



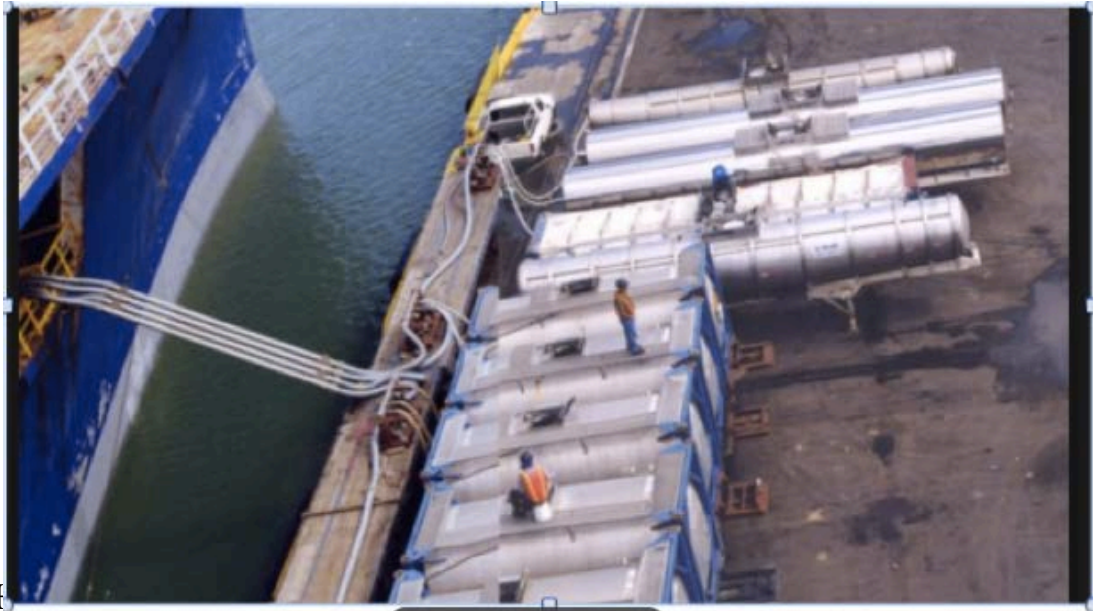
10th IOHA International
Scientific Conference

The shipping industry: a Bermuda triangle for occupational hygiene?

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The maritime sector

- The first global industry!
- Early development of risk management by sharing – insurance
- Ships are an extension of the national territory of the country where they are registered.
- Ownership, crewing,
- Management, insurance determined by cost etc.
- CSR patchy and expedient

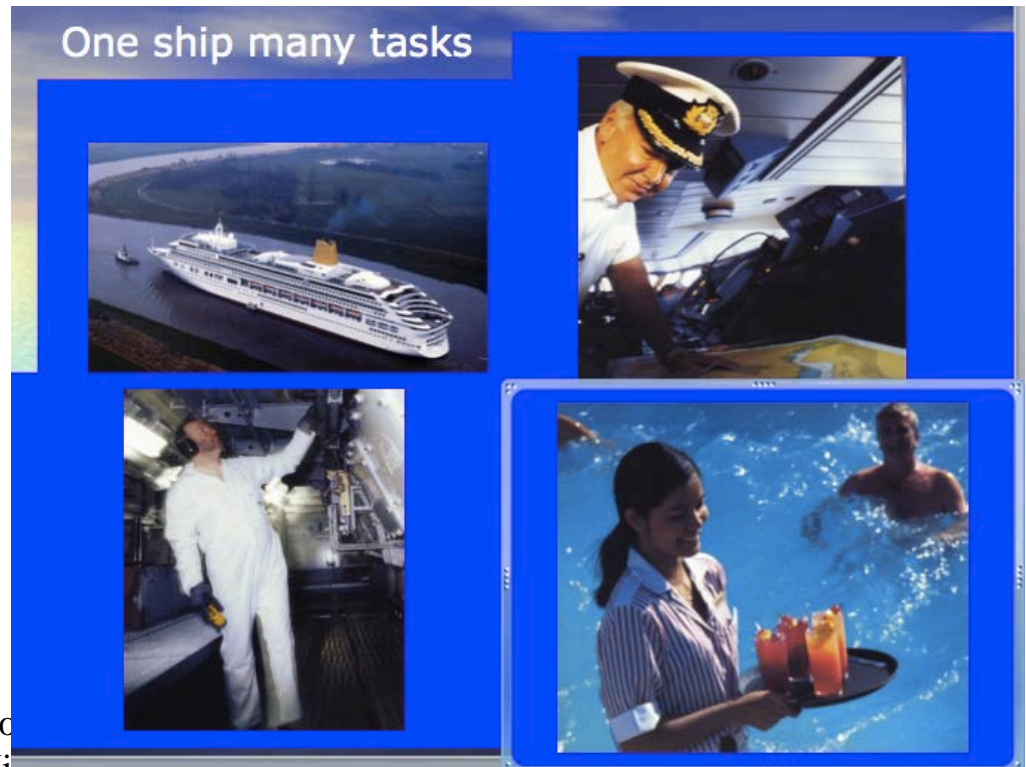


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Seafarers

- Many are on single voyage contracts
- Recruited by commission agents - selection
- Concern about reducing health costs within a 1-2 year period.
- Diversity of jobs, risks, requirements.



Maritime health

- Who can work at sea with minimal risk?
- What are the risks of working and living at sea? How best controlled?
- How should medical events at sea be managed?
- How should ill and injured be managed ashore?
- What are the risks of disease transmission?



Health risks – working and living

- Ship disaster, personal injury, acute or long term harm to health
- Cargo – loading, maintenance, background
- Ship operation – engine, cleaning/painting, climatic.
- Living aboard – noise, vibration, movement.
- Other – fish processing, passenger handling!

Health risk studies few

Limited exposure investigation and little risk quantification
as the basis for control.

Example – fuel use

- Regulation to reduce sulphur emissions – use residual fuel oil or marine diesel.
- I was advising IMO on health implications
- Fuel handling, maintenance of systems, leakage
- Products of combustion – aboard, ashore.
- Little quantification, no info on harm to health.
- Interest group/economic agendas: fuel suppliers, engine mfgs, ship operators, environmental groups, scrubbing technology suppliers.

Fuel use 2

- Exposures: bunkering, fuel systems, engine and exhaust maintenance, exposure to exhaust plumes.
- Marine diesel safer on all counts, but how big are risks anyway and can they be managed?
- What are compromises with other interests?



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Confined spaces

- Ship compartments: reduced oxygen
- Liquid cargo tanks: residual volatiles, cleaning
- Other cargo areas: decomposition, off gassing, fumigants.
- Some quantification – oil and chemical industry, incident investigations.
- Safe systems of work



Shipping containers

- Risks as confined spaces. Opened onshore: customs, port workers, distant warehouses.
- Recent
- investigations
- but limited



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Maritime occupational health and hygiene awareness

- Rule following not investigation oriented
- Little concern with long term risk
- Liability driven emphasis on testing workers not the working environment.
- Initiatives are derivatives from onshore experience: noise, asbestos.
- Few occ, hygienist sail there, so few lost in the maritime Bermuda triangle, but plenty of missed opportunities for prevention.



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