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Greetings and Happy New Year! I hope this newsletter finds you well and that you had a wonderful holiday season with friends, family and loved ones! I am excited to announce our next Winter Conference will be held in Fairlington, Virginia on January 23, 2020.

We would like to thank the Arlington County Health Department, who is jointly sponsoring this conference with NCAEHA.

Some of the topics that will be presented include Artisan Meal Delivery, ASTHO's Environmental Health Program and Public Health Laboratories and Environmental Threats.

In addition to the Winter Conference, I am pleased to share with you that our Board member elections are complete. Thank you to all that voted. Lanita Carpenter with the DC Department of Health was re-elected to serve as our DC Representative, Julia Balsley with the Arlington County Health Department was re-elected to serve as our Secretary, Amanda Losardo with the Alexandria Health Department was elected to serve as our VA Representative, Rahel Telahun was elected to serve as our MD Representative and Courtney Hale with the Fairfax County Health Department was elected to serve as our Treasurer. I hope you'll join us at the Winter Conference where the new Board members will be sworn into their positions. Congratulations to all!!

I am also thrilled to announce the launch of our new website and membership platform. This new membership platform will allow members to manage their own membership, provide a website and future phone app as well as the ability for members to view a full event calendar. It will also permit hassle free renewals, allow members to register for events and offers the ability to connect with other members.

Please be sure to follow us on Facebook and Twitter and bookmark our website. We work diligently to ensure we are providing you all with the most current information from our social events and educational opportunities to our E-Updates and newsletters.

We look forward to seeing you on January 23rd for another informative conference. As always, please let us know of any thoughts or suggestions you may have on how we may better serve you.



TIME TO RENEW YOUR ZOZO MEMBERSHIP!

- BENEFITS OF MEMBERSHIP -

- ✓ Be a part of a local association in the DC, MD, and VA area that is focused on environmental health (EH)
- ✓ Network with other local EH professionals in academia, industry, government, private sector, and other areas
 - ✓ Advance your career by pursuing a credential or certification with our discounted annual courses like the REHS, CP-FS, CPO, and more
- ✓ Gain more knowledge and/or earn up to 15 Continuing Education hours per year by attending our nearby Educational Conferences
- ✓ Enjoy a good time with your EH colleagues and build new connections at our social events
 - Recognize an EH professional by nominating them for an award or scholarship
 - ✓ Pursue local EH employment opportunities with easy accessibility through our announcements
- Stay updated through our newsletter, website, and social media and announcements on other events, trainings, webinars, and more

LOG ON TO YOUR PROFILE AT NCAEHA.WILDAPRICOT.ORG
TO RENEW ONLINE!

NEHA E-JOURNAL ADVANCEMENT OF THE SCIENCE

ARE WE THERE YET? IN-FLIGHT FOOD SAFETY AND CABIN CREW **HYGIENE PRACTICES**

ANDREA GROUT, MSC COLLEGE OF BUSINESS, LAW. AND GOVERNANCE JAMES COOK UNIVERSITY

ELIZABETH M. SPEAKMAN, MA. MSC EDINBURGH NAPIER UNIVERSITY LONDON SCHOOL OF HYGIENE & TROPICAL MEDICINE

Amid the rapid expansion of global air traffic, aviation food safety is a critical issue (Huizer, Swaan, Leitmeyer, & Timen, 2015). More than 1 billion in-flight meals are served annually (Jones, 2006) and the aviation catering market is expected to be worth \$18 billion by 2021 ("Global \$18 billion in-flight catering services market," 2017). Food served on planes is prepared in industrial kitchens close to airports and then transported to planes where it is stored, reheated, and served. The process is complex, with many opportunities for food contamination. Although food preparation on the ground is subject to considerable regulation at both the national and international level, similar rules do not apply to food served in-flight. Airline caterers might need to comply with local food safety regulations, those of the country of the aircraft registration, those of the destination country, and international food safety guidelines (Solar, 2019). While there are greater challenges to ensuring in-flight food safety, we argue that the same food safety principles used in establishments "on-ground" should be applied to inflight food services. This guest commentary considers one key factor of inflight food hygiene: the availability of hand washing facilities for cabin crew.



Food safety regulations are public health measures designed to prevent the spread of disease. Foodborne illness is a widespread and costly-yet preventablepublic health problem (Centers for Disease Control and Prevention, 2018) that can arise in-flight because of the complexity of the food service environment and the confined conditions (Hatakka, 2000), Sheward (2008) sees cabin crews as the missing link in the food handler chain. Yet the nature of the onboard workspace and absence of legislative enforcement hamper adequate crew hygiene and food safety behaviors. Maintenance of a consistently high food safety standard is ever more important, particularly on ultra-long-haul flights (i.e., flight operations that regularly exceed 16 hr of planned flight time [Flight Safety Foundation, 2005]), where increased handling of food over an extended period of time brings ever more opportunity for food safety lapses. Poor food safety management and foodborne illness in-flight can become a flight safety issue by incapacitating pilots or cabin crew, rendering them unfit to fly (McMullan et al., 2007; Mitchell & Evans, 2004). Additional pressures come from the fact that passengers and crew disperse rapidly after flights and any illnesses they suffer would be difficult to track (Aiello & Larson, 2002).

Hand washing has long been considered a basic public health measure (Foddai, Grant, & Dean, 2016). During a flight, cabin crew frequently handle food while simultaneously completing multiple tasks. While contaminated hands play a key role in foodborne illness incidents (Curtis & Cairncross, 2003), access to clean toilets and hand hygiene serve as primary barriers to reduce the risk of transmission of pathogens that cause foodborne disease (Aiello & Larson, 2002). Most national legislation requires compliance with food safety protocols and dictates that hand washing facilities should always be provided to food handlers in proximity to their workspace. Staff toilets and hand washing facilities are mandated in on-ground food establishments (Food and Drug Administration, 2018: Food Standards Agency, 2018). Although aircraft kitchens usually have sinks, they are mostly inadequate due to limited space and the common use of spring-loaded faucets, which require one hand to keep the water on (Hedberg et al., 1992). These factors have been shown to negatively impact hand washing practices of cabin crew (Pragle, Harding, & Mack, 2007).

"INADEQUATE DUE TO LIMITED SPACE"

Although airlines have responded to the limited number of hand washing facilities by providing hand sanitizers as part of galley equipment, evidence from a systematic review questions the efficacy of hand sanitizers as a substitute for hand washing in food handling settings (Foddai et al., 2016). Kampf and coauthors (2010) reported limited efficacy of hand sanitizer gels and advised that hand sanitizers should be used only after hand washing



and never as a substitute. Further barriers to adequate cabin crew hand hygiene in-flight include time pressure, insufficient food handler training, and usage constraints of disposable gloves. The use of gloves typically required for food handlers on-ground, for example, is a voluntary measure in-flight and depends on airline protocols (Flight Safety Foundation, 2003).

The International Health Regulations (World Health Organization, 2006) require the maintenance of sanitary conditions on conveyances and the World Health Organization Guide to Hygiene and Sanitation in Aviation (2009) notes that inadequate water supply for hand washing "may lead to an inability to prepare or serve food in a sanitary manner, thereby impacting on the provision of safe food to passengers."

"THE CONTEXT OF AVIATION FOOD HAS CHANGED."

The International Health Regulations are legally binding but unenforceable; the World Food Safety Guidelines for Airline Catering and the International Air Transport Association Cabin Operations Safety Best Practices Guide also rely on voluntary compliance. In practice, there is no enforceable legal requirement for modern aircraft design to provide galley sinks for adequate hand washing. Even more remarkable, there is no legal requirement for aircraft to have installed toilets.

The context of aviation food has changed. New dynamics in air travel such as extended flight times and increasing passenger loads provide more opportunities for foodborne diseases to occur. A new regulatory approach to in-flight food safety needs to align as closely as possible to onground standards and be supported by effective compliance monitoring and enforcement. Structural improvements might be necessary to enable adherence to personal hygiene protocols. As a focal point of hand hygiene pressures, designated staff sinks can be an effective way to improve safe food handling on board. If hand

sanitizer gels are provided as an alternative, their acceptance by cabin crew and their effectiveness in the cabin workspace should be determined. Such research

could contribute evidence to inform policy as the aviation industry continues to increase the number and length of flights worldwide. Cabin crew need a more informed understanding of what food safety actually means. Meeting the challenges of providing safe food amid increasing air travel requires an understanding of the complexities associated with the cabin workspace, the uncertainties relating to training and education of cabin crew, and the policy responses across relevant aviation and public health sectors. Food safety is a critical component of gen eral aviation safety. Devising more effective ways to adhere to food safety standards inflight can result in significant public health benefits. Shifting policy is a slow proposition but the need for safe food handling on board will only increase.

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References

- Aiello, A.E., & Larson, E.L. (2002). What is the evidence for a causal link between hygiene and infections? *The Lancet Infectious Diseases*, 2(2), 103–110.
- Centers for Disease Control and Prevention. (2018). Foodborne illnesses and germs. Retrieved from https://www.cdc.gov/foodsafety/foodborne-germs.html
- Curtis, V., & Cairncross, S. (2003). Effect of washing hands with soap on diarrhoea risk in the community: A systematic review. *The Lancet Infectious Diseases*, 3(5), 275–281.
- Flight Safety Foundation. (2003). Procedural compliance prevents illnesses caused by microorganisms in food. *Cabin Crew Safety*, 38(5), 1–8. Retrieved from https://flightsafety.org/ccs/ccs_sept-oct03.pdf
- Flight Safety Foundation. (2005). Fourth workshop yields insight into early ultra-long-range operations. *Flight Safety Digest*, 24(8–9), 1–15. Retrieved from https://flightsafety.org/wp-content/uploads/2016/12/fsd aug-sept05.pdf
- Foddai, A.C., Grant, I.R., & Dean, M. (2016). Efficacy of instant hand sanitizers against foodborne pathogens compared with hand washing with soap and water in food preparation settings: A systematic review. *Journal of Food Protection*, 79(6), 1040–1054.
- Food and Drug Administration. (2018). Food guidance & regulation (food and dietary supplements). Retrieved from https://www.fda.gov/food/guidance-regulation-food-and-dietary-supplements
- Food Standards Agency. (2018). *General food law*. Retrieved from https://www.food.gov.uk/business-guidance/general-food-law
- Global \$18 billion in-flight catering services market 2017–2022—Analysis of growth trends progress and challenges—Research and markets. (2017, February 13). *Business Wire*. Retrieved from https://www.businesswire.com/news/home/20170213006081/en/Global-18-Billion-In-Flight-Catering-Services-Market

- Hatakka, M. (2000). Hygienic quality of foods served on aircraft (Doctoral thesis). Helsinki, Finland: University of Helsinki. Retrieved from http://ethesis.helsinki.fi/julkaisut/ela/elint/vk/hatakka/hygienic.pdf
- Hedberg, C.W., Levine W.C., White, K.E., Carlson, R.H., Winsor, D.K., Cameron, D.N., . . . Osterholm, M.T. (1992). An international foodborne outbreak of shigellosis associated with a commercial airline. *JAMA*, 268(22), 3208–3212.
- Huizer, Y.L., Swaan, C.M., Leitmeyer, K.C., & Timen, A. (2015). Usefulness and applicability of infectious disease control measures in air travel: A review. *Travel Medicine and Infectious Disease*, 13(1), 19–30.
- Jones, P.L.M. (2006). Flight-catering. In H. Becker & U. Grothues (Eds.), Catering-management Portrait einer Wachstumsbranche in Theorie und Praxis (Ch. 1.4.1, pp. 39–55) [Chapter in German]. Hamburg, Germany: Behr's Verlag.
- Kampf, G., Marschall, S., Eggerstedt, S., & Ostermeyer, C. (2010). Efficacy of ethanol-based hand foams using clinically relevant amounts: A cross-over controlled study among healthy volunteers. BMC Infectious Diseases, 10, 78.
- McMullan, R., Edwards, P.J., Kelly, M.J., Millar, B.C., Rooney, P.J., & Moore, J.E. (2007). Food-poisoning and commercial air travel. Travel Medicine and Infectious Disease, 5(5), 276–286.
- Mitchell, S.J., & Evans, A.D. (2004). Flight safety and medical incapacitation risk of airline pilots. *Aviation, Space, and Environmental Medicine*, 75(3), 260–268.
- Pragle, A.S., Harding, A.K., & Mack, J.C. (2007). Food workers' perspectives on handwashing behaviors and barriers in the restaurant environment. *Journal of Environmental Health*, 69(10), 27–32.
- Sheward, E. (2008). Aviation food safety. Hoboken, NJ: Wiley-Blackwell.

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NATIONAL CAPITAL AREA ENVIRONMENTAL HEALTH ASSOCIATION

Things just got a lot easier with our

NEW MEMBERSHIP PLATFORM!



MEMBERSHIP MANAGEMENT

- Log on to your Wild Apricot account to update your personal profile.
- · Add a profile photo and
- View, download and print your own membership cards!

NEW WEBSITE & PHONE APP

- Updated website.
- Simple and easy maneuvering for you to find exactly what you're looking for!
 We got an app for that- easily
- We got an app for that- easily access your account and website features from your phone! Available for IOS and Android.

HASSLE-FREE RENEWALS

- View your current membership status online.
- Renew your annual dues online at your own convenience.
- Never let your membership expire, automatic annual renewals available!

REGISTER FOR EVENTS

- Interested in attending a conference or event? Self register online!
- Pay for event registration online.
- Find out which fellow members have RSVP'd for events as well!

FULL EVENT CALENDAR

- Never miss an event! A full calendar will be available for you to view, simply click on the events you are interested in!
- View event calendar and event details

CONNECT WITH MEMBERS

- View organization's entire member directory
- View member profiles
- Message Board and fellow members with ease
- Complete surveys, polls, all in one place!

VISIT

ncaeha.wildapricot.org

*NOTE: WEBSITE ADDRESS WILL REVERT BACK TO NCAEHA.ORG IN JANUARY 23, 2020.



NATIONAL CAPITAL AREA ENVIRONMENTAL HEALTH ASSOCIATION

How to Manage Your NCAEHA Account:

EDITING YOUR PROFILE

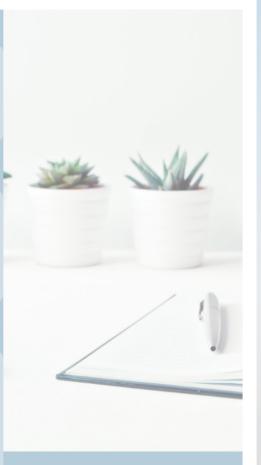
- 1. Click on the on the top right corner of the Home Page, "Login" on the top menu.
- 2. View your personal profile and click Edit to make changes.
- 3. Update your email address, phone number, mailing address, etc.
- 4. Personal information will be private unless switched to public and will only be viewable to active members.

RENEWING YOUR MEMBERSHIP

- 1. Click on the icon on the top right corner of the Home Page to log in.
- 2. View your personal profile and review your status.
- 3. Scroll down and click blue button that says "Renew", update information and click "Next."
- 4. Automatic Renewals are available for you if you choose to renew yearly, hassle-free!

RSVP FOR EVENTS

- Click on the <u>Event Page</u> and find the event you are interested in attending.
- 2. Find the RSVP button on that page.
- 3. Fill out the Event Registration information and pay for event online (if applicable).
- 4. Receive your confirmation and you're all set! A confirmation email will be emailed to you.
- 5. View all events that you have registered for by clicking on the Person Icon on the top right hand corner to view your profile. Need to cancel? Un-register for the event by clicking on the event.





ncaeha.vp.membership@gmail.com



January 23, 8:30am - 4:00pm Fairlington Community Center, 3308 S Stafford St. Arlington VA, 22206

	Fairlington Community Center, 3308 5 Stanord St. Artington VA, 22206
8:30am - 9:00am	GENERAL REGISTRATION / LIGHT BREAKFAST
9:00am - 9:05am	WELCOME/OPENING REMARKS
	Kristen Pybus, President, <i>NCAEHA</i> Erin Miller, Virginia Representative, <i>NCAEHA</i>
9:05am - 9:15am	WELCOME / MEET THE GROUP
9:15am - 10:00am	The intersection of Art & Science: The Path to Food Safety Excellence for the Artisan Meal Delivery Chef Preferences/Allergies
	Patrick Buchan, Frank Curto, CFS - Territory Foods
10:00am - 10:45am	Challenges in Estimating Environmental Exposures for Human Health
	Dr. Jenna Krall, Assistant Professor Department of Global and Community Health - GMU
10:45am - 11:00am	MORNING BREAK
11:00am - 11:45am	Inside ASTHO's Environmental Health Program: Key Activities to Support State and Territorial Health Departments
	Kerry Wyss, Kathy Dolan - ASTHO
11:45am - 1:00pm	LUNCH - On Your Own
1:00pm - 1:10pm	NCAEHA BOARD INSTALLATION
1:00pm - 1:10pm 1:10pm - 1:20pm	NCAEHA BOARD INSTALLATION NEHA UPDATES
	NEHA UPDATES
1:10pm - 1:20pm	NEHA UPDATES Pending, LCDR James Speckhart, MS, USPHS, Region 8 Vice President - NEHA
1:10pm - 1:20pm 1:20pm - 2:05pm	NEHA UPDATES Pending, LCDR James Speckhart, MS, USPHS, Region 8 Vice President - NEHA Keeping it Clean: How Public Health Laboratories Protect Us from Environmental Threats
1:10pm - 1:20pm 1:20pm - 2:05pm	NEHA UPDATES Pending, LCDR James Speckhart, MS, USPHS, Region 8 Vice President - NEHA Keeping it Clean: How Public Health Laboratories Protect Us from Environmental Threats Dr. Anthony Tran, Director - Public Health Laboratory DC Department of Forensic Sciences (DFS)
1:10pm - 1:20pm 1:20pm - 2:05pm	NEHA UPDATES Pending, LCDR James Speckhart, MS, USPHS, Region 8 Vice President - NEHA Keeping it Clean: How Public Health Laboratories Protect Us from Environmental Threats Dr. Anthony Tran, Director - Public Health Laboratory DC Department of Forensic Sciences (DFS) Food Safety - An Operator's Perspective
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1:10pm - 1:20pm 1:20pm - 2:05pm 2:05pm - 2:50pm 2:50pm - 3:05pm	NEHA UPDATES Pending, LCDR James Speckhart, MS, USPHS, Region 8 Vice President - NEHA Keeping it Clean: How Public Health Laboratories Protect Us from Environmental Threats Dr. Anthony Tran, Director - Public Health Laboratory DC Department of Forensic Sciences (DFS) Food Safety - An Operator's Perspective Ann Marie Escobar, COO - Legal Sea Foods Inc. AFTERNOON BREAK Protecting Public and Environmental Health Through Clean Water

Conference Fee: NCAEHA Members-\$15.00 / Non-Members-\$30.00
4.5 Contact Hours Available for Full-Day Attendance
Please RSVP by Monday 1/20/20 to NCAEHA.Secretary@gmail.com or online at ncaeha.wildapricot.org/events