Hygiene as a Measure of Corporate Social Responsibility

With Chief Technology Officer Paul Barnhill

Introduction

About the presenter

Paul Barnhill is a leading expert in human hygiene and serves as Chief Technology Officer at Meritech. For over thirty years, Paul has played a critical role in developing innovative technologies designed to improve hygiene.

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About Meritech

- Centrally focused on redefining human hygiene by creating automated handwashing and footwear hygiene technology
- Meritech is headquartered in Golden, CO and was founded 30 years ago
- All of our hygiene stations and solutions manufactured in the USA
- Dedicated team of hygiene experts throughout the United States

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History of Hand Hygiene

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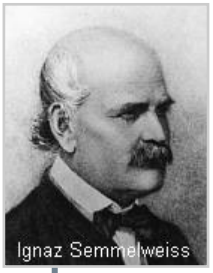

1846

1853

1855
The Third Plague

Late 1800s
Yellow Fever

1889 - 1890
Russian Flu

1918
Spanish Flu

1957 - 1958
Asian Flu

1961

1968 - 1970
Hong Kong Flu

1981 - Present
HIV / AIDS

1985

CDC
CENTERS FOR DISEASE CONTROL AND PREVENTION

OSHA
OCCUPATION SAFETY & HEALTH ADMINISTRATION

1992

2002-2003
SARS

2009-2010
Swine Flu

2012

2012 - Present
MERS

2014 - 2016
Ebola

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Are People Washing Their Hands Properly?

No, most people are not

washing their hands enough or correctly.

- A study conducted by USDA found consumers fail to correctly wash their hands 97 percent of the time, with the most common mistake being not washing hands long enough.
- A hygiene report from Michigan State University found that 33 percent of people didn't use soap when washing their hands, while 10 percent didn't wash their hands at all.

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COVID-19 Changes Hand Hygiene Awareness

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This isn't the first pandemic

and it likely won't be the last one we're faced with.

1918 Spanish Flu

COVID-19

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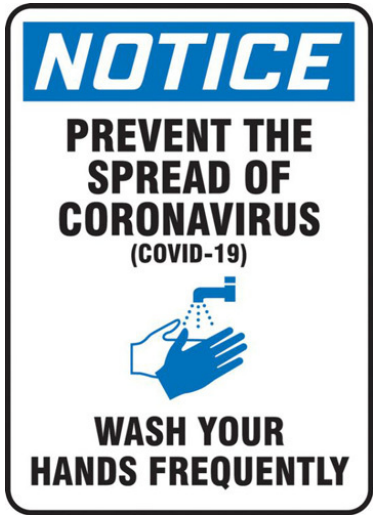
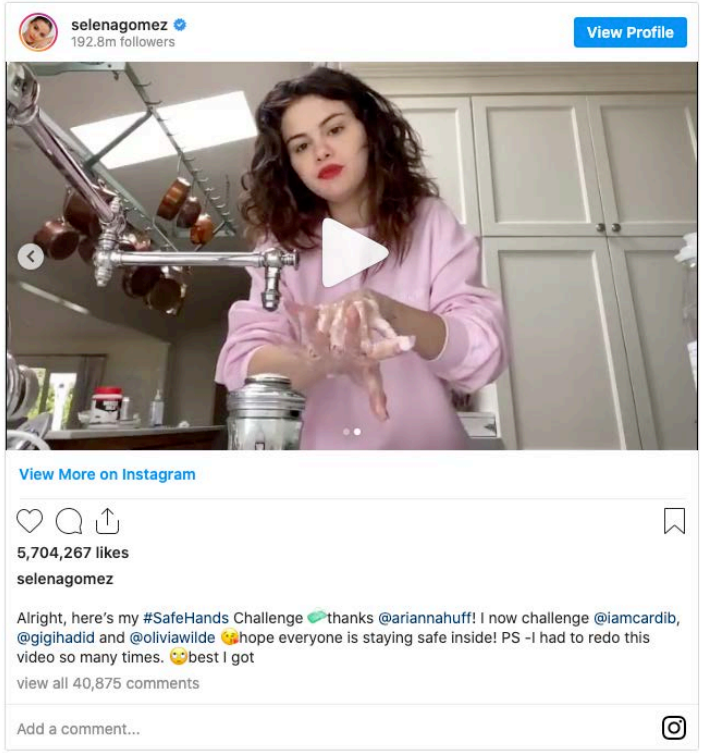
COVID-19 Changes Hand Hygiene Awareness

But this is the first pandemic

where hand hygiene became a mainstream conversation.



Handwashing Goes Mainstream



Handwashing Goes Mainstream

Hygiene as a Measure of Corporate Social Responsibility

Hygiene & Corporate Social Responsibility

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Hygiene & Corporate Social Responsibility

The COVID-19 pandemic has brought many issues to light that businesses have a social responsibility to resolve

- Paid sick leave for employees who work in close proximity to each other
- Protecting the safety and wellbeing of consumers and employees
- Providing the tools, resources and education to encourage good hygiene among staff members
- Build sustainable hygiene solutions for the ongoing protection of consumers and employees

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Hygiene & Corporate Social Responsibility

Ongoing Reinforcement

Validation

SOPs

Hygiene Culture

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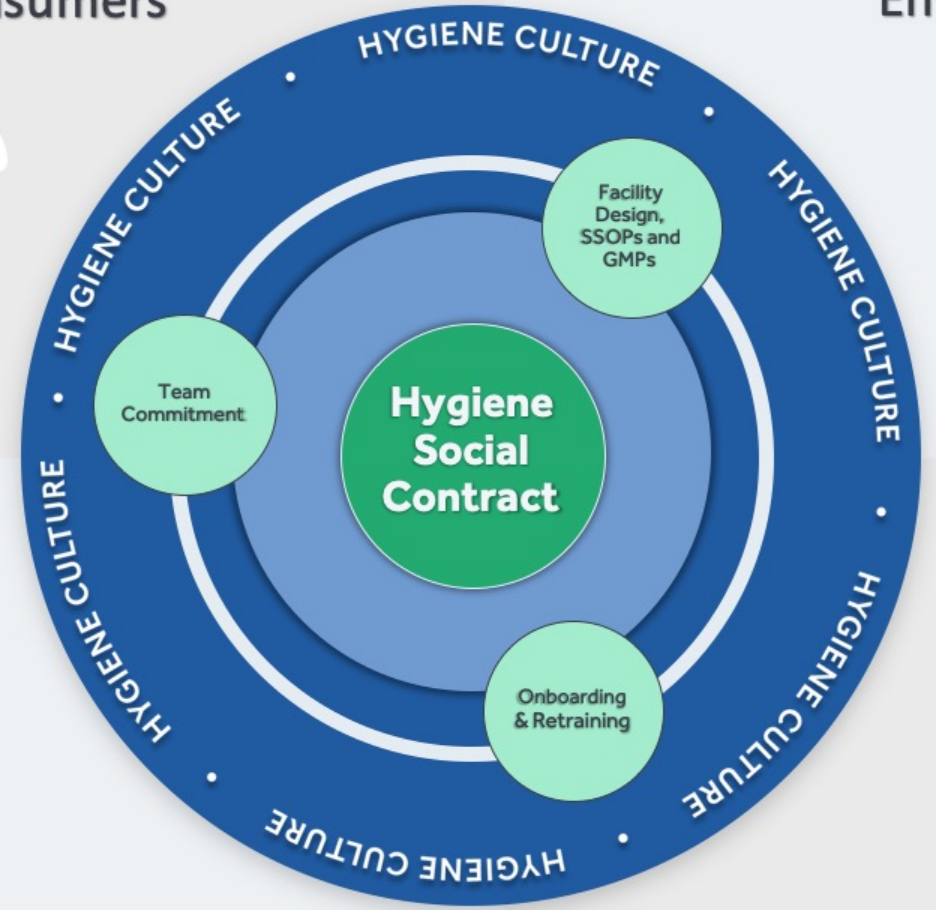
Consumers

Environment



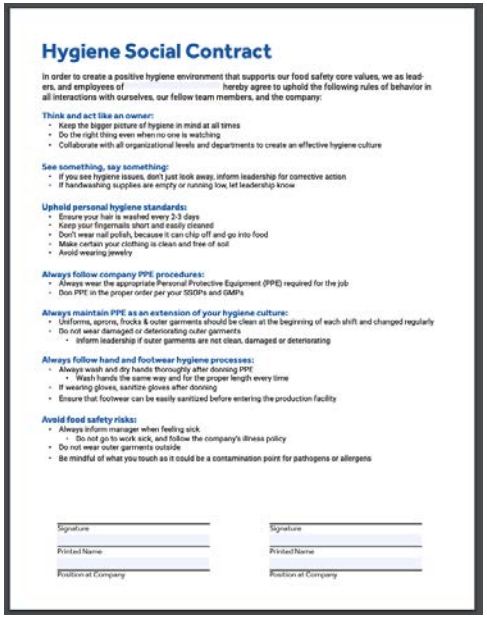
Regulatory

Customers

Hygiene & Corporate Social Responsibility

Hygiene Culture

The foundation of ongoing hygiene improvements



Hygiene Social Contract

in order to create a positive hygiene environment that supports our food safety core values, we as leaders, and employees of hereby agree to uphold the following rules of behavior in all interactions with ourselves, our fellow team members, and the company:

Think and act like an owner:
- Keep the bigger picture of hygiene in mind at all times
- Do the right thing even when no one is watching
- Collaborate with all organizational levels and departments to create an effective hygiene culture

See something, say something:
- If you see hygiene issues, don't just look away, inform leadership for corrective action
- If handwashing supplies are empty or running low, let leadership know

Uphold personal hygiene standards:
- Ensure your hair is washed every 2-3 days
- Keep your fingernails short and easily cleaned
- Don't wear nail polish, because it can chip off and go into food
- Make certain your clothing is clean and free of soil
- Avoid wearing jewelry

Always follow company PPE procedures:
- Always wear the appropriate Personal Protective Equipment (PPE) required for the job
- Don PPE in the proper order per your SSOPs and GMPs

Always maintain PPE as an extension of your hygiene culture:
- Uniforms, aprons, frocks & outer garments should be clean at the beginning of each shift and changed regularly
- Do not wear damaged or deteriorating outer garments
  - Inform leadership if outer garments are not clean, damaged or deteriorating

Always follow hand and footwear hygiene processes:
- Always wash and dry hands thoroughly after donning PPE
  - Wash hands the same way and for the proper length every time
- If wearing gloves, sanitize gloves after donning
- Ensure that footwear can be easily sanitized before entering the production facility

Avoid food safety risks:
- Always inform manager when feeling sick
  - Do not go to work sick, and follow the company's illness policy
- Do not wear outer garments outside
- Be mindful of what you touch as it could be a contamination point for pathogens or allergens

Signature | Signature

Printed Name | Printed Name

Position at Company | Position at Company

Hygiene Social Contract

- Puts everyone on a flat line of leadership when it comes to hygiene
- Establishes a mindset of hygiene and safety among team members
- Helps reinforce the hygiene culture across all areas and levels of the organization

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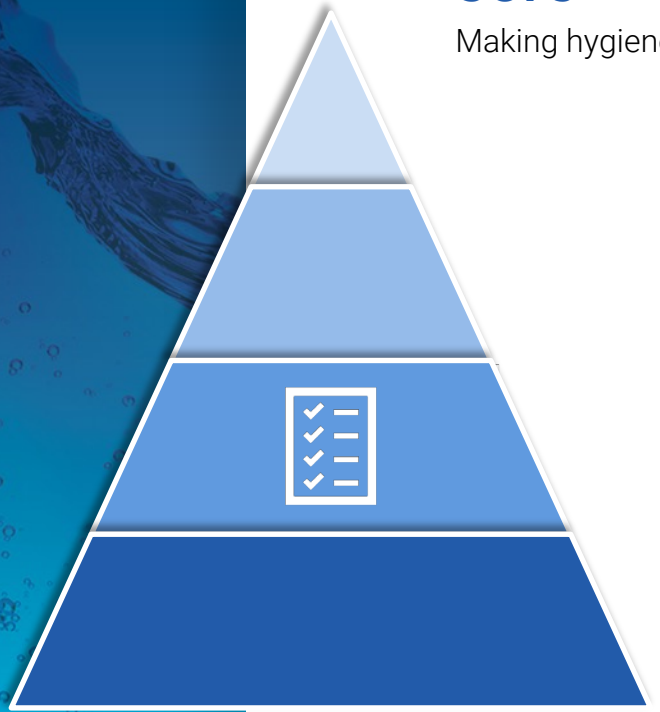
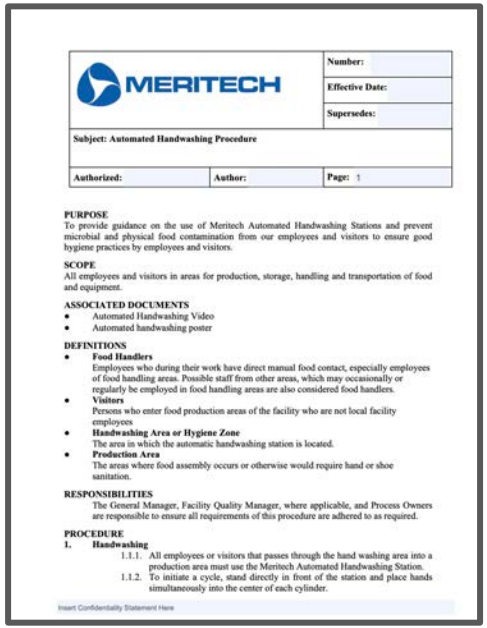
Hygiene & Corporate Social Responsibility

SOPs

Making hygiene a cornerstone of organizational processes





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	Number:
	Effective Date:
	Supersedes:
Subject: Automated Handwashing Procedure	
Authorized:	Author: Page: 1

PURPOSE
To provide guidance on the use of Meritech Automated Handwashing Stations and prevent microbial and physical food contamination from our employees and visitors to ensure good hygiene practices by employees and visitors.

SCOPE
All employees and visitors in areas for production, storage, handling and transportation of food and equipment.

ASSOCIATED DOCUMENTS
- Automated Handwashing Video
- Automated handwashing poster

DEFINITIONS
- **Food Handlers**
  Employees who during their work have direct manual food contact, especially employees of food handling areas. Possible staff from other areas, which may occasionally or regularly be employed in food handling areas are also considered food handlers.
- **Visitors**
  Persons who enter food production areas of the facility who are not local facility employees
- **Handwashing Area or Hygiene Zone**
  The area in which the automatic handwashing station is located.
- **Production Area**
  The areas where food assembly occurs or otherwise would require hand or shoe sanitation.

RESPONSIBILITIES
The General Manager, Facility Quality Manager, where applicable, and Process Owners are responsible to ensure all requirements of this procedure are adhered to as required.

PROCEDURE
1. **Handwashing**
   1.1.1. All employees or visitors that passes through the hand washing area into a production area must use the Meritech Automated Handwashing Station.
   1.1.2. To initiate a cycle, stand directly in front of the station and place hands simultaneously into the center of each cylinder.

Insert Confidentiality Statement Here

Handwashing Procedure Examples

- Hygiene SOPs build upon the hygiene culture and set the gold standard for hygiene practices at an organization
- Automation makes hygiene SOPs easier by removing some of the human variability that needs to be accounted for in these procedures

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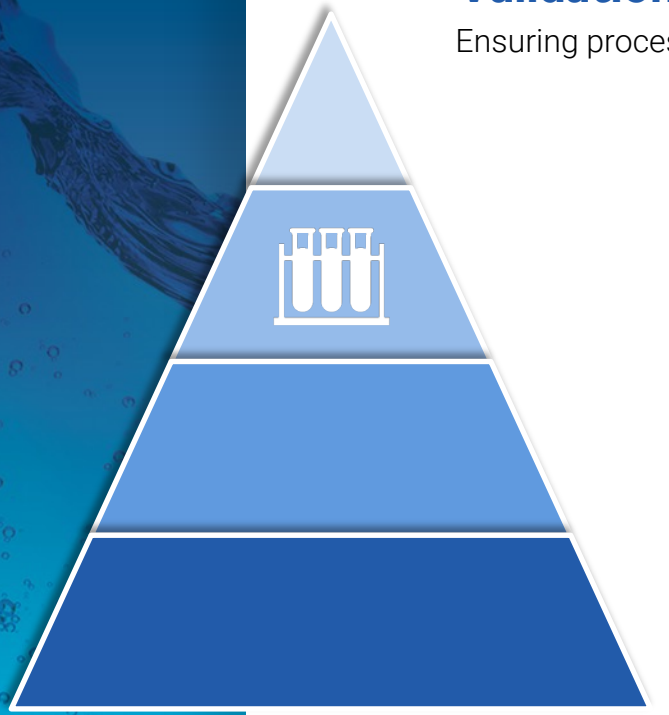
Validation

Ensuring processes exceed hygiene and safety standards



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ATP Testing Guide for Hygiene Efficacy

with Hygiena SystemSure Plus Luminometer

There are several testing methods that can be used to validate the efficacy of hand and footwear hygiene methods. Each method has its limitations and should be fully evaluated before a system of ongoing hygiene validation is written into an SOP or GMP system. This document explores our recommended testing method: an Adenosine triphosphate (ATP) test.

What is ATP?

ATP is an organic compound that provides energy to drive many processes in living cells and organisms, such as muscle contraction and chemical synthesis. ATP serves as a great marker for the prevalence of protein-like material on the surface of the skin (or other organic surface)—some of which could be dangerous and pathogenic.

FIGURE 1

Adenosine triphosphate (ATP)

chemical structure

What is ATP testing?

The ATP test is a process of quickly measuring actively growing microorganisms through detection of Adenosine triphosphate, or ATP. In ATP testing, microorganisms on the surface of the hands combine with a certain enzyme to produce light which can then be measured using a device called a Luminometer. The amount of light that is "read" by the device is expressed in Relative Light Units (RLU/s). The more microorganisms that exist on the surface of the skin, the more light that is generated and thus, the higher the RLU reading will be. High ATP levels indicate that more organic material—some of which may possibly be harmful—are present. Organic material on the surface of the hands may fall into one of two categories: transient flora and resident flora.

Terminology

Resident flora: organisms that naturally occur on skin and do not cause disease. Resident flora are essential to skin health and actually help protect the skin from transient organisms.

Transient flora: Transient or temporary skin flora refers to the microorganisms that transiently colonize the skin. This includes bacteria, fungi and viruses, which reach the hands, for example, by direct skin-to-skin contact or indirectly via objects.

ATP Testing Guide

- ATP testing helps verify that the SOPs that you put in place are improving handwashing practices and supporting your hygiene culture
- With automation you remove the variability and can easily verify that handwashing compliance is being met with handwash cycle counters

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Hygiene & Corporate Social Responsibility

Ongoing Reinforcement

Reminding team members that they each have a role to play in hygiene

Safety Day Guides & Tools

- Safety days help reinforce good hygiene behaviors among the team
- Gives all employees a chance to refresh themselves on good hygiene behaviors and ask questions
- Leadership participation demonstrates equal commitment to hygiene and safety

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Open Q & A