



## **DRAFT COVID-19 Procedures & Protocols for Fishing Vessels**

*Per State of Alaska Health Mandate 17*

This checklist is intended to make preparation and compliance easier but should not be considered a comprehensive summary and is subject to change without notice. Vessel owners must read, understand and comply with all state and local mandates impacting their fishery. Contact local authorities for additional guidance. State mandates can be found at <https://covid19.alaska.gov/health-mandates/>.

### **Planning**

- Sign [Mandate 17 Acknowledgement Form](#). Copy to processor, copy on board vessel.
- Read, understand and comply with state/local ordinances and protocols. **Contact:** fuel dock, fleet manager, harbor master at all ports of call for updated local information.
- Prepare Essential Worker Letter for crew traveling to Alaska.
- Quarantine plan for crew traveling to Alaska. If crew are going directly to work as essential workers, **designate workspaces and lodging separate from community, and restrict movement to those places during quarantine.** Crew may complete quarantine on board.

### **Travel, Screening & Quarantine Procedures for Incoming Workers**

*\*Procedures are for those traveling from out of state, not travel between communities.*

- Crew must wear a face mask throughout travel.
- Crew must carry a copy of their Essential Worker Letter.
- Crew must travel directly to established lodging or worksite/vessel upon arrival.
- Complete initial health screening with incoming crew. If crew demonstrates symptoms that cannot be attributed to another condition (i.e. allergies), do not allow them to board.
  - Take and note temperature (should be below 100.4). Crew should take their own temperature, or person taking temperature should wear a mask and gloves.

#### *Verbal Screening:*

- Cough, difficulty breathing, shortness of breath, loss of smell or taste, sore throat, unusual fatigue or symptoms of acute respiratory illness in past 72 hours?
- Fever over 100.4 or unusual chills, aches or pains in past 72 hours?
- Travel to area with widespread Covid-19 transmission, without practicing social distancing in past 14 days?
  - Close contact (within 6 feet for longer than 10 minutes) with a confirmed or suspected COVID-19 patient in the past 14 days?
- Take temperature twice daily during quarantine. Seek Covid-19 testing if signs of fever.
- Fly a "Lima" flag or similar yellow/black flag if crew is still under quarantine.

*\*If a crewmember joins a worksite/vessel prior to completing a 14-day self-quarantine, they must complete it at the worksite or vessel. If it is not possible to fully quarantine separate from others, the 14-day period must restart for the entire crew.*

Prepared by Ocean Strategies, Inc. for the Under Sixty Cod Harvesters, a 501(c)5 trade organization representing vessels harvesting Pacific cod, sablefish, halibut, salmon and a variety of species in Alaska. This checklist is not meant to be all-inclusive or considered final. This is not intended as a standard of care or as an industry standard and does not constitute independent legal or regulatory authority or mandate. Fishermen must refer to Governor Dunleavy's Health Mandates for compliance and are encouraged to reference Discovery Health's *Draft Covid-19 Catcher and Tender Vessel Procedures* for added safety measures.

- Report quarantine status to harbormaster, dock manager or tender prior to contact.

### **General Operating Procedures**

- Minimize contact with the public to the greatest extent possible.
- Use social distancing and sanitation practices during any essential interaction with community or public spaces, i.e. fueling, offload, maintenance and resupply.
- If living locally, any household members must practice social distancing.
- Recommend: Disinfect any deliveries to vessel. Do not allow delivery workers aboard.
- Recommend: Do not allow anyone aside from essential maintenance workers aboard.
- **Required:** Complete a health screening of any additional workers that *must* board the vessel (i.e. welder, electrician, etc.). Use crew screening protocol above.
- Regularly sanitize shared workspaces, surfaces, living quarters, supplies and tools. Establish a vessel protocol and assigned duties for regular sanitation.
- All crew practice regular hand washing, cough covering and social distancing where possible and safe. Use face masks and social distancing during community interactions.
- Identify one crewmember to handle, prepare and serve food.
- Wear gloves and face masks when exchanging any necessary items between vessels or at the dock. Sanitize items after receipt.
- Recommend: Use ventilation fans when working in engine room.

### **Identifying & Preventing Spread of Illness**

- Check all crew members daily for new signs of illness: fever, cough, shortness of breath, loss of smell or taste, unusual fatigue.
- If a respiratory illness is identified, complete health screening for all crew members, and take temperature twice daily for all crew members.
- If symptoms are consistent with Covid-19, isolate the ill crew member and use face masks, or consider the entire crew under isolation. Seek medical evaluation.
- If a vessel returns to port with a sick crew member, no other crew shall leave the vessel.
- If crew is under isolation and a Covid-19 exposure is suspected, use strict social distancing and sanitation precautions, and contact port of call for further guidance.

Dillingham Public Health Center: 842-5981  
Homer Public Health Center: 235-8857  
King Cove Medical Clinic: 497-2311  
Kodiak Public Health Center: 486-3319

Petersburg Public Health Center: 772-4611  
Sitka Public Health Center: 747-3255  
Valdez Public Health Center: 835-4612  
Unalaska (Iliuliuk) Health Center: 581-1202

### **Documentation:** *Keep a vessel log with the following information*

- Signed Mandate 17 Acknowledgement Form
- Record of crew arrivals in Alaska, start and end dates of quarantine, and record of completed temperature/health screenings during quarantine.
- Record of any onboard illness, and steps taken to prevent spread and seek treatment.



**STATE OF ALASKA**  
**DEPARTMENT OF HEALTH AND SOCIAL SERVICES**  
**INDEPENDENT FISHING VESSEL PROTECTIVE MEASURES**  
**ACKNOWLEDGMENT FORM**  
**MANDATE 017 - APPENDIX 02**



The State of Alaska acknowledges the importance of our commercial fishing fleets to our economy and lifestyle as Alaskans. In order to ensure a safe and productive fishing season this year, while protecting Alaskan communities to the maximum extent possible from the spread of the coronavirus, protective measures are necessary for independent commercial fishing vessels operating within Alaskan waters and ports in order to prevent, slow, and otherwise disrupt the spread of the virus that causes COVID-19.

<b>Vessel name and USCG No.:</b>				
<b>Alaska home port:</b>				
<b>Captain's name:</b>				
<b>No. of crew total:</b>		<b>immediate family members:</b>		<b>non-family members:</b>

I, \_\_\_\_\_, have read and understand all of the requirements of Mandate 017. As captain of the above-named vessel, I hereby acknowledge and agree to comply with the protective plan outlined in Appendix 01 of Mandate 017 for the 2020 fishing season.

I agree to comply with all other Mandates and health advisories issued by the State of Alaska and any local community mandates, ordinances, or directives that are not in direct conflict with this Mandate. I agree to keep a copy of this form and any other documentation required under Mandate 017 and Appendix 01 for the entirety of the 2020 fishing season. I shall produce this form, and any other required documentation, upon request to the United States Coast Guard, the State of Alaska, Department of Fish and Game, Department of Health and Social Services, and/or local, state, and federal authorities.

**CERTIFICATE:** I swear or affirm, under penalty of perjury, that the above information I provided on this document is true and correct. I swear or affirm I will comply with all of the requirements set out in Appendix 01 of Health Mandate 017.

**WARNING:** If you provide false information on this form, you may be convicted of a Class B felony under AS 11.56.200 and/or a Class A misdemeanor under AS 11.56.210. Pursuant to AS 12.55.155(b) and AS 12.55.035, Class B felonies are punishable by imprisonment of not more than 10 years; and by a fine of up to \$100,000 for an individual or up to \$2,500,000 for an organization.

Additionally, due to the imminent danger to the public by the spread of coronavirus, if you violate the self-quarantine regulations set forth in the Mandate, you may also be convicted of a class A misdemeanor which is punishable by a fine of up to \$25,000, or imprisonment of not more than one year, or both pursuant to AS 12.55.035 and AS 12.55.135.

**SIGNATURE:** \_\_\_\_\_

**DATE:** \_\_\_\_\_

**PRINTED NAME:** \_\_\_\_\_

[ Vessel / Company Name ]  
Address

DATE:

CRITICAL INFRASTRUCTURE INDUSTRY ESSENTIAL EMPLOYEE VERIFICATION  
AND TRAVEL LETTER

This letter identifies, [ Crewmember Name ] as an Essential Employee of [ Vessel / Company Name ], which is a Critical Infrastructure Industry under Alaska Governor Dunleavy's March COVID-19 Health Mandates and "Alaska Essential Services and Critical Workforce Infrastructure Order," specifically the fishing and fish processing industry identified in subsection II.e.ii.8, and under Washington Governor Inslee's "Stay Home-Stay Healthy" March 23, 2020 Proclamation 20-25 and Essential Critical Infrastructure Workers Appendix.

[ Vessel / Company Name ] has submitted its Protective Plan for maintaining critical infrastructure to the Alaska Unified Command pursuant to COVID-19 Health Mandates 010, 011 and 012. The individual named above should be considered authorized to travel under the mobility restrictions of Alaska Health Mandate 010 and Washington Proclamation 20-25.

They are also authorized to work under the safety measures enacted by our Protective Plan during their 14-day self quarantine period. Please grant this Essential Employee entry into Alaska and/or permit him/her travel to and from work in Washington or Alaska so he/she can continue with their job in the interest of protecting public health and security.

This letter is valid from the above date for the duration of the national emergency related to the COVID-19 pandemic, the effective period of Alaska's COVID-19 Health Mandates, and/or Washington's Stay Home-Stay Healthy Proclamation 20-25.

Thank you for your cooperation.

For validation purposes or questions, please contact the undersigned.

Sincerely, [ Vessel Captain ]  
Email address

## Crew Member Employment Contract

### Purpose

This agreement defines the terms of employment of \_\_\_\_\_ (crew member) by \_\_\_\_\_ (vessel owner) aboard the fishing vessel \_\_\_\_\_ during the \_\_\_\_\_ season.

### Term

This agreement is applicable from \_\_\_\_\_ through \_\_\_\_\_. It may be extended by mutual agreement.

### Payment

The crew member will be paid a crew share of the grounds price value of the catch for all landings made while the crew member was working aboard the boat during the term of this agreement, calculated in one of the two following ways. Check the correct line.

\_\_\_ Payment will be \_\_\_% of the gross landed value of the catch.

*or*

\_\_\_ Payment will be \_\_\_% of the net landed value of the value of the catch after deductions for expenses. Expenses to be deducted include (check those applicable)

\_\_\_ food at the rate of \$ \_\_\_\_\_ per day

\_\_\_ fuel, oil

\_\_\_ gear, including nets, bouys, lines, etc.

\_\_\_ ice

\_\_\_ other (list here) \_\_\_\_\_

If required to perform work on the vessel beyond normal pre- and post season preparation, maintenance and lay-up, the crew member will be paid for that extra work at the rate of \$ \_\_\_\_\_ per hour or \$ \_\_\_\_\_ per day.

### Retros and Bonuses

The crew member (check one) \_\_\_ does, or \_\_\_ does not receive a share of post-season price adjustments, retros, refrigeration or dock delivery bonuses.

If the crew member satisfactorily completes the season, including pre-and post-season maintenance, repair and lay-up, the crew member will be paid a bonus of \_\_\_% of the gross or net value of the catch as calculated above.

### Conditions of Employment

The crew member must perform all duties assigned by the captain and obey all orders. The crew member must at all times behave in a seaman like manner and avoid conflict with other crew members.

No alcohol, illegal drugs or other banned substances are allowed aboard the vessel. Use or possession of such substances is ground for immediate dismissal.

The crew member must adhere to all State of Alaska social distancing mandates for 14 days prior to travel to the fishery including appropriate PPE in public spaces.

Upon arrival in \_\_\_\_\_ the crew member will quarantine at the vessel's onshore storage location and abide by all State of Alaska and City of \_\_\_\_\_ ordinances and mandates in regards to COVID 19.

The captain must be kept informed of the crew member's location when in port and the crew member must gain captain's explicit permission to leave the site of quarantine anytime before launching the vessel and departing from the harbor.

The crew member will wear a face mask, provided by the vessel owner, whenever deemed applicable by COVID 19 mandates or the vessel owner.

The crew member will immediately report to the captain if they experience any of the following symptoms fever (stipulated as a temperature of 100.4 or higher), loss or change in taste or smell, cough, shortness of breath, chills, muscle pain, headache, sore throat, and submit to daily temperature checks.

The crew member will engage in no illegal activities during the term of this agreement. The captain will operate the vessel in a safe and legal manner, and will not order crew members to perform unusually dangerous tasks.

### Lay-off, Termination, and Voluntary Departure

In the event of slow fishing or failure of the crew member to properly perform duties, the captain may lay off or dismiss the crew member. All earned crew share will be paid.

If the crew member breaches this agreement and leaves employment or fails to comply with COVID 19 precautions the captain may deduct up to \_\_\_\_\_% from the crew share, which must be paid on or shortly after departure.

Other Provisions

The following will be provided by (check one):	Captain	Crew Member
Transportation to and from vessel	_____	_____
Rain gear, boots, other clothing	_____	_____
Survival Suit	_____	_____
Site of quarantine upon arrival for employment	_____	_____
Crew Member License	_____	_____
Face Masks	_____	_____
Other(specify)_____	_____	_____

Medical History

The crew member is required to declare here and upon arrival a previous history of any of the following:

\_\_\_Fever (stipulated as a temperature of 100.4 or higher), loss of taste or smell, cough, shortness of breath, chills, muscle pain, headache, sore throat, within the 21 days prior to arriving to the fishery

\_\_\_Contact with anyone confirmed Positive with COVID 19 anytime prior to arriving to the fishery

\_\_\_Travel outside of 50 miles of place of permanent residence within 21 days of arriving in Dillingham excluding travel to report for the season

\_\_\_Back injuries or back pain

\_\_\_Heart disease

\_\_\_Diabetes

\_\_\_Lung disease

Asthma

Hernia

Broken or dislocated limbs, shoulders, hips, fingers, etc.

Allergies, food or diet restrictions, substance sensitivities (smoke, noise, dust, etc.)

Severe seasickness

Alcoholism, drug dependence

Other injury or disease that may be aggravated or affect performance of duties

If any of the above is checked, describe condition, circumstances, treatment, and status of current treatment:

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Other Considerations

In the event the crew member is injured, becomes ill, or contracts COVID 19 during the 2020 salmon season while in the employ of the fishing vessel \_\_\_\_\_ any and all medical expenses incurred will be the sole responsibility of the crew member. The captain will provide transportation to the nearest medical facility and do everything within their capacity to limit exposure of other crew members aboard the vessel if illness arises.



# Steps to help prevent the spread of COVID-19 if you are sick

**FOLLOW THE STEPS BELOW:** If you are sick with COVID-19 or think you might have COVID-19, follow the steps below to help protect other people in your home and community.

## Stay home except to get medical care

- **Stay home:** Most people with COVID-19 have mild illness and are able to recover at home without medical care. Do not leave your home, except to get medical care. Do not visit public areas.
- **Stay in touch with your doctor.** Call before you get medical care. Be sure to get care if you have trouble breathing, or have any other emergency warning signs, or if you think it is an emergency.
- **Avoid public transportation:** Avoid using public transportation, ride-sharing, or taxis.



## Separate yourself from other people in your home, this is known as home isolation

- **Stay away from others:** As much as possible, stay away from others. You should stay in a specific “sick room” if possible, and away from other people in your home. Use a separate bathroom, if available.
  - See COVID-19 and Animals if you have questions about pets. <https://www.cdc.gov/coronavirus/2019-ncov/faq.html#COVID19animals>



## Call ahead before visiting your doctor

- **Call ahead:** Many medical visits for routine care are being postponed or done by phone or telemedicine.
- If you have a medical appointment that cannot be postponed, call your doctor’s office, and tell them you have or may have COVID-19. This will help the office protect themselves and other patients.



## If you are sick wear a facemask in the following situations, if available.

- **If you are sick:** You should wear a facemask, if available, when you are around other people (including before you enter a healthcare provider’s office).
- **If you are caring for others:** If the person who is sick is not able to wear a facemask (for example, because it causes trouble breathing), then as their caregiver, you should wear a facemask when in the same room with them. Visitors, other than caregivers, are not recommended.



**Note:** During a public health emergency, facemasks may be reserved for healthcare workers. You may need to improvise a facemask using a scarf or bandana.

## Cover your coughs and sneezes

- **Cover:** Cover your mouth and nose with a tissue when you cough or sneeze.
- **Dispose:** Throw used tissues in a lined trash can.
- **Wash hands:** Immediately wash your hands with soap and water for at least 20 seconds. If soap and water are not available, clean your hands with an alcohol-based hand sanitizer that contains at least 60% alcohol.



## Clean your hands often

- **Wash hands:** Wash your hands often with soap and water for at least 20 seconds. This is especially important after blowing your nose, coughing, or sneezing; going to the bathroom; and before eating or preparing food.
- **Hand sanitizer:** If soap and water are not available, use an alcohol-based hand sanitizer with at least 60% alcohol, covering all surfaces of your hands and rubbing them together until they feel dry.
- **Soap and water:** Soap and water are the best option, especially if hands are visibly dirty.
- **Avoid touching:** Avoid touching your eyes, nose, and mouth with unwashed hands.



## Avoid sharing personal household items

- **Do not share:** Do not share dishes, drinking glasses, cups, eating utensils, towels, or bedding with other people in your home.
- **Wash thoroughly after use:** After using these items, wash them thoroughly with soap and water or put in the dishwasher.



## Clean all “high-touch” surfaces everyday

Clean high-touch surfaces in your isolation area (“sick room” and bathroom) every day; let a caregiver clean and disinfect high-touch surfaces in other areas of the home.



- **Clean and disinfect:** Routinely clean high-touch surfaces in your “sick room” and bathroom. Let someone else clean and disinfect surfaces in common areas, but not your bedroom and bathroom.
  - If a caregiver or other person needs to clean and disinfect a sick person’s bedroom or bathroom, they should do so on an as-needed basis. The caregiver/other person should wear a mask and wait as long as possible after the sick person has used the bathroom.
- High-touch surfaces include phones, remote controls, counters, tabletops, doorknobs, bathroom fixtures, toilets, keyboards, tablets, and bedside tables.
- **Clean and disinfect areas that may have blood, stool, or body fluids on them.**
- **Household cleaners and disinfectants:** Clean the area or item with soap and water or another detergent if it is dirty. Then, use a household disinfectant.
  - Be sure to follow the instructions on the label to ensure safe and effective use of the product. Many products recommend keeping the surface wet for several minutes to ensure germs are killed. Many also recommend precautions such as wearing gloves and making sure you have good ventilation during use of the product.
  - Most EPA-registered household disinfectants should be effective. A full list of disinfectants can be found [here](#).

## Monitor your symptoms

- Common symptoms of COVID-19 include fever and cough. Trouble breathing is a more serious symptom that means you should get medical attention.
- **If you are having trouble breathing, seek medical attention, but call first.**
  - Call your doctor or emergency room before going in and tell them your symptoms. They will tell you what to do.
- **Wear a facemask:** If available, put on a facemask before you enter the building. If you can’t put on a facemask, cover your coughs and sneezes. Try to stay at least 6 feet away from other people. This will help protect the people in the office or waiting room.
- **Follow care instructions from your healthcare provider and local health department:** Your local health authorities will give instructions on checking your symptoms and reporting information.



If you develop **emergency warning signs** for COVID-19 get **medical attention immediately.**

Emergency warning signs include\*:

- Trouble breathing
- Persistent pain or pressure in the chest
- New confusion or inability to arouse
- Bluish lips or face

\*This list is not all inclusive. Please consult your medical provider for any other symptoms that are severe or concerning.

**Call 911 if you have a medical emergency:** If you have a medical emergency and need to call 911, notify the operator that you have or think you might have, COVID-19. If possible, put on a facemask before medical help arrives.

## How to discontinue home isolation

- People **with COVID-19 who have stayed home (home isolated)** can stop home isolation under the following conditions:
  - **If you will not have a test** to determine if you are still contagious, you can leave home after these three things have happened:
    - You have had no fever for at least 72 hours (that is three full days of no fever without the use medicine that reduces fevers) AND
    - other symptoms have improved (for example, when your cough or shortness of breath have improved) AND
    - at least 7 days have passed since your symptoms first appeared
  - **If you will be tested** to determine if you are still contagious, you can leave home after these three things have happened:
    - You no longer have a fever (without the use medicine that reduces fevers) AND
    - other symptoms have improved (for example, when your cough or shortness of breath have improved) AND
    - you received two negative tests in a row, 24 hours apart. Your doctor will follow CDC guidelines.



**In all cases, follow the guidance of your healthcare provider and local health department.** The decision to stop home isolation should be made in consultation with your healthcare provider and state and local health departments. Local decisions depend on local circumstances.

More information is available <https://www.cdc.gov/coronavirus/2019-ncov/hcp/disposition-in-home-patients.html>.

Additional information for healthcare providers: [Interim Healthcare Infection Prevention and Control Recommendations for Persons Under Investigation for 2019 Novel Coronavirus.](#)

# Use Personal Protective Equipment (PPE) When Caring for Patients with Confirmed or Suspected COVID-19

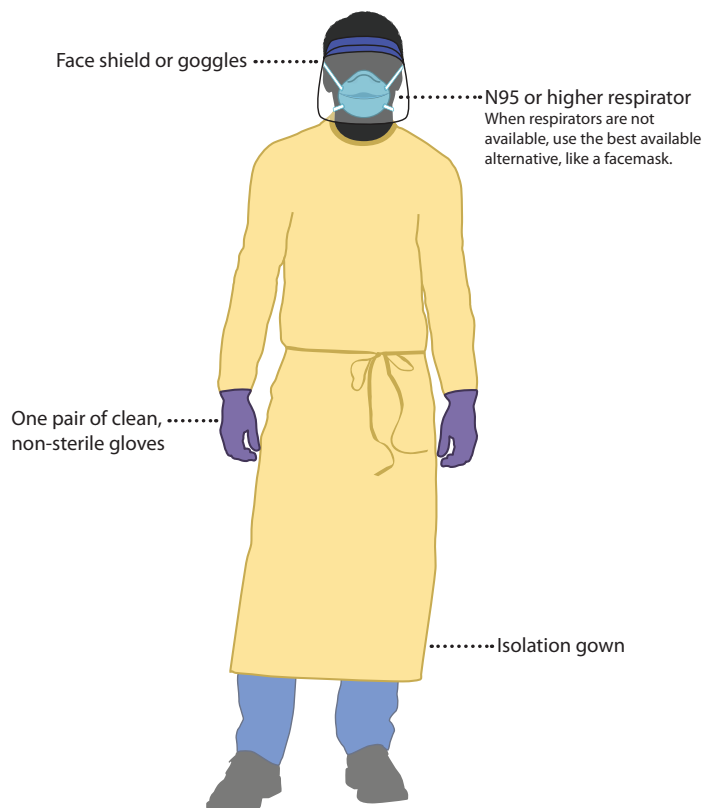
## Before caring for patients with confirmed or suspected COVID-19, healthcare personnel (HCP) must:

- **Receive comprehensive training** on when and what PPE is necessary, how to don (put on) and doff (take off) PPE, limitations of PPE, and proper care, maintenance, and disposal of PPE.
- **Demonstrate competency** in performing appropriate infection control practices and procedures.

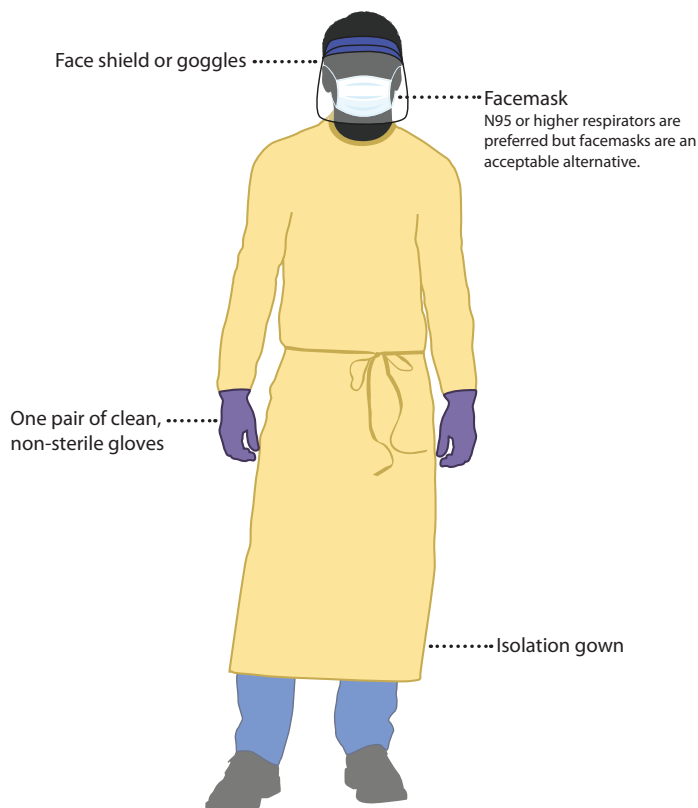
## Remember:

- PPE must be donned correctly before entering the patient area (e.g., isolation room, unit if cohorting).
- PPE must remain in place and be worn correctly for the duration of work in potentially contaminated areas. PPE should not be adjusted (e.g., retying gown, adjusting respirator/facemask) during patient care.
- PPE must be removed slowly and deliberately in a sequence that prevents self-contamination. A step-by-step process should be developed and used during training and patient care.

### Preferred PPE – Use N95 or Higher Respirator



### Acceptable Alternative PPE – Use Facemask



## Donning (putting on the gear):

*More than one donning method may be acceptable. Training and practice using your healthcare facility's procedure is critical. Below is one example of donning.*

- 1. Identify and gather the proper PPE to don.** Ensure choice of gown size is correct (based on training).
- 2. Perform hand hygiene using hand sanitizer.**
- 3. Put on isolation gown.** Tie all of the ties on the gown. Assistance may be needed by another HCP.
- 4. Put on NIOSH-approved N95 filtering facepiece respirator or higher (use a facemask if a respirator is not available).** If the respirator has a nosepiece, it should be fitted to the nose with both hands, not bent or tented. Do not pinch the nosepiece with one hand. Respirator/facemask should be extended under chin. Both your mouth and nose should be protected. Do not wear respirator/facemask under your chin or store in scrubs pocket between patients.\*
  - » **Respirator:** Respirator straps should be placed on crown of head (top strap) and base of neck (bottom strap). Perform a user seal check each time you put on the respirator.
  - » **Facemask:** Mask ties should be secured on crown of head (top tie) and base of neck (bottom tie). If mask has loops, hook them appropriately around your ears.
- 5. Put on face shield or goggles.** Face shields provide full face coverage. Goggles also provide excellent protection for eyes, but fogging is common.
- 6. Perform hand hygiene before putting on gloves.** Gloves should cover the cuff (wrist) of gown.
- 7. HCP may now enter patient room.**

## Doffing (taking off the gear):

*More than one doffing method may be acceptable. Training and practice using your healthcare facility's procedure is critical. Below is one example of doffing.*

- 1. Remove gloves.** Ensure glove removal does not cause additional contamination of hands. Gloves can be removed using more than one technique (e.g., glove-in-glove or bird beak).
- 2. Remove gown.** Untie all ties (or unsnap all buttons). Some gown ties can be broken rather than untied. Do so in gentle manner, avoiding a forceful movement. Reach up to the shoulders and carefully pull gown down and away from the body. Rolling the gown down is an acceptable approach. Dispose in trash receptacle.\*
- 3. HCP may now exit patient room.**
- 4. Perform hand hygiene.**
- 5. Remove face shield or goggles.** Carefully remove face shield or goggles by grabbing the strap and pulling upwards and away from head. Do not touch the front of face shield or goggles.
- 6. Remove and discard respirator (or facemask if used instead of respirator).\*** Do not touch the front of the respirator or facemask.
  - » **Respirator:** Remove the bottom strap by touching only the strap and bring it carefully over the head. Grasp the top strap and bring it carefully over the head, and then pull the respirator away from the face without touching the front of the respirator.
  - » **Facemask:** Carefully untie (or unhook from the ears) and pull away from face without touching the front.
- 7. Perform hand hygiene after removing the respirator/facemask** and before putting it on again if your workplace is practicing reuse.

*\*Facilities implementing reuse or extended use of PPE will need to adjust their donning and doffing procedures to accommodate those practices.*

## Disinfecting and Sanitizing with Bleach

### Guidelines for Mixing Bleach Solutions for Child Care and Similar Environments

#### Preparation Tips

- **Prepare** a fresh bleach solution each day in a well-ventilated area that is separate from children.
- **Label** bottles of bleach solution with contents, ratio and date mixed.
- **Use cool water. Always add** bleach to cool water, **NOT** water to bleach.
- **Wear** gloves and eye protection.
- **Prepare** solution in an area with an eye wash.

#### Disinfecting Solutions

For use on diaper change tables, hand washing sinks, bathrooms (including toilet bowls, toilet seats, training rings, soap dispensers, potty chairs), door and cabinet handles, etc.

Water	Bleach Strength*	Bleach Strength*	Bleach Strength*
1 Gallon	1/3 Cup, plus 1 Tablespoon	3 Tablespoons	2 Tablespoons
1 Quart	1 1/2 Tablespoons	2 1/4 Teaspoons	1 1/2 Teaspoons

#### Sanitizing Solutions

For use on eating utensils, food use contact surfaces, mixed use tables, high chair trays, crib frames and mattresses, toys, pacifiers, floors, sleep mats, etc.

1 Gallon	1 Tablespoon	2 Teaspoons	1 Teaspoon
1 Quart	1 Teaspoon	1/2 Teaspoon	1/4 Teaspoon

Disinfection of non-porous non-food contact surfaces can be achieved with 600 parts per million (ppm) of chlorine bleach. To make measuring easier, the strengths listed in this table represent approximately 600-800 ppm of bleach for disinfecting, and approximately 100 ppm for sanitizing. Chlorine test strips with a measuring range of 0-800 ppm or higher can also be used to determine the strength of the solution.

**Contact your local health jurisdiction** for further instructions on cleaning and disinfecting if specific disease or organisms are identified as causing illness in your program.

**\*Use only plain unscented bleach** that lists the percent (%) strength on the manufacturer's label. Read the label on the bleach bottle to determine the bleach strength. For example, Sodium Hypochlorite...6.25% or 8.25%.

#### Steps to Follow

- **Clean** the surface with soap and water before disinfecting or sanitizing.
- **Rinse** with clean water and dry with paper towel.
- **Apply** chlorine bleach and water solution to the entire area to be disinfected or sanitized.
- **Air dry** for at least 2 minutes.

This chart was created by the Disinfection Workgroup led by the Washington State Department of Health. Workgroup members consist of staff from the Department of Early Learning, Snohomish Health District, Local Hazardous Waste Management Program in King County, Washington State Department of Ecology, the Coalition for Safety and Health in Early Learning, and the Washington State Department of Health.

For people with disabilities, this document is available on request in other formats. To submit a request, please call 1-800-525-0127 (TDD/TTY call 711).



# Chlorine Bleach Disinfecting and Sanitizing Chart Companion Document

DOH 970-216 January 2015

**Background:** Sodium hypochlorite is the active ingredient in household bleach or chlorine bleach. It is economical, and is an effective disinfectant with a broad spectrum of antimicrobial activity. It has been the primary disinfectant used in early learning programs in Washington State for more than 30 years. During this time, most household chlorine bleach was available at strengths of 5.25-6.25%. The recommended concentration for disinfection has been 600-800 ppm of chlorine bleach and 50 to 200 parts per million (ppm) for sanitizing.

In 2012, some manufacturers changed their chlorine bleach formulation to a strength of 8.25% with a registered non-food contact surface disinfection level of 2400 ppm, the level often used in hospitals. Their sanitizing level is 200 ppm, the upper end of the range allowed by the Food and Drug Administration (FDA).

**Problem:** As of 2014, the most available household chlorine bleach used for disinfection in children’s programs in many areas of Washington State is at a strength of 8.25%. Instructions for use of these products and other strength bleaches indicate 2400 ppm of chlorine bleach is needed for disinfection. This represents 3 to 4 times the levels previously recommended for Washington’s child cares. This issue has raised the question of what guidance to give child care providers regarding the concentration of disinfection and sanitizing solutions for use in their programs.

**Discussion:** It is prudent to use as few chemicals as possible in a child’s environment. We believe 2400 ppm is too strong to use in children’s environments when they are present, especially since children’s lungs are still developing, and are more vulnerable to exposures to toxic chemicals.

The U.S. Environmental Protection Agency (EPA) (2014) guidelines contain procedures for testing, and test organisms that products must be able to destroy at 99.9% in order to be labeled as disinfectants and receive EPA’s approval. The Disinfection Workgroup found several products that received EPA approval for disinfection at a strength of 600 ppm. For example:

Name of Product	Strength of Sodium Hypochlorite	EPA’s Approval date
Aqua Guard Bleach	12.5%	August 4, 2014
Clorox Ultra Bleach	6.15%	August 29, 2012
KA Steel	12.5%	February 25, 2014
KIK International –Pure Bright Disinfectant Bleach	5.25%	January 13, 2014
So White Brand Bleach and Disinfectant	5.25%	July 11, 2013
Vertex	5.25%	February 12, 2014

**Prepared by:** The Disinfection Workgroup led by the Washington State Department of Health. Workgroup members consist of staff from the Local Hazardous Waste Management Program in King County, Snohomish Health District, the Coalition for Safety and Health in Early Learning, Washington State Department of Early Learning, Washington State Department of Ecology, and the Washington State Department of Health.

Based on the information contained herein, careful review of the literature and correspondence with EPA, the Disinfection Workgroup recommends staying as close as possible to a 600 ppm disinfection level for general non-food contact surface disinfection.

A thorough review of evidence-based literature has shown that 600 ppm to be an effective disinfectant when used appropriately. The literature suggests that there are key advantages to using lower strength chlorine bleach as a disinfectant (CDC, 2009). Chlorine bleach:

- Does not leave a toxic residue that requires rinsing in children’s areas.
- Is unaffected by water hardness.
- Is inexpensive and fast acting.

The Disinfection Workgroup created a chart titled *Disinfecting and Sanitizing with Bleach: Guidelines for Mixing Bleach Solutions for Child Care and Similar Environments* that lists recipes for creating disinfection and sanitizing solutions for the most common concentrations of chlorine bleach currently on the market. The chart uses a disinfection level of 600-800 ppm, and a sanitizing level at approximately 100 ppm. The chart also reminds providers to check with their local health department when disease or pathogenic organisms are present that require a higher level of disinfection to kill. For example, a norovirus outbreak, or dealing with a child with *Clostridium difficile*.

**How to Determine Chlorine Bleach strength:**

- Read the fine print on the label.
- The active ingredients may be listed on the back or front of the container’s label, and listed in a similar manner to the example below showing the strength or percent of chlorine in a container of 8.25% bleach.

Active Ingredients	
Sodium Hypochlorite...	8.25%
Other ingredients.....	91.75%
Total.....	100%

**References**

Centers for Disease Control and Prevention (CDC). (2009, December 29). Guideline for Disinfection and Sterilization in Healthcare Facilities, 2008. Retrieved from

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