the home

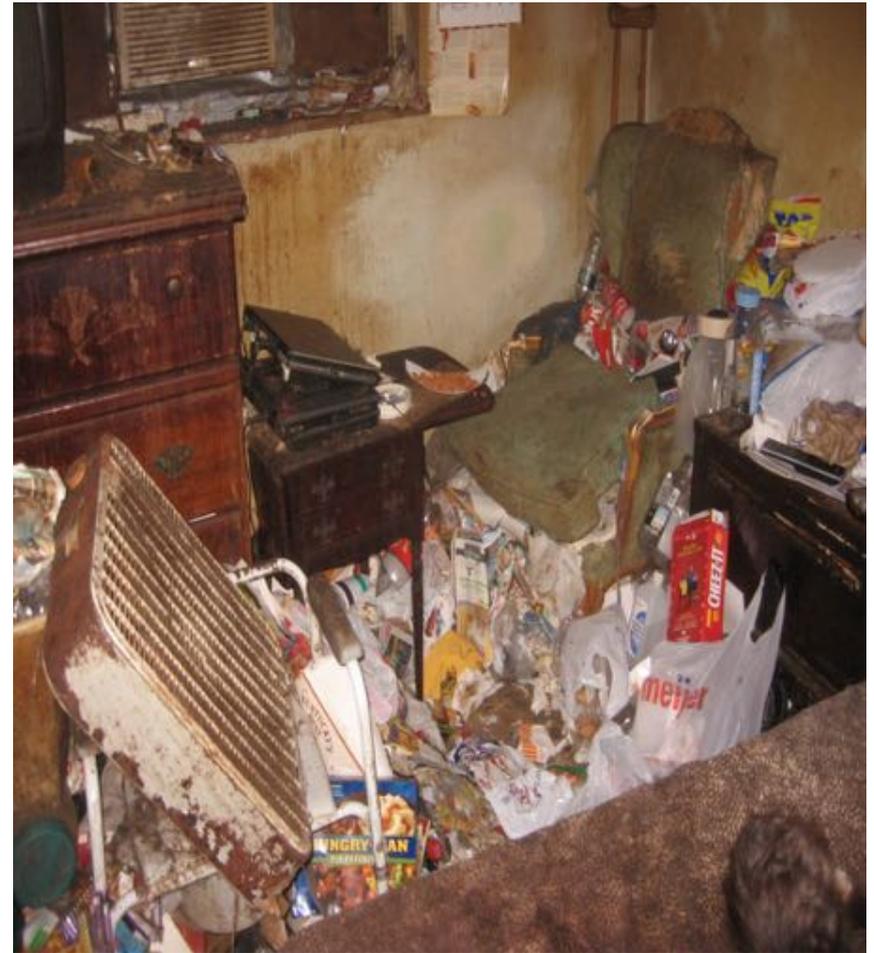
HCPH Case #1

- One elderly and another person living in home
- Refused entry
- Complaint came in from our WQ division for smell, fleas, and flies
- Entered home via search warrant
- Home was condemned
- Both occupants removed for mental evaluation

HCPH Case #1



HCPH Case #1



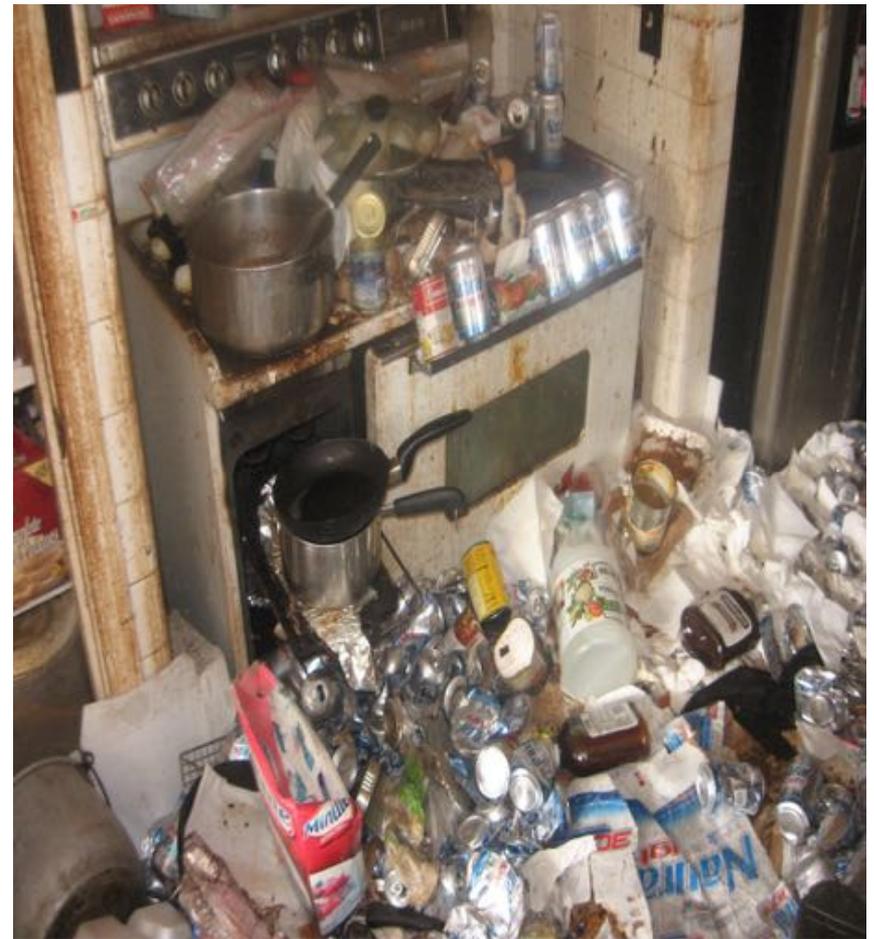
Hoarding Case #1



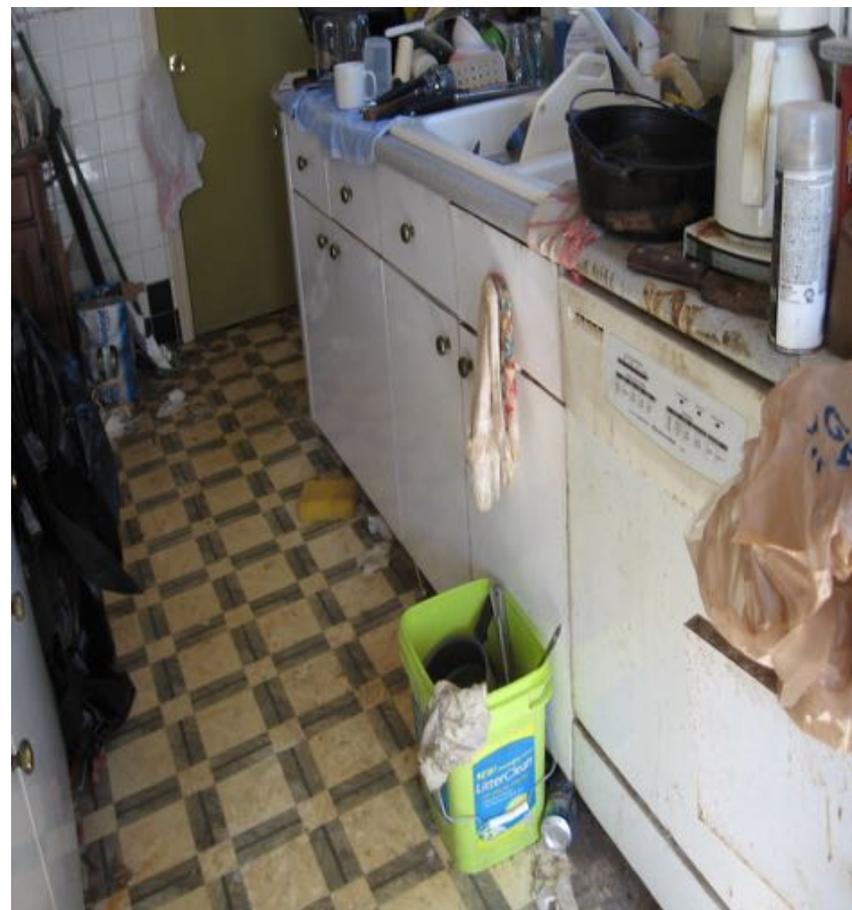
HCPH Case #2

- Elderly man living alone
- Denied entry on numerous occasions
- Outside was just as bad as inside
- No central heat, only space heaters
- Call came from EMS after a run there
- Home was condemned

HCPH Case #2



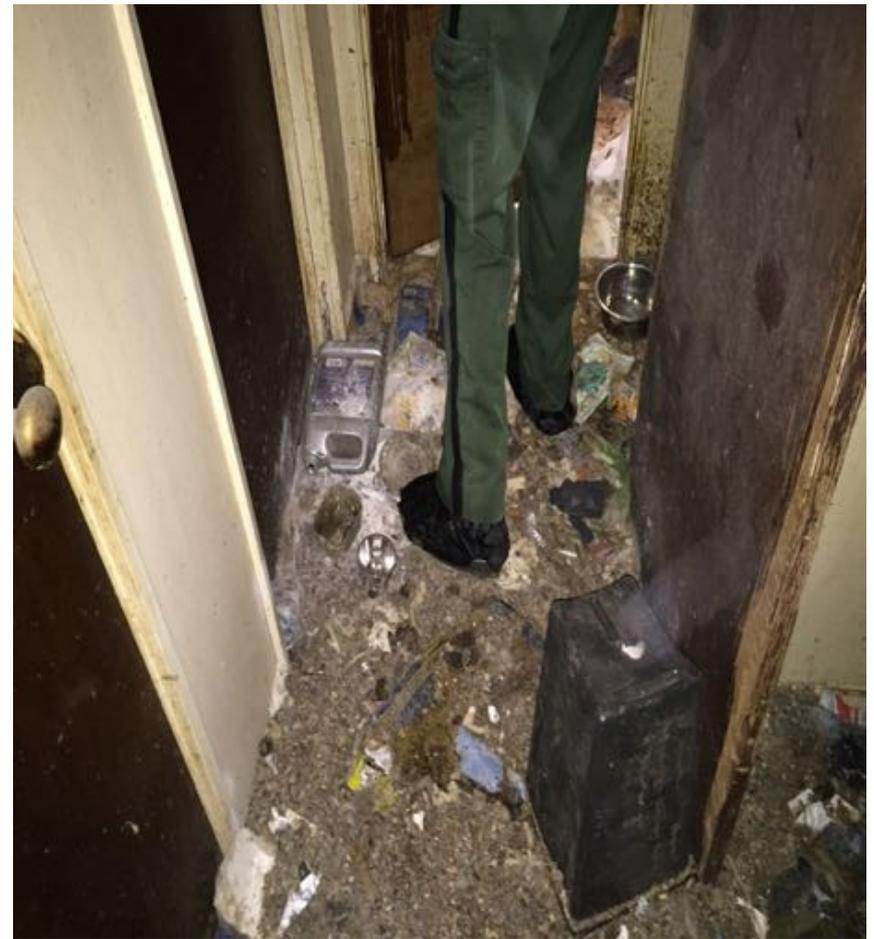
HCPH Case #2



HCPH Case #3

- Call from Forest Park Fire, when they responded to dogs running in the street around the property
- Home given up to animals by owner
- Owner was living down the street
- No pathways
- Unsanitary
- Animal hoarding
- Fleas
- Large amount of animal waste
- Home is boarded and remains condemned

HCPH Case #3



HCPH Case #3



HCPH Case #3



HCPH Case #4

- Older resident 65 +
- Mobile home
- Adult protective involved
- Condemned and resident still living at the home
- Removed by Mobile Crisis after 2 years – mental hold
- Pictures take to social worker/ doctor at hospital
- Testified at guardianship hearing
- Assigned guardian

HCPH Case #4



HCPH #4



HCPH #4



HCPH Case #5

- Complaint of 60-70 cats in home.
- Elderly resident.
- Cat feces seen on his body.
- SPCA had removed some cats the week prior.
- Mobile home

HCPH #5



HCPH #5



HCPH #5



HCPH #5 - Outcomes

- Home condemned.
 - Ammonia, animal waste, unsanitary.
- Ammonia reading at 50 ppm. The OSHA PEL for ammonia is 50 ppm.
- Resident taken to the hospital by Sanitarian
- Resident gave home to park
- Family member took him in
- Placed in nursing home
- Home removed from park

Road Blocks for Help

- Agencies for assistance
 - Money, services, mental help
- Family assistance
 - Resistance
 - Ability to help
- Resident unwilling to accept help
- Twp./ city officials involved
- Prosecutor help
 - Search warrants, assistance

Things to Remember

- Work with other agencies to reach goals
- Establish relationship with resident and/ or family to reach the goal of living back in their home and living a healthy life
- Stress that it is unsanitary, unhealthy, and hazardous for their health
- Provide as many resources as possible to the resident
- Involve cities, villages, and township officials when appropriate
- Prepare for the worst

Healthy Life

- Everyone deserves to live in a healthy and safe home
- Cooperation and teamwork is a must
 - Must work with agencies and people trying to help
- Sometimes painful and long process

Questions?

Tucker Stone, R.S.
Supervisor of Environmental Health

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