

MONTEREY COUNTY

OFFICE OF EMERGENCY SERVICES

1322 Natividad Road, Salinas CA 93906

Phone: (831) 796-1900 • Fax: (831) 796-1911

DATE:

TO: Food Organization owners, supervisors, and managers

FROM: Monterey County Office of Emergency Services

TOPIC: Disaster preparation for organizations

We at Monterey County Office of Emergency Services (OES) are sending you this letter to provide you information and guidance to help prepare your organization for disasters. While many disasters cannot be avoided, their impacts can be reduced when we take the right steps to prepare. The food industry is a key part of our community, feeding and providing employment for our residents and helping to keep our economy strong. During disasters, your ability to withstand and quickly recover from disaster can help protect your business, your staff, and your customers. Please review the attached flyer and follow the steps to prepare your facilities and staff to respond and recover from any and all kinds of emergencies.

If you are interested in getting connected with other food organizations, contact the Monterey County Food System Coalition at montereycountyfpc@gmail.com and take the Food System Network Expansion Survey at: <https://arcg.is/10ymL8>

If you are interested in being contacted regarding disaster preparedness training, funding and collaboration opportunities and/or if you have any questions or concerns, feel free to call 831-796-1923, email info.oes@co.monterey.ca.us or attend OES' Community Office Hours to talk one on one with OES staff. OES Office Hours occur on zoom from 6pm to 7pm on the 2nd and 4th Tuesday of every month:

- Link: <https://montereycty.zoom.us/j/91243093461>
- Call in: 669-219-2599
- Meeting ID: 91243093461#
- Password: 819822

You can learn more about Monterey County OES, read our emergency plans, get active disaster information, and learn more about disaster preparedness by visiting our website at www.co.monterey.ca.us/OES .



HOW TO PREPARE YOUR ORGANIZATION FOR DISASTER

Take the 5 steps outlined below to strengthen your organization's capability to withstand, respond to, and recover from disaster. For more detailed disaster prep guidance download the resilience toolkits at www.co.monterey.ca.us/resilience or visit www.ready.gov

1. MAKE A PLAN

- Your organization's emergency plan should consider the potential disaster impacts and how to respond to different disasters, reduce and recover losses, and continue/restart/expand services during disasters.

2. BE READY TO USE THE PLAN

- Sign up for Alert Monterey County** at www.alertmontereycounty.org to receive local emergency alerts, such as evacuation notices.
- Train staff on your emergency plans**, practicing your plan at least twice a year at different times, from different starting points and for different disasters. The more you practice, the better prepared you will be.

3. GATHER SUPPLIES

- A 3-day supply bag with resources for evacuations.** Consider what resources you will need to recover losses for your organization and/or run operation virtually or from another location.
- A 2-week supply of resources** in case staff must shelter in place at your facility.
- A cache of supplies to help you restart, continue, or expand operations during a disaster** (ex. generator, backup equipment, etc.)

4. PROTECT STAFF & PROPERTY

- Modify buildings** for their hazard risk (ex. earthquake retrofits or elevating buildings for flooding/tsunamis). Talk to your local building/planning dept for guidance.
- Make sure your business is properly insured** for your hazard risk. The size, type, and location of your business will determine the appropriate types of insurance needed. Remember that standard business policies do not typically cover flooding, cyberattacks, or terrorist attacks.
- Encourage staff to make their own household emergency plans and kits**

5. BUILD A NETWORK

- Create a strong relationship between your organization and the larger Monterey County community**, including local organizations, first responders, and emergency management. Developing these relationships pre disaster can help you more quickly find resources and information during disasters. Start by contacting the County Office of Emergency Services (*contact info provided below*)
- Make agreements with 3rd party contractors** to ensure you have back up equipment, staff, supplies, and/or facilities during emergencies.
- Consider how your organization's staff and/or customers can work together during disasters** (ex. carpool during evacuations, share supplies, etc.).



STEPS FOR CREATING YOUR DISASTER PLAN

Every organization should have an emergency plan to help manage and continue/restart operations when disaster strikes. Read below to learn how to develop your disaster plan. For a fillable plan template visit:

[Mema.maryland.gov/Documents/FEMA_Small Business Continuity Plan Template.docx](http://Mema.maryland.gov/Documents/FEMA_Small_Business_Continuity_Plan_Template.docx)

1.

ASSESS RISK & POTENTIAL IMPACTS

- What are your organization's hazard risks?
- How will your organization be impacted?
- What services and functions could be impacted?
- How will this impact customers, finances, regulations, operations, reputations, staff, and the community?

More on conducting a risk assessment: www.ready.gov/risk-assessment

2.

IDENTIFY NEEDED RESPONSE

Include procedures in your emergency plan for evacuations, sheltering in place, and specific response measures for different types of disasters.

- What should staff and leadership do during and directly after each disaster?
- What should be done if staff must evacuate or shelter in place? Where should they go?
- How will staff communicate with one another, leadership, and customers?

3.

PRIORITIZE FUNCTIONS

Review and prioritize your organization's services and functions based on impact to life/safety, organization losses, and time you can go without the function. Consider what you will need to continue/restart services and functions. What staff, facilities, and equipment will you need?

4.

DEVELOP A STRATEGY TO CONTINUE OPERATIONS

Consider ways to continue or restart services during and after disasters.

- Where can you get backup equipment, facilities, providers, staff, and any other resources you will need for operations?
- How long would it take to resume services?
- If demand for services grows, do you have the staff, supplies, and experience to manage operations?
- What partners should you be working with as you conduct operations?

5.

DEVELOP A RECOVERY STRATEGY

- What are the potential losses you may have due to a disaster? (ex. temporary shutdowns, damage to facilities, expanded services, changes to supply and demand, staff unavailability, etc.)
- How will you recover losses created by disaster? Consider what your insurance will and won't cover and how you will recover losses not included in your insurance policy. What other resources are available to you?



RESOURCES TO HELP YOUR ORGANIZATION THROUGH DISASTER PREPAREDNESS, RESPONSE, AND RECOVERY



DISASTER RESPONSE TRAINING

- **American Red Cross of the Central Coast** - Phone: 831-624-6921. Website: www.redcross.org/take-a-class/disaster-training
- **Bay Area Urban Area Security Initiative** - <http://www.bayareauasi.org/programs/training>
- **California Office of Emergency Services** - www.caloes.ca.gov/office-of-the-director/operations/planning-preparedness-prevention/california-specialized-training-institute/
- **CERV of the Monterey Peninsula** - Phone: 831-649-3050. Website: www.cerv501c3.org/pages/training-1
- **FEMA's Emergency Management Institute Classes** - <https://training.fema.gov/emi.aspx>
- **Listos California** - <https://www.listoscalifornia.org/disaster-preparedness/>
- **FEMA Online Preparedness Training**: <https://community.fema.gov/PreparednessCommunity/s/open-training>
- **FEMA Preparedness Resources**: www.fema.gov/emergency-managers/individuals-communities/faith



DISASTER INFORMATION AND RESOURCES

- **Find disaster information and resources via phone 24/7 in 170+ languages** by calling 2-1-1 or texting your zip code to 898-211.
- **Find active disaster information online** on Monterey County Office of Emergency Service's
 - Website: www.co.monterey.ca.us/OES
 - Twitter: @MontereyCoOES
 - Facebook: @MontereyCountyOES
- **Find recent emergency alerts** in Monterey County by visiting the notification tab on the top right of Alert Monterey County's webpage: www.AlertMontereyCounty.org/
- **Find potential disaster response and recovery resources online** at: www.co.monterey.ca.us/DisasterResources



FINANCIAL ASSISTANCE

- **Programs and assistance for disaster survivors.**
 - 800-621-3362
 - www.disasterassistance.gov/
- **Small business disaster assistance**
 - US Small Business Association: www.sba.gov/funding-programs
 - Cal Coastal Small Business Development Center: <https://calcoastalsbdc.com/>
- **Funding for farmers and farmworkers**
 - California Family Farmer Emergency Fund for small-scale farmers impacted by disaster - <https://caff.org/cafamilyfarmeremergencyfund/>
 - Casa de la Cultura farmworker advocacy and resources in North Monterey County. www.casadelaculturacenter.org
 - Western Regional Agricultural Stress Assistance Program Grants and Collaboration opportunities: - <https://farmstress.us/about/>
 - The Farmer Resource Network free search tool to find organizations and resources. <https://farmerresourcenetwork.force.com/FRN/s/>



LA OFICINA DE SERVICIOS DE EMERGENCIA DEL CONDADO DE MONTEREY

1322 Natividad Road, Salinas CA 93906

Teléfono: (831) 796-1900 • Fax: (831) 796-1911

FECHA:

PARA: Todas las organizaciones de la industria alimentaria del Condado de Monterey (de la granja a la mesa)

DE: La Oficina de Servicios de Emergencia del Condado de Monterey

TEMA: Preparación para desastres para organizaciones

En la Oficina de Servicios de Emergencia del Condado de Monterey (OES) le enviamos esta carta para brindarle información y orientación para ayudar a preparar a su organización para desastres. Si bien muchos desastres no se pueden evitar, sus impactos se pueden reducir cuando tomamos las medidas adecuadas para prepararnos. La industria alimentaria es una parte clave de nuestra comunidad, ya que alimenta y proporciona empleo a nuestros residentes y ayuda a mantener nuestra economía fuerte. Durante los desastres, su capacidad para resistir y recuperarse rápidamente de un desastre puede ayudar a proteger su empresa, su personal y sus clientes. Revise el folleto adjunto y siga los pasos para preparar sus instalaciones y personal para responder y recuperarse de cualquier tipo de emergencia.

Si está interesado en conectarse con otras organizaciones alimentarias, comuníquese con el Coalición del Sistema Alimentario del Condado de Monterey en montereycountyfpc@gmail.com y realice la Encuesta de Expansión de la Red del Sistema Alimentario en: <https://arcg.is/10ymL8>

Si está interesado en ser contactado con respecto a la capacitación en preparación para desastres, financiamiento y oportunidades de colaboración y/o tiene alguna pregunta o inquietud, llame al 831-796-1923, enviar un correo electrónico a info.oes@co.monterey.ca.us o asista a las horas de oficina de la comunidad de OES para hablar uno a uno con el personal de OES. El horario de oficina de OES está en zoom de 6pm a 7pm el segundo y cuarto martes de cada mes:

- Enlace: <https://montereycty.zoom.us/j/91243093461>
- Llame: 669-219-2599
- ID de reunión: 91243093461#
- Contraseña: 819822

Puede obtener información sobre la OES del Condado de Monterey, leer nuestros planes de emergencia, obtener actualizaciones sobre desastres y encontrar más información sobre la preparación para desastres visitando nuestro sitio web en www.co.monterey.ca.us/OES.



CÓMO PREPARAR A SU ORGANIZACIÓN PARA DESASTRES

Siga los 5 pasos que se describen a continuación para fortalecer la capacidad de su organización para resistir, responder y recuperarse de un desastre. Para obtener una guía más detallada de preparación para desastres, descargue los kits de herramientas de resiliencia en www.co.monterey.ca.us/resilience o visite www.ready.gov

1. HACER UN PLAN

- El plan de emergencia de su organización debe considerar los impactos potenciales del desastre y cómo responder a diferentes desastres, reducir y recuperar las pérdidas, y continuar/reiniciar/ampliar los servicios durante los desastres.

2. ESTAR LISTO PARA USAR EL PLAN

- Regístrese en Alert Monterey County** en www.alertmontereycounty.org para recibir alertas de emergencia locales, como avisos de evacuación.
- Capacite al personal en sus planes de emergencia**, practicando su plan al menos dos veces al año en diferentes momentos, desde diferentes puntos de partida y para diferentes desastres. Cuanto más practique, mejor preparado estará.

3. REUNIR SUMINISTROS

- Una bolsa de suministros para 3 días con recursos para evacuaciones.** Considere qué recursos necesitará para recuperar las pérdidas de su organización y/o ejecutar la operación virtualmente o desde otra ubicación.
- Un suministro de recursos para 2 semanas** en caso de que el personal deba refugiarse en su instalación.
- Una reserva de suministros** para ayudarlo a reiniciar, continuar o ampliar las operaciones durante un desastre (por ejemplo, generador, equipo de respaldo, etc.)

4. PROTEGER AL PERSONAL Y LA PROPIEDAD

- Modificar los edificios** para su riesgo de peligro (ex. modernizaciones de terremotos o elevación de edificios para inundaciones/tsunamis). *Habla con su departamento local de construcción/planificación para obtener orientación.*
- Asegúrese de que el negocio esté debidamente asegurado** para su riesgo de peligro. El tamaño, el tipo y la ubicación de su negocio determinarán los tipos apropiados de seguro necesarios. Recuerde que las pólizas comerciales estándar no suelen cubrir inundaciones, ataques cibernéticos o ataques terroristas.
- Alentar al personal a hacer sus propios planes y kits de emergencia para el hogar.**

5. CONSTRUIR UNA RED

- Crear una relación sólida entre su organización y la comunidad más grande del Condado de Monterey**, incluidas las organizaciones locales, los socorristas, y la gestión de emergencias. Desarrollar estas relaciones antes de un desastre puede ayudarlo a encontrar recursos e información más rápidamente durante los desastres. Comience comunicándose con el Oficina de Servicios de Emergencia del Condado (la *información de contacto proporcionado a continuación*)
- Hacer acuerdos con los contratistas externos** para asegurarse de tener equipos, personal, suministros, y/o instalaciones de respaldo durante emergencias.
- Considerar cómo el personal y/o los clientes de su organización pueden trabajar juntos durante los desastres** (ej. compartir vehículos durante las evacuaciones, compartir suministros, etc.).



PASOS PARA CREAR SU PLAN DE DESASTRE

Cada organización debe tener un plan de emergencia para ayudar a administrar y continuar/reiniciar las operaciones cuando ocurre un desastre. Lea a continuación para aprender cómo desarrollar su plan de desastre. Para obtener una plantilla de plan rellenable, visite: [Mema.maryland.gov/Documents/FEMA Small Business Continuity Plan Template.docx](http://Mema.maryland.gov/Documents/FEMA_Small_Business_Continuity_Plan_Template.docx)

1. EVALUAR EL RIESGO Y LOS IMPACTOS POTENCIALES

- ¿Cuáles son los riesgos de peligro de su organización?
- ¿Cómo se verá afectada su organización?
- ¿Qué servicios y funciones podrían verse afectados?
- ¿Cómo afectará esto a los clientes, las finanzas, las regulaciones, las operaciones, la reputación, el personal y la comunidad?

Más información cómo realizar una evaluación de riesgos: www.ready.gov/risk-assessment

2. IDENTIFICAR LA RESPUESTA NECESARIA

Incluya procedimientos en su plan de emergencia para evacuaciones, refugio en el lugar y medidas de respuesta específicas para diferentes tipos de desastres.

- ¿Qué deben hacer el personal y liderazgo durante y después de cada desastre?
- ¿Qué se debe hacer si el personal debe evacuar o refugiarse en el lugar? ¿Adónde deberían ir?
- ¿Cómo se comunicará el personal entre sí, con el liderazgo y con los clientes?

3. PRIORIZAR FUNCIONES

Revise y priorice los servicios y funciones de su organización en función del impacto a la vida/seguridad, la pérdida de la organización y el tiempo que puede pasar sin la función. Considere lo que necesitará para continuar/reiniciar servicios. ¿Qué personal, instalaciones y equipo necesitará?

Considere formas de continuar/reiniciar los servicios en un desastre

- ¿Dónde puede obtener equipos, instalaciones, proveedores, personal de respaldo y cualquier otro recurso que necesitará para las operaciones?
- ¿Cuánto tiempo tomaría reanudar los servicios?
- Si crece la demanda de servicios, ¿tiene el personal, los suministros y la experiencia para administrar las operaciones?
- ¿Con qué socios debería trabajar antes, durante y después de un desastre?

4. DESARROLLAR UNA ESTRATEGIA PARA CONTINUAR CON LAS OPERACIONES.

5. CREAR UNA ESTRATEGIA DE RECUPERACIÓN

- ¿Cuáles son las pérdidas potenciales que podría tener debido a un desastre? (ej. cierres temporales, daños a las instalaciones, servicios ampliados, cambios en la oferta y la demanda, falta de disponibilidad del personal, etc.)
- ¿Cómo recuperará las pérdidas creadas por el desastre? Considere qué cubrirá y qué no cubrirá su seguro y cómo recuperará las pérdidas no incluidas en su póliza de seguro ¿Qué otros recursos están disponibles?



RECURSOS PARA AYUDAR A SU ORGANIZACIÓN A TRAVÉS DE LA PREPARACIÓN, RESPUESTA Y RECUPERACIÓN EN DESASTRES



CAPACITACIÓN EN RESPUESTA A DESASTRES

- Cruz Roja de la Costa Central
 - 831-624-6921.
 - www.redcross.org/take-a-class/disaster-training
- Iniciativa de Seguridad del Área Urbana del Área de la Bahía - www.bayareauasi.org/programs/training
- Oficina de Servicios de Emergencia de California - www.caloes.ca.gov/office-of-the-director/operations/planning-preparedness-prevention/california-specialized-training-institute/
- CERV de la Península de Monterey - Teléfono: 831-649-3050. Sitio web: www.cerv501c3.org/pages/training-1
- Clases del Instituto de Manejo de Emergencias de FEMA - <https://training.fema.gov/emi.aspx>
- Listos California - <https://www.listocalifornia.org/disaster-preparedness/>
- Capacitación en línea sobre preparación de FEMA: <https://community.fema.gov/PreparenessCommunity/s/open-training>
- Recursos de preparación de FEMA: www.fema.gov/emergency-managers/individuals-communities/faith



INFORMACIÓN Y RECURSOS SOBRE DESASTRES

- Encuentre información y recursos sobre desastres por teléfono 24/7 en más de 170 idiomas llamando al 2-1-1 o enviando un mensaje de texto con su código postal al 898-211
- Encuentre información activa sobre desastres en línea de la Oficina de Servicios de Emergencia del Condado de Monterey
 - Sitio web: www.co.monterey.ca.us/OES
 - Twitter: [@MontereyCoOES](https://twitter.com/MontereyCoOES)
 - Facebook: [@MontereyCountyOES](https://www.facebook.com/MontereyCountyOES)
- Encuentre alertas de emergencia recientes en el Condado de Monterey visitando la pestaña de notificación en la parte superior derecha de página web Alert Monterey County: www.AlertMontereyCounty.org/
- Encuentre posibles recursos de respuesta y recuperación ante desastres en línea en: www.co.monterey.ca.us/DisasterResource



ASISTENCIA FINANCIERA

Programas y asistencia para sobrevivientes de desastres.

- 800-621-3362
- www.disasterassistance.gov/

Asistencia para pequeñas empresas

- Asociación de Pequeñas Empresas de EE. UU.: www.sba.gov/funding-programs
- Centro de Desarrollo de Pequeñas Empresas de Cal Coastal: <https://calcoastalsbdc.com/>

Fondos para agricultores y trabajadores agrícolas

- Fondo de Emergencia para Agricultores Familiares de para agricultores de pequeño tema afectados por desastres - <https://caff.org/cafamilyfarmeremergencyfund/>
- Defensa y recursos de los trabajadores agrícolas de Casa de la Cultura para el norte del Condado - www.casadelaculturacenter.org
- Oportunidades de colaboración y subvenciones del Programa de Asistencia para el Estrés Agrícola de la Región Occidental - <https://farmstress.us/about/>
- La herramienta de búsqueda gratuita para encontrar organizaciones y recursos del Red de Recursos para Agricultores. <https://farmerresourcenetwork.force.com/FRN/s/>





MONTEREY COUNTY HEALTH DEPARTMENT

Environmental Health

Guidelines for Food Safety at Retail Establishments During Power Outages

The County of Monterey, Environmental Health Branch, developed this guidance document for the retail food industry on what to do when a power outage occurs. This guideline is provided to assist retail food facilities in safe food handling during power outages.

Always be prepared. Have a written contingency plan that is developed ahead of time in the event of a power outage or other natural disasters. What will be your standard operating procedures during an event of this type? Make sure your staff is knowledgeable and trained to respond to a power outage or other natural disaster events and know where to find these procedures should they need to reference them. The focus is on the action steps to take for potentially hazardous foods (PHF), which are those foods that can support the rapid growth of microorganisms at temperatures between 41° F - 135° F. Develop a plan of action on how to keep refrigerated foods cool in your facility. This may include consolidating foods into insulated containers or walk-in coolers, covering open display cases, and purchasing ice or dry ice from local retailers. You should also keep a supply of ice or gel packs frozen and readily accessible. Calibrated food thermometers, a battery-operated clock and a temperature log will help you monitor and document the temperature of the food and the time it spent in the temperature danger zone.

During a Power Outage

***** IF THERE IS NO ELECTRICITY, YOU MUST CLOSE AND STOP ALL FOOD PREPARATION *****

- Immediately stop taking in new customers and close when the current customers are finished with their meals.
- Do not prepare food if you cannot properly wash your hands, clean and sanitize food contact surfaces, or maintain other required food safety practices.
- Your focus during a power outage is to keep foods out of the temperature danger zone as much as possible. Below are some action steps to take for both cold and hot foods:

Cold Foods

- Document the time the outage began.
- Document the temperature of food item.
- Keep all cold holding units closed.
- Use ice, gel packs, or dry ice to keep foods cold.
- Hot foods may be chilled with ice baths.
- Do not accept perishable food deliveries.
- Stop all cooking activities when ventilation for cooking equipment is not functional.



Hot Foods

- Document the time the outage began.
- Document the temperature of food item
- Discard any foods in the process of being cooked that had not reached their appropriate final cooking temperature.
- Cover hot food display cases with thermal blankets or lids to reduce the temperature loss.



When Power is Restored

***** WHEN IN DOUBT, THROW IT OUT *****

The steps to take after a power outage will vary, depending on the length of time your facility was without power and how effectively you were able to keep your food out of the temperature danger zone.

- Table 1 will help you decide how to handle refrigerated potentially hazardous foods.

Duration of Outage (hours)	Temperature of Food When Power Returns		
	41°F or below	42°F to 49°F	50°F or above
0-2	PHF can be sold	Cool PHF to 41°F or below within 2 hours	Discard
2-3		Cool PHF to 41°F or below within 1 hour	
4+		Discard	

- Table 2 is for potentially hazardous foods held in hot cases.

Duration of Outage (hours)	Temperature of Food When Power Returns	
	135°F or above	134°F or below
0-2	PHF can be sold	1. May be sold if reheated to 165°F and then held at 135°F or above; or 2. May be sold as refrigerated food if rapidly cooled to 41°F or below within 2 hours following the restoration of power.
2+		Discard

Prior to resuming operations after a power outage, you should evaluate all potentially hazardous foods and discard any which have been subjected to severe temperature abuse as defined in the tables above. Any products discarded should be denatured sufficiently to prevent accidental consumption. If you are unable to verify the length of time a product spent in the temperature danger zone, it should be discarded.

- If food inside a freezer has thawed, but not exceeded 41° F, it must be cooked or stored inside an operating refrigerator. Thawed food must never be refrozen.
- Foods such as meat, poultry, seafood, soft cheese, leftovers, and other similar potentially hazardous foods should be discarded if they are held above 41° F for more than 2 hours.

Disposal of Food

Please be advised that a power outage increases the risk of foodborne illness and food preparation should cease until power is fully restored. Potentially Hazardous Food that has been subjected to unsafe temperatures prior to or during the power outage might not be safe to eat even if the procedures in the tables are followed.

- If it is determined that food must be discarded, document the type and amount of food and the reason for disposal for insurance and regulatory purposes.
- Small volumes of food to be discarded can be denatured with a cleaning product (such as bleach) and placed in the outside refuse bin.
- To discard large volumes of food, contact your refuse disposal company or your local landfill operator for disposal instructions.

- If there are any questions regarding the safety of specific foods, contact the Environmental Health Department.

Questions or Additional Information?

Contact Monterey County Health Department Staff
Mondays through Fridays between 8:00 AM to 5:00 PM:

- **Monterey Office**
 - **Address:** 1200 Aguajito Rd, Monterey, CA, 93940
 - **Phone:** 831 – 647 - 7654
- **Salinas Office** 831-755-4508
 - **Address:** 1270 Natividad Rd, Salinas, CA, 93906
 - **Phone:** 831 – 755 - 4508

Reopening Your Food Facility

Prior to resuming food preparation and re-opening your facility to the public, the following conditions must be verified:

- All unsafe, potentially hazardous food has been discarded.
- Electricity and gas services have been restored.
- All circuit breakers have been properly reset as needed.
- Any “Boil Water Notices” are followed to assure the water is safe for food preparation and consumption.
- All Equipment and facilities are operating properly, including:
 - Lighting
 - Refrigeration (unit(s) can hold foods at 41° F or below)
 - Freezers (unit(s) can hold foods in a solid, frozen state)
 - Hot holding (unit(s) can hold food at 135° F or above)
 - Ventilation
 - Toilet facilities
- Hot and cold potable water, under pressure for:
 - Hand washing (handwashing station can hold temperatures between 100-108° F)
 - Proper dishwashing (station can hold a minimum temperature of 120° F)
- Voluntary closure of your facility does not require an Environmental Health Specialist for reopening. However, if your facility was closed by the Environmental Health Department, it must remain closed until you obtain approval from the Environmental Health Department to reopen.



DEPARTAMENTO DE SALUD DEL CONDADO DE MONTEREY

Salud Ambiental

Pautas para la Seguridad de los Alimentos en Establecimientos Minoristas Durante Cortes de Energía

El Condado de Monterey, División de Salud Ambiental, desarrolló este documento de orientación para el sector de alimentos minoristas sobre qué hacer ante un corte de energía. Esta guía se entrega para ayudar a las instalaciones minoristas de alimentos en la manipulación segura de los alimentos durante los cortes de energía.

Debe estar siempre preparado. Tenga un plan de contingencia escrito elaborado con anticipación en caso de un corte de energía u otro desastre natural. ¿Cuáles serán sus procedimientos operativos estándar durante un evento de este tipo? Asegúrese de que su personal conozca y haya recibido capacitación para responder a un corte de energía u otros eventos de desastres naturales y sepa dónde encontrar estos procedimientos si necesita consultarlos. La atención se centra en las medidas de acción a seguir para los alimentos potencialmente peligrosos (PHF), que son los alimentos que pueden permitir el crecimiento rápido de microorganismos a temperaturas entre 41 °F - 135 °F. Desarrolle un plan sobre cómo mantener frescos los alimentos refrigerados en sus instalaciones. Esto puede incluir unificar alimentos en contenedores aislados o cámaras de refrigeración, cubrir los contenedores de exhibición y comprar hielo común o seco a los vendedores minoristas locales. También debe conservar un suministro de hielo o paquetes de gel congelados en un sitio de fácil acceso. Los termómetros calibrados para los alimentos, un reloj que funcione con baterías y un registro de temperatura lo ayudarán a controlar y documentar la temperatura de los alimentos y el tiempo que pasaron en la zona de peligro de temperatura.

Durante un Corte de Energía

***** SI NO HAY ELECTRICIDAD, DEBE CERRAR Y SUSPENDER TODA LA PREPARACIÓN DE ALIMENTOS *****

- Deje de recibir nuevos clientes de inmediato y cierre cuando los clientes actuales hayan terminado sus comidas.
- No prepare alimentos si no puede lavarse las manos adecuadamente, limpiar y desinfectar las superficies en contacto con alimentos o mantener otras prácticas de seguridad alimentaria requeridas.
- Su prioridad durante un corte de energía es mantener los alimentos fuera de la zona de peligro de temperatura en la mayor medida posible. A continuación, se enumeran algunos pasos a tomar para alimentos fríos y calientes.

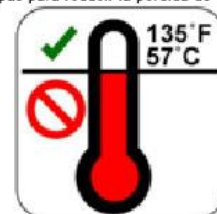
Alimentos Fríos

- Documente la hora en que comenzó el corte de energía.
- Documente la temperatura de todos los alimentos.
- Mantenga cerradas todas las unidades que conservan alimentos fríos.
- Use hielo, paquetes de gel o hielo seco para mantener fríos los alimentos.
- Los alimentos calientes pueden enfriarse con baños de hielo.
- No acepte entregas de alimentos perecederos.
- Suspnda todas las actividades de cocción si no funciona la ventilación para los equipos de cocción.



Alimentos Calientes

- Documente la hora en que comenzó el corte de energía.
- Documente la temperatura de todos los alimentos.
- Deseche los alimentos en el proceso de cocción que no alcanzaron su temperatura de cocción final apropiada.
- Cubra los contenedores de exhibición de alimentos calientes con mantas térmicas o tapas para reducir la pérdida de temperatura.



Quando se restablece la energía

***** EN CASO DE DUDA, DESÉCHELO *****

Los pasos a seguir después de un corte de energía variarán según la cantidad de tiempo que su instalación estuvo sin energía y su efectividad para mantener los alimentos fuera de la zona de peligro de temperatura.

- La Tabla 1 lo ayudará a decidir cómo manipular los alimentos refrigerados potencialmente peligrosos.

Duración del Corte (horas)	Temperatura de los Alimentos cuando Regresa la Energía		
	41 °F o inferior	42 °F a 49 °F	50 °F o superior
Duración del Corte (horas)	135 °F o superior		134 °F o inferior
0-2	Se pueden vender los alimentos potencialmente peligrosos	1. Se pueden vender si se recalientan a 165 °F y luego se mantienen a 135 °F o más; o 2. Se pueden vender como alimentos refrigerados si se enfrían rápidamente a 41 °F o menos en el plazo de 2 horas después del restablecimiento de la energía	
2+		Deseche	

- La Tabla 2 hace referencia a los alimentos potencialmente peligrosos que se mantienen en recipientes calientes.

Antes de reanudar las operaciones después de un corte de energía, debe evaluar todos los alimentos potencialmente peligrosos y desechar los que han estado bajo pronunciadas variaciones indebidas de temperatura tal como se define en las tablas anteriores. Los productos desechados deben desnaturalizarse lo suficiente para prevenir el consumo accidental. Si no puede verificar la cantidad de tiempo que un producto pasó en la zona de peligro de temperatura, debe descartarse.

- Si se descongelaron alimentos dentro de un congelador, pero no superaron los 41 °F, deben cocinarse o almacenarse dentro de un refrigerador en funcionamiento. Los alimentos descongelados nunca deben volver a congelarse.
- Los alimentos como carne, pollo, mariscos, queso blando, sobras y otros alimentos potencialmente peligrosos similares deben desecharse si se mantuvieron por encima de 41 °F por más de 2 horas.

Desecho de Alimentos

Tenga en cuenta que un corte de energía aumenta el riesgo de enfermedades transmitidas por los alimentos y la preparación de los alimentos debe cesar hasta que se restablezca por completo la energía. Es posible que los alimentos potencialmente peligrosos que han sido sometidos a temperaturas inseguras antes o durante el corte de energía no sean seguros para comer, incluso si se siguen los procedimientos de las tablas.

- Si se determina que los alimentos deben desecharse, documente el tipo y la cantidad de alimentos y el motivo de su desecho a los efectos del seguro y las reglamentaciones.
- Los volúmenes reducidos de alimentos que se descartarán pueden desnaturalizarse con un producto de limpieza (como blanqueador) y colocarse en el contenedor de basura exterior.

- Para desechar grandes cantidades de alimentos, comuníquese con su compañía de eliminación de desechos o con su operador local de vertederos para obtener instrucciones de desecho.
- Si tiene alguna pregunta sobre la seguridad de alimentos específicos, comuníquese con el Departamento de Salud Ambiental.

¿Preguntas o Información Adicional?

Comuníquese con el personal del Departamento de Salud del Condado de Monterey
De lunes a viernes de 8:00 a. m. a 5:00 p. m.:

- **Oficina de Monterey**
 - **Dirección:** 1200 Aguajito Rd, Monterey, CA, 93940
 - **Teléfono:** 831 – 647 - 7654
- **Oficina de Salinas**
 - **Dirección:** 1270 Natividad Rd, Salinas, CA, 93906
 - **Teléfono:** 831 – 755 - 4508

Reapertura de sus Instalaciones de Alimentos

Antes de reanudar la preparación de alimentos y volver a abrir sus instalaciones al público, se deben verificar las siguientes condiciones:

- Todos los alimentos inseguros y potencialmente peligrosos se han descartado.
- Se han restablecido los servicios de electricidad y gas.
- Todos los disyuntores se han reiniciado en caso de ser necesario.
- Se cumple con los “Avisos de Hervir el Agua” para garantizar que el agua sea segura para la preparación y consumo de alimentos.
- Funcionan todos los equipos e instalaciones, que incluyen:
 - Iluminación
 - Refrigeración (las unidades pueden conservar alimentos a 41 °F o menos)
 - Congelación (las unidades pueden conservar alimentos en estado sólido y congelado)
 - Conservación en caliente (las unidades pueden conservar los alimentos a 135° F o más)
 - Ventilación
 - Sanitarios
- Agua potable caliente y fría, bajo presión para :
 - Lavado de manos (la estación de lavado de manos puede mantener temperaturas entre 100-108 °F)
 - Lavado adecuado de vajilla (la estación puede mantener una temperatura mínima de 120 °F)
- El cierre voluntario de su instalación no requiere un Especialista en Salud Ambiental para su reapertura. Sin embargo, si el Departamento de Salud Ambiental cerró sus instalaciones, deben permanecer de esa manera hasta obtener la aprobación del Departamento de Salud Ambiental para su reapertura.



MONTEREY COUNTY HEALTH DEPARTMENT

Environmental Health

Guidelines for Food Safety at Retail Establishments During Power Outages

The County of Monterey, Environmental Health Branch, developed this guidance document for the retail food industry on what to do when a power outage occurs. This guideline is provided to assist retail food facilities in safe food handling during power outages.

Always be prepared. Have a written contingency plan that is developed ahead of time in the event of a power outage or other natural disasters. What will be your standard operating procedures during an event of this type? Make sure your staff is knowledgeable and trained to respond to a power outage or other natural disaster events and know where to find these procedures should they need to reference them. The focus is on the action steps to take for potentially hazardous foods (PHF), which are those foods that can support the rapid growth of microorganisms at temperatures between 41° F - 135° F. Develop a plan of action on how to keep refrigerated foods cool in your facility. This may include consolidating foods into insulated containers or walk-in coolers, covering open display cases, and purchasing ice or dry ice from local retailers. You should also keep a supply of ice or gel packs frozen and readily accessible. Calibrated food thermometers, a battery-operated clock and a temperature log will help you monitor and document the temperature of the food and the time it spent in the temperature danger zone.

During a Power Outage

***** IF THERE IS NO ELECTRICITY, YOU MUST CLOSE AND STOP ALL FOOD PREPARATION *****

- Immediately stop taking in new customers and close when the current customers are finished with their meals.
- Do not prepare food if you cannot properly wash your hands, clean and sanitize food contact surfaces, or maintain other required food safety practices.
- Your focus during a power outage is to keep foods out of the temperature danger zone as much as possible. Below are some action steps to take for both cold and hot foods:

Cold Foods

- Document the time the outage began.
- Document the temperature of food item.
- Keep all cold holding units closed.
- Use ice, gel packs, or dry ice to keep foods cold.
- Hot foods may be chilled with ice baths.
- Do not accept perishable food deliveries.
- Stop all cooking activities when ventilation for cooking equipment is not functional.



Hot Foods

- Document the time the outage began.
- Document the temperature of food item
- Discard any foods in the process of being cooked that had not reached their appropriate final cooking temperature.
- Cover hot food display cases with thermal blankets or lids to reduce the temperature loss.



When Power is Restored

***** WHEN IN DOUBT, THROW IT OUT *****

The steps to take after a power outage will vary, depending on the length of time your facility was without power and how effectively you were able to keep your food out of the temperature danger zone.

- Table 1 will help you decide how to handle refrigerated potentially hazardous foods.

Duration of Outage (hours)	Temperature of Food When Power Returns		
	41°F or below	42°F to 49°F	50°F or above
0-2	PHF can be sold	Cool PHF to 41°F or below within 2 hours	Discard
2-3		Cool PHF to 41°F or below within 1 hour	
4+		Discard	

- Table 2 is for potentially hazardous foods held in hot cases.

Duration of Outage (hours)	Temperature of Food When Power Returns	
	135°F or above	134°F or below
0-2	PHF can be sold	1. May be sold if reheated to 165°F and then held at 135°F or above; or 2. May be sold as refrigerated food if rapidly cooled to 41°F or below within 2 hours following the restoration of power.
2+		Discard

Prior to resuming operations after a power outage, you should evaluate all potentially hazardous foods and discard any which have been subjected to severe temperature abuse as defined in the tables above. Any products discarded should be denatured sufficiently to prevent accidental consumption. If you are unable to verify the length of time a product spent in the temperature danger zone, it should be discarded.

- If food inside a freezer has thawed, but not exceeded 41° F, it must be cooked or stored inside an operating refrigerator. Thawed food must never be refrozen.
- Foods such as meat, poultry, seafood, soft cheese, leftovers, and other similar potentially hazardous foods should be discarded if they are held above 41° F for more than 2 hours.

Disposal of Food

Please be advised that a power outage increases the risk of foodborne illness and food preparation should cease until power is fully restored. Potentially Hazardous Food that has been subjected to unsafe temperatures prior to or during the power outage might not be safe to eat even if the procedures in the tables are followed.

- If it is determined that food must be discarded, document the type and amount of food and the reason for disposal for insurance and regulatory purposes.
- Small volumes of food to be discarded can be denatured with a cleaning product (such as bleach) and placed in the outside refuse bin.
- To discard large volumes of food, contact your refuse disposal company or your local landfill operator for disposal instructions.

- If there are any questions regarding the safety of specific foods, contact the Environmental Health Department.

Questions or Additional Information?

Contact Monterey County Health Department Staff
Mondays through Fridays between 8:00 AM to 5:00 PM:

- **Monterey Office**
 - **Address:** 1200 Aguajito Rd, Monterey, CA, 93940
 - **Phone:** 831 – 647 - 7654
- **Salinas Office** 831-755-4508
 - **Address:** 1270 Natividad Rd, Salinas, CA, 93906
 - **Phone:** 831 – 755 - 4508

Reopening Your Food Facility

Prior to resuming food preparation and re-opening your facility to the public, the following conditions must be verified:

- All unsafe, potentially hazardous food has been discarded.
- Electricity and gas services have been restored.
- All circuit breakers have been properly reset as needed.
- Any “Boil Water Notices” are followed to assure the water is safe for food preparation and consumption.
- All Equipment and facilities are operating properly, including:
 - Lighting
 - Refrigeration (unit(s) can hold foods at 41° F or below)
 - Freezers (unit(s) can hold foods in a solid, frozen state)
 - Hot holding (unit(s) can hold food at 135° F or above)
 - Ventilation
 - Toilet facilities
- Hot and cold potable water, under pressure for:
 - Hand washing (handwashing station can hold temperatures between 100-108° F)
 - Proper dishwashing (station can hold a minimum temperature of 120° F)
- Voluntary closure of your facility does not require an Environmental Health Specialist for reopening. However, if your facility was closed by the Environmental Health Department, it must remain closed until you obtain approval from the Environmental Health Department to reopen.



California Department of Health Services

Indoor Air Quality Info Sheet

Mold in My Home: What Do I Do?

Updated June 2006

This is an update of our info sheet providing basic information to people who have experienced water damage to their home. It describes health concerns related to mold exposure, and it also provides general guidelines on prevention, mold detection, as well as cleanup of mold-contaminated materials. Additional resources and documents are referenced.

ABOUT MOLD

What are Molds?

Molds are simple, microscopic organisms, present virtually everywhere, indoors and outdoors. Molds, along with mushrooms and yeasts, are *fungi* and are needed to break down dead material and recycle nutrients in the environment. For molds to grow and reproduce, they need only a food source – any organic material, such as leaves, wood, paper, or dirt— and moisture. Because molds grow by digesting the organic material, they gradually destroy whatever they grow on. Sometimes, new molds grow on old mold colonies. Mold growth on surfaces can often be seen in the form of discoloration, frequently green, gray, brown, or black but also white and other colors. Molds release countless tiny, lightweight spores, which travel through the air.

How am I exposed to indoor molds?

Everyone is exposed to some mold on a daily basis without evident harm. It is common to find mold spores in the air inside homes, and most of the airborne spores found indoors come from outdoor sources. Mold spores primarily cause health problems when they are present in large numbers and people *inhale* many of them. This occurs primarily when there is *active* mold growth within home, office or school where people live or work. People can also be exposed to mold by touching contaminated materials and by eating contaminated foods.

Can mold become a problem in my home?

Molds will grow and multiply whenever conditions are right—sufficient moisture is available and organic material is present. Be on the lookout in your home for common sources of indoor moisture that may lead to mold problems:

- Flooding
- Leaky roofs
- Sprinkler spray hitting the house
- Plumbing leaks
- Overflow from sinks or sewers
- Damp basement or crawl space
- Steam from shower or cooking
- Humidifiers
- Wet clothes drying indoors or clothes dryers exhausting indoors

Warping floors and discoloration of walls and ceilings can be indications of moisture problems. *Condensation on windows or walls* is also an important indication, but it can sometimes be caused by an indoor combustion problem! *Have fuel-burning appliances routinely inspected by your local utility or a professional heating contractor.*

Should I be concerned about mold in my home?

Yes, if indoor mold contamination is extensive, it can cause very high and persistent airborne spore exposures. Persons exposed to high spore levels can become sensitized and develop allergies to the mold or other health problems. Mold growth can damage your furnishings, such as carpets, sofas and cabinets. Clothes and shoes in damp closets can become soiled. In time, unchecked mold growth can cause serious damage to the structural elements in your home.

HEALTH EFFECTS

What symptoms are commonly seen with mold exposure?

Molds produce health effects through inflammation, allergy, or infection. Allergic reactions (often referred to as hay fever) are most common following mold exposure. Typical symptoms that mold-exposed persons report (alone or in combination) include:

- Respiratory problems, such as wheezing, difficulty breathing, and shortness of breath
- Nasal and sinus congestion
- Eye irritation (burning, watery, or reddened eyes)
- Dry, hacking cough
- Nose or throat irritation
- Skin rashes or irritation

Headaches, memory problems, mood swings, nosebleeds, body aches and pains, and fevers are occasionally reported in mold cases, but their cause is not understood.

How much mold can make me sick?

It depends. For some people, a relatively small number of mold spores can trigger an asthma attack or lead to other health problems. For other persons, symptoms may occur only when exposure levels are much higher. Nonetheless, indoor mold growth is unsanitary and undesirable. Basically, *if you can see or smell mold* inside your home, take steps to identify and eliminate the excess moisture and to cleanup and remove the mold.

Are some molds more hazardous than others?

Allergic persons vary in their sensitivities to mold, both as to the amount and the types to which they react. In addition to their allergic properties, certain types of molds, such as *Stachybotrys chartarum*, may produce compounds that have toxic properties, which are called *mycotoxins*. Mycotoxins are not always produced, and whether a mold produces mycotoxins while growing in a building depends on what the mold is growing on, conditions such as temperature, pH, humidity or other unknown factors. When mycotoxins are present, they occur in both living and dead mold spores and may be present in materials that have become contaminated with molds. While *Stachybotrys* is growing, a wet slime layer covers its spores, preventing them from becoming airborne. However, when the mold dies and dries up, air currents or physical handling can cause spores to become airborne.

At present there is no environmental test to determine whether *Stachybotrys* growth found in buildings is producing toxins. There is also no blood or urine test that can establish if an individual has been exposed to *Stachybotrys chartarum* spores or its toxins.

Who is at greater risk when exposed to mold?

Exposure to mold is not healthy for anyone inside buildings. Therefore, it is always best to identify and correct high moisture conditions quickly before mold grows and health problems develop.

Some people may have more severe symptoms or become ill more rapidly than others:

- Individuals with existing respiratory conditions, such as allergies, chemical sensitivities, or asthma.
- Persons with weakened immune systems (such as people with HIV infection, cancer chemotherapy patients, and so forth)
- Infants and young children
- The elderly

Anyone with health problems they believe due to molds should consult a medical professional.

Additional fact sheets on Mold and Health Effects are available from CDHS:

- *Health Effects of Toxin-Producing Molds in California*
- *Stachybotrys chartarum (atra) — a mold that may be found in water-damaged homes*
- *Fungi and Indoor Air Quality*
- *Misinterpretation of Stachybotrys Serology*

These documents are available from the Environmental Health Investigation Branch, (510) 620-3620, or on the web at www.dhs.ca.gov/ehib/.

DETECTION OF MOLD

How can I tell if I have mold in my house?

You may suspect that you have mold if you *see* discolored patches or cottony or speckled growth on walls or furniture or if you *smell* an earthy or musty odor. You also may suspect mold contamination if mold-allergic individuals *experience* some of the symptoms listed above when in the house. *Evidence of past or ongoing water damage should also trigger more thorough inspection.* You may find mold growth underneath water-damaged surfaces or behind walls, floors or ceilings.

Should I test my home for mold?

The California Department of Health Services does not recommend testing as a first step to determine if you have a mold problem. Reliable air sampling for mold can be expensive and requires expertise and equipment that is not available to the general public. Owners of individual private homes and apartment generally will need to pay a contractor to carry out such sampling, because insurance companies and public health agencies seldom provide this service. Mold inspection and cleanup is

usually considered a housekeeping task that is the responsibility of homeowner or landlord, as are roof and plumbing repairs, house cleaning, and yard maintenance.

Another reason the health department does not recommend testing for mold contamination is that there are few available standards for judging what is an acceptable quantity of mold. In all locations, there is some level of airborne mold outdoors. If sampling is carried out in a home, an outdoor air sample also must be collected at the same time as the indoor samples, to provide a baseline measurement. Because individual susceptibility varies so greatly, sampling is at best a general guide.

The simplest way to deal with a suspicion of mold contamination is: **If you can see or smell mold, you likely have a problem and should take the steps outlined below.** Mold growth is likely to recur unless the source of moisture that is allowing mold to grow is removed and the contaminated area is cleaned.

GENERAL CLEAN-UP PROCEDURES

The following is intended as an overview for homeowners or apartment dwellers. We recommend that you consult one of several more thorough documents currently available as guidance, listed in the USEFUL PUBLICATIONS section below.

Elements of the Clean-up Procedures

- Identify and eliminate sources of moisture
- Identify and assess the magnitude and area of mold contamination
- Clean and dry moldy areas – use containment of affected areas
- Bag and dispose of all material that may have moldy residues, such as rags, paper, leaves, and debris.

Assessing the Size of a Mold Contamination Problem

There will be a significant difference in the approach used for a small mold problem – total area affected is less than 10 ft² – and a large contamination problem – more than 100 ft². In the case of a relatively small area, the clean-up can be handled by the homeowner or maintenance staff, using personal protective equipment (see below). However, for cases of much larger areas, it is advisable that an experienced, professional contractor be used. For in-between sized cases, the type of containment and personal protection equipment to be used will be a matter of judgment.

Can cleaning up mold be hazardous to my health?

Yes. During the cleaning process, you may be exposed to mold, strong detergents, and disinfectants. Spore counts may be 10 to 1000 times higher than background levels when mold-contaminated materials are disturbed. Take steps to protect you and your family's health during cleanup:

- When handling or cleaning moldy materials, it is important to use a respirator to protect yourself from inhaling airborne spores.

Respirators can be purchased from hardware stores; select one that is effective for particle removal (sometimes referred to as an N-95 particulate respirator). However, respirators that remove particles will not protect you from fumes (such as bleach). Minimize exposure when using bleach or other disinfectants by ensuring good ventilation of the area.

- Wear protective clothing that is easily cleaned or discarded.
- Use rubber gloves.
- Try cleaning a test area first. If you feel that this activity adversely affected your health, you should consider paying a licensed contractor or other experienced professional to carry out the work.
- Ask family members or bystanders to leave areas that are being cleaned.

- Work for short time periods and rest in a location with fresh air.
- Air out your house well during and after the work.

Never use a gasoline engine indoors (e.g., water pump, pressure washer or generator), as you could expose your family to toxic carbon monoxide.

Removal of Moldy Materials

Clean up should begin *after* the moisture source is fixed and excess water has been removed. Wear gloves when handling moldy materials.

- Discard porous materials (for example, ceiling tiles, sheetrock, carpeting, and wood products).
- Bag and discard moldy items; if properly enclosed, items can be disposed with household trash.
- Dry affected areas for 2 or 3 days.

Spores are more easily released when moldy materials dry out, hence it is advisable to remove moldy items as soon as possible.

If there was flooding, sheetrock should be removed to a level above the high-water mark. Visually inspect the wall interior and remove any mold-contaminated materials.

What can I save? What should I toss?

You should discard moldy items that are porous and from which it will be difficult to remove mold completely: paper, rags, wallboard, rotten wood, carpet, drapes, and upholstered furniture. Contaminated carpet is often difficult to thoroughly clean, especially when the backing and/or padding can become moldy. Solid materials – glass, plastic, and metal – can generally be kept after they are thoroughly cleaned.

Clean-up

When attempting to clean less porous items (i.e., solid items such as floors, cabinets, solid furniture), the first step is to remove as much mold as possible. A cleaning detergent is effective for this purpose. Wear gloves, mask and eye protection when doing this cleanup.

- Use non-ammonia soap or detergent, or a commercial cleaner, in hot water, and scrub the entire area that is affected by the mold.
- Use a stiff brush or cleaning pad on cement-block walls or other uneven surfaces.
- Rinse cleaned items with water and dry thoroughly. A wet/dry vacuum cleaner is helpful for removing water and cleaning items.

Disinfection of Contaminated Materials

Disinfecting agents can be toxic for humans, not just molds. They should be used only when necessary and should be handled with caution.

Disinfectants are intended to be applied to thoroughly cleaned materials and are used to ensure that most microorganisms have been killed. *Therefore, do not use disinfectants instead of, or before, cleaning materials with soap or detergent.* Removal of mold growth from nonporous materials usually is sufficient. Wear gloves, mask and eye protection when using disinfectants

- After thoroughly cleaning and rinsing contaminated materials, a solution of 10% household bleach (for example, 1½ cup household bleach per gallon of water) can be used as a disinfectant.
- **Using bleach straight from the bottle is actually LESS effective than diluted bleach.**
- Keep the disinfectant on the treated material for the prescribed time before rinsing or drying; typically 10 minutes is recommended for a bleach solution
- **Bleach fumes can irritate the eyes, nose, and throat, and damage clothing and shoes. Make sure working areas are well ventilated.**
- When disinfecting a large structure, make sure that the entire surface is wetted (for example, the floors, joists, and posts).
- Properly collect and dispose extra disinfectant and runoff.
- **Never mix bleach with ammonia; toxic fumes may be produced.**

Can air ducts become contaminated with mold?

Yes. Air duct systems can become contaminated with mold. Duct systems may be constructed of bare sheet metal, sheet metal with fibrous glass insulation on the exterior, or sheet metal with an internal fibrous glass liner, or they may be made entirely of fibrous glass. Bare sheet metal systems and sheet metal with exterior fibrous glass insulation can be cleaned and disinfected. If water damaged, ductwork made of sheet metal with an **internal** fibrous glass liner or made entirely of fibrous glass will often need to be removed and discarded. Ductwork in difficult-to-reach locations may have to be abandoned. If you have other questions, contact an air duct cleaning professional or licensed contractor.

Can ozone air cleaners help remove indoor mold or reduce odors?

Sometimes air cleaners are promoted to remove indoor mold or associated odors, and some of these are designed to produce ozone. Ozone is a strong oxidizing agent that is used as a disinfectant in water and sometimes to eliminate odors. However, ozone is a known lung irritant. Ozone generators have been shown to sometimes produce indoor levels above the safe limit. Furthermore, it has been shown that **ozone is not effective in controlling molds and other microbial contamination**, even at concentrations far above safe health levels. Also, ozone may damage materials in the home, for example, cause rubber items to become brittle. For these reasons, **the California Department of Health Services strongly recommends that you NOT use an ozone air cleaner in any occupied space.** Refer to the CDHS IAQ Info Sheet: *Health Hazards of Ozone-generating Air Cleaning Devices* (January 1998), available on the CDHS-IAQS web site.

How can I prevent indoor mold problems in my home?

Inspect your home regularly for the indications and sources of indoor moisture and mold listed on Page 1. Take steps to eliminate sources of water as quickly as possible. If a leak or flooding occurs, it is essential to act *quickly*:

- Stop the source of leak or flooding.
- Remove excess water with mops or wet vacuum.
- Whenever possible, move wet items to a dry and well ventilated area or outside to expedite drying. Move rugs and pull up areas of wet carpet as soon as possible.
- Open closet and cabinet doors and move furniture away from walls to increase circulation.
- Run portable fans to increase air circulation. Do NOT use the home's central blower if flooding has occurred in it or in any of the ducts. Do NOT use fans if mold may have already started to grow -- more than 48 h since flooding.
- Run dehumidifiers and window air conditioners to lower humidity.
- Do NOT turn up the heat or use heaters in confined areas, as higher temperatures *increase* the rate of mold growth.
- If water has soaked inside the walls, it may be necessary to open wall cavities, remove baseboards, and/or pry open wall paneling.

FOR LOCAL ASSISTANCE: **Contact your County or City Department of Health, Housing, or Environmental Health**

California Department of Health Services
(CDHS) IAQ Info Sheet

Arnold Schwarzenegger, Governor
State of California
Kimberly Belshé, Secretary
Health and Human Services Agency
Sandra Shewry, Director
Department of Health Services

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USEFUL PUBLICATIONS

Links to the following documents can be found at <http://www.ca-iaq.org>.

General Information

Molds, Toxic Molds, and Indoor Air Quality. Detailed overview for the legislature by the California Research Bureau.

Mold in Workplace – CDHS-HESIS Info Sheet. Useful overview with specific resources for workers.

Biological Pollutants in Your Home. Concise booklet by U.S. EPA and ALA aimed at affected homeowner.

Mold and Moisture. Appendix H in the U.S. EPA IAQ Tools for Schools

Clean-up Guidance

Repairing Your Flooded Home. Excellent resource by the American Red Cross and FEMA, with details on technical & logistical issues.

Guidelines on Assessment and Remediation of Fungi in Indoor Environments. Widely referenced guidelines developed by the New York City Department of Health.

Mold Remediation in Schools and Commercial Buildings. Valuable guidance by U.S. EPA, also applicable to residences.

Consultants, Laboratories & Clinics
CDHS Listing of Consultants Offering IAQ Services in California. Self-reported database of contractors.

CDHS List of Laboratories for Bioaerosol (Mold) Testing. Identifies labs providing bioaerosol testing.

Association of Occupational & Environmental Clinics. www.aoec.org.

Additional Information:

U.S. EPA IAQ INFO, 800-438-4318,
9 am to 5 pm, Eastern Time,
www.epa.gov/iaq/

CDHS Indoor Air Quality Section,
850 Marina Bay Parkway (EHLB),
Richmond, CA 94804
Phone: 510-620-2874