Cross Training for a Safe Environment Erika Kramer, LNHA & Chris Smith, Solutions Specialist



Objectives:

- Participants will be guided through virtual demonstrations and information to implement infection control measures in their community.
- Participants will understand the impact of cross training on a successful infection prevention program.
- Participants will learn how to simplify everyday infection control challenges to achieve a safe environment at their community.

- Dedicated medical equipment should be used when caring for patients with suspected or confirmed SARS-CoV-2 infection.
 - All non-dedicated, non-disposable medical equipment used for patient care should be cleaned and disinfected according to manufacturer's instructions and facility policies.

 Ensure that environmental cleaning and disinfection procedures are followed consistently and correctly.

- Routine cleaning and disinfection procedures (e.g., using cleaners and water to pre-clean surfaces prior to applying an EPA-registered, hospital-grade disinfectant to frequently touched surfaces or objects for appropriate contact times as indicated on the product's label) are appropriate for SARS-CoV-2 in healthcare settings, including those patient-care areas in which aerosol generating procedures are performed.
 - Refer to <u>List Nexternal icon</u> on the EPA website for EPAregistered disinfectants that have qualified under EPA's emerging viral pathogens program for use against SARS-CoV-2.

 Management of laundry, food service utensils, and medical waste should also be performed in accordance with routine procedures.

 Additional information about recommended practices for terminal cleaning of rooms and PPE to be worn by environmental services personnel is available in the <u>Healthcare Infection Prevention and</u> <u>Control FAQs for COVID-19</u>

How can you cross train?

- Education and training of main areas to achieve safety
- Posters as reminders
- Testing to understand competency
- Communicate WHY your team needs to be engaged with cross training. This is important for resident and self safety.

How can you cross train?



T/F Laundry Procedures

Competency Exam

Please answer these $\mbox{\bf True}$ / $\mbox{\bf False}$ statements.

PPE is really only needed when handling infectious linen.
Both soiled and clean linen should be transported in covered carts, bins or shelving.
Linen should be dried completely to reduce opportunity for static discharge.
Catching heavy soiled areas and pretreating them prior to wash is best way to prevent staining.
Isolation or infectious linen should never be sorted prior to washing.
Linen should be allowed to sit in dryer for at least 20 minutes after drying to cool to touch, so it is easier to fold.
Gross soils should always be removed from linen in soiled hold area prior to going to laundry area.
Selecting proper chemical setting is more important than washer setting.

Education- Environmental Services

- Understand what disinfecting means:
 - Disinfecting removes 100% of microbials from a cleaned surface.
 - Disinfectants must be EPA registered and used at required concentrations as directed by label. Disinfectants must also have proper dwell time on surface for product to be effective as directed by label.

Picking the Right Disinfectant

- ☐ Know what germs your are trying to eliminate and pick a disinfectant with the proper kill claim.
- ☐ Always mix disinfectant at the proper dilution IMPORTANT!
- ☐ Remove all gross soils BEFORE disinfecting.
- ☐ Know the **proper contact time** for the disinfectant
- ☐ What is the active ingredient and will it damage the surfaces to be disinfected?
- ☐ Is it EPA registered?
- ☐ Is it a one-step product or do you need to pre-clean?

Education- Environmental Services

- What is "Dwell" time?
 - Dwell time or contact time is the required amount of time the disinfectant must remain wet on a surface. Typical dwell times are anywhere from 1 minute to 10 minutes.
 - Every disinfectant may be different in its dwell time.

Kill Claims and Contact Times

	256Worx or Century Q 256 (quat)	Milenium 64 (quat)	Microcide TB	Clorox Healthcare Hydrogen Peroxide Cleaner (spray)	Clorox Bleach Germicidal Wipes	Clorox Germicidal Bleach
Hepatitis A	Yes-10 min	Yes-10 min	Yes – 10 min	Yes-30 sec	Yes-1 min	Yes-5 min
Hepatitis B	Yes-10 min	Yes-10 min	Yes-5 min	Yes-30 sec	Yes-1 min	Yes-5 min
Hepatitis C	Yes-10 min	Yes-10 min	Yes-5 min	Yes-30 sec	Yes-1 min	Yes-5 min
HIV/AIDS	Yes-10 min	Yes-2 min	Yes-1 min	Yes-30 sec	Yes-30 sec	Yes-2 min
Seasonal Influenza	Yes-10 min	Yes-10 min	Yes-3 min	Yes-30 sec	Yes-1 min	Yes-5 min
Streptococcus pneumoniae	Yes-10 min	Yes-10 min	Yes – 3 min	Yes-30 sec	Yes-30 sec	Yes-5 min
CA-MRSA	Yes-10 min	Yes-10 min	Yes-3 min	Yes-1 min	Yes-30 sec	Yes-5 min
MRSA	Yes-10 min	Yes-10 min	Yes-3 min	Yes-1 min	Yes-30 sec	Yes-5 min
VRE	Yes-10 min	Yes-10 min	Yes-3 min	Yes-30 sec	Yes-30 sec	Yes-5 min
Acinetobacter	Yes-10 min	NO	NO	Yes – 30 sec	Yes-30 sec	Yes-5 min
Norovirus	NO	NO	Yes-30 sec	Yes-3 min	Yes-1 min	Yes-2 min
Tuberculosis TB	NO	NO	Yes-5 min	Yes-4 min	Yes-3 min	Yes-5 min
Clostridium Difficile – C diff spores	NO	NO	NO	NO	Yes-3 min	Yes-10 min
Staphylococcus aureus	Yes-10 min	Yes-10 min	Yes-3 min	1 min	Yes-30 sec	Yes-5 min

Products that Kill COVID-19

PRODUCTS THAT KILL CORONAVIRUS (on EPA List N)

Product Name	EPA#	Martin Bros. Item#	Dilution Rate	Contact Time	Pack/Siz
Claire Disinfectant Spray		016250	RTU	5 min	12/20 oz
TMA Conc. Neutral Lemon Disinfectant		190328	2 oz/gal	10 min	4/1 gal
TMA Quat Sanitizer		013518	.78oz/gal	10 min	4/1 gal
TMA Disinfectant Complete RTU		162318	6/32 oz.	5 min	6/1 qt
TMA 256Worx Disinfectant		171180	½ oz/gal	5 min	4/2 Liter
MultiClean Millennium Q 64 MultiTask		022905	2 oz/gal	10 min	4/2 Liter
MultiClean Millenium Q 64		022910	2 oz/gal	10 min	4/1 gal
MultiClean Century Q 256 MultiTask		022805	½ oz/gal	10 min	4/2 Liter
MultiClean Microcide TB	1839-83	010660	RTU	10 min	12/1 qt
MultiClean E-fecticide 128	6836-365	022930	1 oz/gal	5 min	4/2 Liter
MultiClean Kit Viral Disinfection	1839-95	022940	2 oz/gal	10 min	1/1 each
Clorox Healthcare Germicidal Bleach Wipes		019810	RTU	3 min	6/70 ct
Clorox Healthcare Fuzion Cleaner Disinfectant		016550	RTU	1 min	9/32 oz
Clorox Healthcare Hydrogen Peroxide Cleaner Disinfectant		019950	RTU	1 min	9/32 oz
Clorox Healthcare Hydrogen Peroxide Cleaner/Disinfectant Wipes		019970	RTU	2 min	6/95 ct
Clorox Disinfecting Wipes – Fresh Scent		019720	RTU	4 min	6/75 ct
Purell Surface Disinfectant	84150-1	019440	RTU	5 min	6/32 oz
Whirlpool Disinfectant Cleaner	6836-75	040960	RTU	3 min	4/1 gal.
Spic and Span Disinfectant Cleaner	3573-96	013100	9.15oz/ gal	10 min	3/1 gal
Spic and Span Disinfectant Cleaner RTU	6836-245	013090	RTU	10 min	8/32 oz
Comet Disinfecting Cleaner w/ Bleach	3573-77	013080	32 oz/gal	1 min	3/1 gal
Comet Disinfecting Cleaner w/ Bleach	3573-77	013110	RTU	1 min	8/32 oz
Comet Disinfecting Bathroom Cleaner	3573-54	012350	RTU	10 min	8/32 oz
Pure Hard Surface Disinfectant	72977-5	011930	KTU	1 min	12/1 qt
Clean-Cide Disinfecting Wipes		025840	RTU	5 min	400 ct
TMA Lemon Disinfectant 256		171308	1/2 oz/gal	5 min	2/1 gal
TMA X-force Disinfectant Cleaner	1839-220	162358	RTU	5 min	6/1 qt
Multi-Clean Peroxi-Cide Disinfectant Cleaner	6836-385	022990	RTU	3 min	12/1 qt
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Education- Environmental Services

DIRECTIONS

To disinfect inanimate, hard non-porous surfaces add 2 ounces of INFUSION Liquid Lemon Disinfectant per gallon of water. Apply solution with a mop, cloth, sponge, hand pump trigger sprayer or low pressure coarse sprayer so as to wet all surfaces thoroughly. Allow to remain wet for 10 minutes, then remove excess liquid. For sprayer applications, spray 6-8 inches from surface, rub with brush, sponge or cloth. Do not breathe spray mist. For heavily soiled areas, a pre-cleaning step is required.



DILUTED

NEUTRAL LEMON SCENTED DISINFECTANT

For Institutional and Foodservice Use

DANGER:

KEEP OUT OF REACH OF CHILDREN.

NET CONTENTS: 1 QT. (0.946 LITER)

SAFETY PRECAUTIONS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS.

DANGER, KEEP OUT OF REACH OF CHILDREN, CORROSIVE.

Causes irreversible eye damage and skin burns. Do not get in eyes, on skin or on clothing. May be fatal if absorbed through the skin. Harmful if swallowed. Wear goggles or face shield, rubber gloves, and protective clothing. Remove contaminated clothing and wash before reuse. Wash thoroughly with soap and water after handling and before eating, drinking, or using tobacco.

STATEMENT OF PRACTICAL TREATMENT

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. If in eyes: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

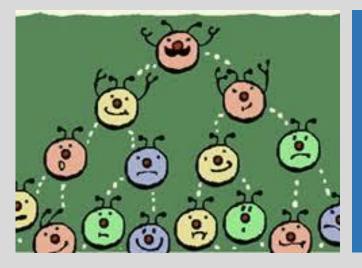
If on skin or clothing: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice. If swallowed: Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by the poison control center or doctor. Do not give anything by mouth to an unconscious person.

If inhaled: Move person to fresh air. If person is not breathing, call 911 or an ambulance then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.

NOTE TO PHYSICIAN - Probable mucosal damage may contraindicate the use of gastric lavage.

695 D 6/13/16

TMA/ Chemnet Systems 2335 Buttermilk Crossing, Crescent Springs, KY 41017 www.chemnet-systems.com



Fact: Microorganisms can reproduce by doubling every 15-20 minutes under optimal conditions (food source, humidity and temperature). So theoretically one germ could multiply to 76 billion germs in a 9 hour period!

Because of a germ's quick ability to multiply, we must be diligent about cleaning and disinfecting places where these germs can live and come in contact with humans.

Exponential Growth of Bacteria

Bacteria	Elapsed Time
10	0
160	1 hour
640	2 hours
40,960	4 hours
2,621,440	6 hours

HAIs

- In the U.S. there are an estimated 1.7 million healthcareassociated infections (HAI's), also known as nosocomial infections.
- 100,000 deaths each year from HAI's preventable deaths!
- Growing threat of antibiotic resistant germs
- Infection Control is key

Common Types of HAI's

TB and MDR-TB

Bloodborne Pathogens

Norovirus

MRSA

VRE

Acinetobacter

Clostridium difficile (C. diff)

Pneumonia

Influenza

DON'T FORGET TO DISINFECT FOR THESE AS WELL!!

Norovirus

 Virus that causes gastroenteritis in people. Gastroenteritis is an inflammation of the lining of the stomach and intestines, causing severe vomiting and diarrhea.

What's the cause?

 This virus is found in the feces and vomit of infected people and is highly contagious. Its sometimes also called "food poisoning" or the "stomach flu" because it can cause food poisoning, but there are other germs or chemicals that cause this as well. How is it transmitted: Fecal contamination gets on hands which in turn spread to other surfaces or food.

Norovirus can survive for days or weeks on hard surfaces.

CDC facts:

- Estimates on average 19-21 million cases of acute gastroenteritis is caused by norovirus
- 1 in 15 Americans will get norovirus each year
- Causes over 56,000-71,000 hospitalizations each year
- Causes 570-800 deaths each year
- It cost about \$2 billion in the US for healthcare and lost productivity from norovirus*

C. Diff

- It is a bacterium that can cause symptoms ranging from diarrhea to life threatening inflammation of the colon. C. Diff produces toxins that inflame and damage the colon.
- Antibiotics disrupt the good bacteria living in the colon leaving room for the C. diff spores to become active bacteria and take over.
- It occurs primarily in older adults in hospitals or long-term care facilities who have been using antibiotics.

How is it transmitted: C diff is found in feces. So people can transfer it from having fecal-contaminated hands.

In one study,
Clostridium difficile
was shown to
survive for 5 months
on hard surfaces.

The average total cost for a single inpatient C. difficile infection is more than \$35,000, and the estimated annual cost burden for the healthcare system exceeds \$3 billion.*

Influenza

It is a contagious respiratory illness caused by the influenza viruses that infect the nose, throat and lungs. Often called the flu.

How is it transmitted: Influenza is spread mainly by droplets made when flu victims cough, sneeze or talk. Also by touching a flu-contaminated object and then touching ones mouth, nose or eyes.

Similar to the common cold but more severe.

SIGNS AND SYMPTOMS

- Fever or feeling feverish/chills
- Cough
- Sore throat
- Muscle or body aches
- Headaches
- Runny or Stuffy Nose
- Fatigue
- Some people may have vomiting or diarrhea

Influenza virus can be transferred from contaminated surfaces to hands for up to 24 hours after the surface was contaminated.

COVID-19

What are coronaviruses?

Coronavirus

A family of viruses, seven of which are known to infect people. They get their name from the crown-like spikes—coronas—that appear on the viruses under a microscope. Coronaviruses can cause the common cold (which can also be caused by other viruses, such as rhinoviruses), as well as dangerous illnesses such as severe acute respiratory syndrome (SARS) and Middle East respiratory syndrome (MERS). SARS CoV-2, the coronavirus virus first discovered in December 2019, causes the disease now known as COVID-19.

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Quick Summary

Tuberculosis	Can remain alive longer than 9 hours in the air of a room, 45 days on clothing, 70 days in carpet, 90-120 days in dust, 105 days on a paper book and 6-8 months in sputum.
Bloodborne pathogens	Aids ·Cannot survive long outside the body
	Hepatitus B •Can survive outside the body up to 7 days
	Hepatitus C ·Can survive outside the body for 16 hrs up to 4 days
Norovirus	Can survive for days or weeks on hard surfaces.
MRSA	Can survive for days or weeks on hard surfaces.
VRE	Can survive for weeks or months on hard surfaces outside the body.
Acinetobacter	Can live on surfaces for several days
C-Diff	In one study, Clostridium difficile was shown to survive for 5 months on hard surfaces
Pneumonia	Different surfaces can allow the bacteria to live from just a few hours to several days, or even months
	Influenza virus can be transferred from contaminated surfaces to hands for up to 24 hours after the surface was contaminated.
Influenza	

PPE

Personal protective equipment, or PPE, as defined by the Occupational Safety and Health Administration, or OSHA, is "specialized clothing or equipment, worn by an employee for protection against infectious materials."

Types of PPE

- Gloves
- Goggles or eye protection
- Mask or face shield
- Apron or gown
- Shoe protector
- Respirator

EDUCATION-The Whole Team

80% of all infectious diseases are transmitted by touch.



Handwashing is the single most important means of preventing the spread of infection." CDC

Basic Handwashing Procedure

- 1. Turn water on and then wet your hands and wrists.
- Apply soap and then vigorously rub hands together for 20 seconds. Be sure to wash wrists, around and under rings, around cuticles and under fingernails.
- 3. Rinse hands thoroughly and point fingers down so water and contamination won't drip toward elbows.
- 4. Dry hands completely with a clean dry paper towel.
- 5. Use a paper towel to turn off the faucet.

Self-reported factors for poor adherence with hand-hygiene*

- Handwashing agents cause irritation and dryness
- Sinks are inconveniently located/shortage of sinks
- Lack of soap and paper towels
- Often too busy/insufficient time
- Understaffing/overcrowding
- Patient needs take priority
- Hand hygiene interferes with health-care worker relationships with patients
- Low risk of acquiring infection from patients
- Wearing of gloves/beliefs that gloves use obviates the need for hand hygiene

- Lack of knowledge of guidelines/protocols
- Not thinking about it/forgetfulness
- No role model from colleagues or supervisors
- Skepticism regarding the value of hand hygiene
- Disagreement with the recommendations
- Lack of scientific information of definitive impact of improved hand hygiene on health-care associated infection rates.

Hand-hygiene

- Hand hygiene is the most important way to prevent the spread of bacteria which cause infections.
- Improving healthcare personnel adherence to hand hygiene practices can reduce both infections and the spread of antibiotic-resistant bacteria.
- Although most bacteria and viruses are effectively killed by alcohol-based hand rubs or washing with soap and water, C. difficile spores are not killed by alcohol hand rubs or removed by hand washing.
- Use of gloves in addition to hand hygiene is very important to prevent hand contamination from C. difficile. But, gloves are not a substitute for performing hand hygiene.

Hand-hygiene

- Hand hygiene adherence among healthcare personnel remains disappointingly low; many studies report less than half of health care personnel perform appropriate hand hygiene.
- Proper hand hygiene must be understood by all people working in a healthcare facility.
- Effective hand hygiene programs must go beyond training to identify and address barriers to hand hygiene, including availability of and satisfaction with hand hygiene products.
- Providing feedback about hand hygiene performance can raise hand hygiene awareness and promote better adherence among healthcare personnel.



Handwashing

Objective:

Participants will demonstrate proper handwashing practices

Learning Activities:

- · Discuss the proper technique to wash hands using handout
- · Proper handwashing technique will be shown through a demonstration with oil & cinnamon.
- Moderator will discuss when to wash hands and review glove usage.

Materials:

- Cinnamon
- Vegetable Oil
- · Handwashing facilities: hand sink, soap, water
- Handout on handwashing technique:
 - o Log onto www.martinsmart.com
 - o Click "Resources"
 - o Click "Handwashing Procedures"
- Discussion points for moderator on when to wash hands.

- See Foodhandler website for online video clips & downloadable posters on handwashing & glove use
 - o Log onto www.foodhandler.com
 - o Click "training"
 - o Click "video series"
 - o Click "play" to view each video
 - o Click "downloadable tools" to view and print charts

Method:

- Review proper handwashing technique per handout.
- Ask for 4 volunteers. Pour 1 Tsp of vegetable oil in each of their hands followed by 1 Tsp of cinnamon. Instruct to rub hands dispersing oil & cinnamon.

Direct to handwashing facilities:

- Volunteer 1: Instruct to wash hands using no soap.
- Volunteer 2: Instruct to wash hands with no rubbing.
- Volunteer 3: Instruct to wash with cold water.
- Volunteer 4: Instruct to use proper handwashing technique.
- Visually inspect and smell the hands of the volunteers to identify the techniques used.

When to Wash Hands:

Before

- Beginning to work and after breaks
- Food preparation & service
- Putting on or changing gloves
- Assisting a customer with dining
- Handling medication

After

- · Handling raw meats, poultry, or fish
- Touching dirty dishes, equipment or utensils
- Handling trash, money, the phone, & other unclean objects
- Using chemicals
- After sweeping, mopping, or wiping counters
- . Coming in contact with body fluids

DINING Room and KITCHEN

- Food Contact Surfaces must be sanitized with an approved product for food contact surfaces after surface is cleaned.
- Food contact surfaces can be disinfected, but a potable rinse is required to remove residual disinfectant that may be harmful if ingested.
- Sanitizers kills 99.99% of microbials where disinfectants kills 100%.

**Dining room tables are considered a food contact surface area

DINING Room and KITCHEN

- Proper Sanitation Levels
 - Heat Using hot water to sanitize.
 - High temp dishwasher 180° F rinse temperature
 - 3rd compartment sink sanitizing 70-75 degree rinse water with a sanitizer solution

DINING Room and KITCHEN

- Proper Sanitation Levels
 - Sanitizing with Chlorine 50 ppm minimum, over 200 may constitute disinfecting and may need potable rinse
 - Low temp dishwasher
 - 3rd compartment sink sanitizer
 - Other food contact surfaces
 - Sanitizing with Quaternary typically 150-400 ppm but always consult product labels
 - 3rd compartment sink sanitizer
 - Other food contact surfaces
 - Other sanitizing products like iodine or alcohol-based sanitizers should consult product label directions for strength and use.

FOOD CODE 4-703.11 Hot Water and Chemical.

After being cleaned, EQUIPMENT FOOD-CONTACT SURFACES and UTENSILS shall be SANITIZED in:

- (A) Hot water manual operations by immersion for at least 30
- seconds and as specified under § 4-501.111; P
- (B) Hot water mechanical operations by being cycled through
- EQUIPMENT that is set up as specified under §§ 4-501.15,
- 4-501.112, and 4-501.113 and achieving a UTENSIL SURface
- temperature of 71°C (160°F) as measured by an irreversible
- registering temperature indicator; Por
- (C) Chemical manual or mechanical operations, including the
- application of SANITIZING Chemicals by immersion, manual
- swabbing, brushing, or pressure spraying methods, using a
- solution as specified under § 4-501.114. Contact times shall
- be consistent with those on EPA-registered label use
- instructions by providing:
- (2) A contact time of at least 7 seconds for a chlorine
- solution of 50 $_{\text{MG}}$ /L that has a $_{\text{PH}}$ of 10 or less and a
- temperature of at least 38_oC (100_oF) or a PH of 8 or less
- and a temperature of at least 24°C (75°F), P
- (3) A contact time of at least 30 seconds for other chemical
- SANITIZING solutions,

Dining Room-Kitchen

- WHEN to use gloves
- All food needs to be covered while transporting to resident rooms
- Correct temperatures that food needs to be when serving residents

Resident Rooms

Resident Rooms

- Bed Rails
- Trash Receptacles
- Over-bed Tables
- Telephones
- Charts
- Door Frames
- Wheelchairs
- Floors
- TV
- Appliances

- How to read a label
- Where to get the products
- The procedure of cleaning and disinfecting the room (top to bottom)

Bathrooms

Bathrooms

- Exterior of Hand Dryers
- All Dispensers
- Fixtures
- Sinks
- Toilets
- Urinals
- Floors
- Light Switches

- How to read a label
- Where to get the products
- The procedure of cleaning and disinfecting the room (top to bottom)
- Spray disinfectant on the toilet and clean it last

Laundry

Laundry

- Use proper formula
- Different items need to be washed separately
- The sanitization of the laundry happens during the drying process

- PPE is worn
- Don't shake contaminated linens
- Transportation of clean and dirty linens need to be in separate carts

Lobby/Entryway

Lobby

- Use an EPA registered disinfectant on high touch surface areas
- High touch surfaces are handled many times throughout the day by various users
- Your hand sanitizer needs to be at least 60% alcohol

- What high touch surface areas are
- What you are doing to maintain social distancing
- Your new visitor procedure, and update as it changes

We're not done!!

Senior Living Cross Training CHECKLIST GUIDE

This checklist will help you make sure you see everything available in this interactive t

WELCOME PAGE

Cleaning Matrix

Products That Kill Coronavirus

ENTRYWAY / LOBBY

POS/Hostess/Lobby Cleaning Overview

Encourage Social Distancing

RESIDENT ROOM

General Guidelines & Safety Procedures

DINING ROOM

Dining Room Cleaning Overview

3-Bucket & Quat. Sanitizer Resources

KITCHEN

Kitchen Walk-Through: Cleaning & Sanitizing

Restaurant/Foodservice Cleaning Checklist

LAUNDRY ROOM

Laundry Infection Prevention

BATHROOM

Resident Room Bathroom Cleaning

Hand Washing Demonstration

