

Public Health Education and Preventive Medicine in a Nautical College: An Operative Field Experience

Antonello Campagna[1], Mattia Latorre[1], Elisabetta Fanni[1], Paolo Rosati[1], Concetta Tuzzolino[1], Daniel Gattai[2], Giorgio Timm[2], Chiara Sorriente[2], Giovanni Battista Siffredi[2], Antonella Mofferdin[1]

1 Liguria Health Port Authority - Ministry of Healt ,Italy 2 Andrea Doria Nautical School, Imperia,Italy

BACKGROUND

The World Health Organization emphasizes the critical **schools' role in promoting health.**

Public health interventions in school settings effectively promote physical, mental, and emotional well-being.[1].

Future officers operating on modern ships require **specialized training on maritime occupational safety and public health issues.**

Crucially, **conditions causing unfitness for work onboard should be detected early, ideally at the start of the student's training curriculum.**

To address these challenges, a **pilot collaboration** was established between the **Liguria Health Port Authority** and the **"Andrea Doria" Nautical College** in Imperia, a premier center for training future merchant ship deck and engineer officers.

AIM

To present the core structural actions, target metrics, and operational best practices of an innovative health promotion and voluntary screening program tailored for future maritime professionals.

Copyright MMXXVI Antonello CAMPAGNA
E mail camp.anto@virgilio.it - All rights reserved - Reproduction forbidden

METHODS

The pilot project (First Phase: 2025–2027) targets **the entire student population of the Nautical College (180 students aged 14–19).** Interventions are structured across three interconnected pillars:

1) **Students' health promotion**;
2) **Specific Training on ships' officers occupational and public health responsibilities;**
3) **Screening of conditions/diseases that cause unfitness for maritime work).**

ACTIVITY PROGRAM

Promotion of
- Vaccinations
- Motor vehicle safety
- Safer and healthier foods (healthy nutrition).
- Physical activity and obesity prevention
- prevention of alcohol abuse and drugs dependence
- Recognition of tobacco use as a health hazard
- Prevention of HIV and other sexually transmitted infections
- Mental health awareness

Tools: a) questionnaires, b) informative brochures and c) meetings

Education on ship's officers occupational and public health competences
- ✓ Awareness of Preemployment medical examination relevance
- ✓ Safety of ships workplaces
- ✓ Seafarers Occupational Risk *(identification and prevention)*
- ✓ First aid skills, Medevac management and telemedical assistance
- ✓ Control of infectious diseases onboard
- ✓ WHO International Health Regulation
- ✓ Communication to Health Port Authority *(including MHD)*
- ✓ WHO Ship Sanitation System
- ✓ EU Shipsan Program
- ✓ CDC Vessel Sanitation Program
- ✓ Management of potable and recreational water, sewage and ballast water
- ✓ Waste management and pest control

Tools: dedicated workshop and training on the field during inspections onboard

VOLUNTARY SCREENING for pathologies that are cause for unfitness to maritime work according to ILO/IMO guidelines

BMI and physical capabilities for obesity
Visual acuity and hearing testing
Ishihara test and indication for second level tests, if required, for colour vision deficiencies
Blood glucose control for diabetes *(fasting glucose and glycated haemoglobin)*
Dedicated Meetings with the student's family in case of specific conditions/pathologies requiring awareness and insight

RESULTS

• **Full Enrollment:** The program successfully reached and involved 100% of the targeted student population (180 students) in the initial educational modules. • **Operational Integration**: the first cycle of voluntary health screenings and interactive shipboard inspection workshops was successfully executed, bridging theoretical public health frameworks with practical maritime tasks **Follow- up organizational meetings** are planned to analyze the results according to a set of indicators including student satisfaction.

CONCLUSION

Maritime Impact: This active collaboration between maritime public health experts and nautical training institutions serves as a reproducible model to enhance the preparation of future maritime professionals.•

Global Scaling: The program establishes a framework for future SHIPSAN activities, contributing significantly to safer, healthier sailing conditions and improved maritime medicine standards worldwide.

REFERENCES

World Health Organization, UNESCO. *Making Every School a Health-Promoting School: Global Standards and Indicators.* WHO; 2021. Accessed August 28, 2026. https://www.who.int/publications/i/item/9789240025059

DISCLOSURES

The content of this poster represents the views of the authors and the Italian Society of Maritime Medicine and Public Health (ISMMPH) only, and is their sole responsibility. It cannot be considered to reflect the official views of the Italian Ministry of Health or any other body of the Italian Government..

Contact Information

ISMMPH
Italian Society Maritime Medicine and Public Health
CORRESPONDING AUTHOR ANTONELLO CAMPAGNA

For any further information, feedback, exchange of experience and proposal forcollaboration please feel free to email and download connecting to

www.ismmph.com
info@ismmph.com