

How many sea containers move globally each year?

The global container fleet exceeds 25 million intermodal containers operating in international commerce. As containers come in several sizes, the common term used in industry is twenty-foot equivalent unit (TEU). For example, a forty-foot container is two TEUs. In 2017, there were over 210 million packed TEUs moving globally which transported cargo valued at more than \$4 trillion, or about 60% of the value of global seaborne trade. In addition, that same year more than 135 million empty TEUs were repositioned between countries.

Why does cleanliness matter?

Sea containers and their cargos can potentially carry pests that could pose a serious risk to agriculture, forestry and natural resources. These containers and their cargos not only pose a risk at ports of entry but, as they move within, through and among countries, the pests could also potentially be spread.

What kinds of pests contaminate containers and their cargos?

Examples include:

- Mollusks: snails and slugs
- Insects: egg masses (e.g. Asian gypsy moth), storage pests, weevils, leafhoppers, pupal cases, etc.
- Seeds (e.g. weeds, crops)
- Contaminants such as soil, plant debris (e.g. stems, leaves, branches, etc.)
- Other: straw, spiders, earthworms, bird nests, bird droppings, etc.
- Animals (live or dead), their parts and their by-products.

Is there any evidence that sea containers are contaminated with pests?

Pests have been intercepted on containers and their cargo in both the United States and Canada. Analysis, research and assessment of the types and magnitude of the pest risks associated with sea containers and their cargos is ongoing.

What's in it for me?

By taking reasonable and focused measures to reduce the risk of visible pest contaminants, industry demonstrates it is committed to protecting North American agriculture, forestry and natural resources. In turn, this may result in:

- Reduction in container inspections for pest contaminants.
- Fewer delays for cargo release.
- Fewer demurrage charges due to cargo holds.
- Avoidance of the expense of having your container quarantined, tarped, and treated or cleaned, or re-exported back to origin.
- Importers will have increased business certainty because a system of internal control helps to ensure compliant transactions.

Are there any recommended guidelines parties in the container supply chain should use to minimize pest contamination of containers and their cargos?

The International Maritime Organization (IMO), the International Labor Organization (ILO), and the United Nations Economic Commission for Europe (UNECE) jointly developed the 2014 IMO/ILO/UNECE Code of Practice for Packing of Cargo Transport Units (CTU Code). It is a voluntary global code of practice for handling and packing containers for transportation by sea and land. Chapter 8 section 4 offers guidance for the cleanliness of containers and Annex 6 addresses minimizing recontamination. Related informative material (IM 4) identifies pests of concern regarding recontamination.

In addition, the Global Shippers' Forum (GSF) has published a variety of documents for shippers and packers to promote the safe handling of cargo by those members of the supply chain that pack and unpack cargos. As part of this initiative, the GSF has published a "Working with Containers" document that augments the IMO Guidelines for packing and unpacking cargo transport units, i.e., the "CTU Code." The various GSF documents that promote the safe handling of containers can be found on the GSF website at www.globalshippersforum.com/media/1073/gsf_p19.pdf. These documents can also be ordered through the UK Freight Transportation Association website www.shop.fta.co.uk.

The container industry (World Shipping Council, Container Owners Association, The Institute of International Container Lessors, and International Cargo Handling Coordination Association) has also developed joint industry guidelines for cleaning containers when an empty container is in the custody of the container operator in a container depot. These guidelines complement the guidance provided in the CTU Code and can help minimize the movement of pests by sea containers. The joint industry guidelines can be accessed at: www.worldshipping.org/industry-issues/safety/joint-industry-guidelines-for-cleaning-of-containers.

The North American Sea Container Initiative (NASCI) working group developed a sea container cleanliness bulletin outlining the impacts to trade from contaminated sea containers and their cargos. The bulletin outlines a number of practices that parties involved in the container supply chain can implement to minimize pest contamination.

Where is the best location to inspect and clean a container?

As there is no single party responsible for the cleanliness of the container throughout its journey from origin to ultimate consignee, there is no single location for inspection and cleaning. The International Plant Protection Convention (IPPC) Commission on Phytosanitary Measures recommendation from 2015 confirms that “the packing of sea containers with cargo is the most likely stage in the sea container supply chain at which contamination can occur.” That does not mean, however, that other parties, and therefore locations, in the container supply chain do not have a role to play. In fact, the CTU Code clarifies that “all persons involved in the movement of cargo transport units (e.g., containers) have a duty to ensure, in accordance with their roles and responsibilities in the supply chain, that the CTU is not infested with plants, plant products, insects or other animals.”

How are government and industry collaborating to address this concern?

As part of national, regional and global efforts to reduce pest risks associated with sea containers and their cargos, the United States and Canada have launched NASCI. NASCI is a partnership between the U.S. and Canadian national plant protection organizations, border protection agencies, shippers and maritime and shipping industry entities operating in North America.

How will NASCI help to mitigate pest contamination on containers and cargo?

Under NASCI, industry and government are working collaboratively to raise awareness, educate, and motivate participants along the supply chain to help reduce pest risks associated with sea containers and their cargos.

- Cleanliness matters
- Cleanliness protects
- Clean containers and clean cargos are good business
- Clean containers and clean cargos reduce inspections, expedite clearance, and result in lower costs to the sea container supply chain

NASCI aims to:

- Gain a better understanding of the pest risks associated with containers and their contents and of challenges and opportunities for identifying and reducing pest risks in the sea container supply chain. Such information would assist in guiding future efforts and response actions aimed at diminishing and preventing the spread of pests.
- Gain a better understanding of container logistics and movements in North America and around the world
- Conduct outreach and education to our respective industries and stakeholders
- Encourage global adoption of similar, voluntary programs through the International Plant Protection Convention and other relevant international and regional forums

What can I do?

- See it, say it. If you see a pest or contaminant associated with a container or its cargo, notify the local biosecurity authorities.
- Live it. Adopt best management practices such as the CTU code and industry cleaning guidelines.
- Participate. Spread the word that container and cargo cleanliness matters.
- Provide your ideas and experience regarding sea container and cargo cleanliness so that we can all better protect our global plant resources.

How can I find out more information about NASCI?

To learn more, visit the North American Plant Protection Organization website at www.nappo.org and click on NA Sea Container Initiative under Quick Links.
