

Infection Prevention: historic examples

Hand hygiene



Florence Nightingale implemented hand washing and other hygiene measures in military hospitals during the Crimean War (1853-56).

“Every nurse ought to be careful to wash her hands very frequently during the day.” Florence Nightingale, Notes on Nursing (1860)



Face masks



Face masks were used during the 1918 ‘Spanish Flu’ pandemic to reduce the spread of infection. Other measures such as staying at home if unwell and avoiding poorly ventilated spaces were also encouraged.



“To Prevent Influenza!” poster, from Illustrated Current News, 1918



Maximising ventilation with open air wards at Walter Reed Hospital, 1918

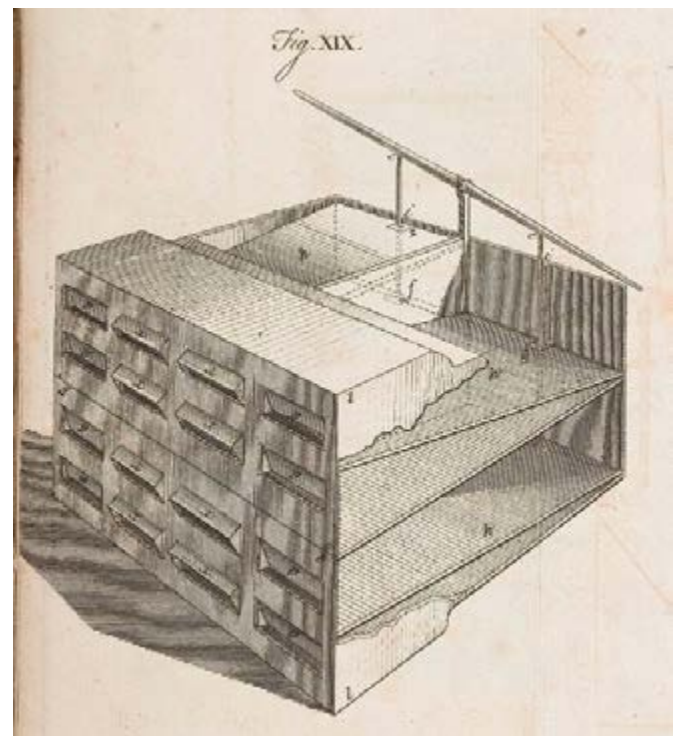
[The use of masks during the Spanish flu pandemic through old photographs, 1918 - Rare Historical Photos](#)

Ventilation



Sir John Pringle, surgeon-general of the British Army 1742-58, recognised the importance of ventilation to reduce the spread of infection in military hospitals and in other enclosed, densely occupied places such as on board ships.

In his 1752 publication ‘Observations on the Diseases of the Army’, Pringle not only recommends increasing natural ventilation by using airy venues such as barns and churches, but also recommends additional mechanical ventilation using Dr Hale’s ventilator.



Ventilation bellows designed by Dr Stephen Hales

https://wellcomeimages.org/indexplus/obf_images/09/79/369f99308f620f-0c060a7941346c.jpg

Gallery: <https://wellcomeimages.org/indexplus/image/L0040396.html> Wellcome Collection gallery (2018-04-06): <https://wellcomecollection.org/works/aactcqhkc> CC-BY-4.0, CC BY 4.0, <https://commons.wikimedia.org/>

Isolation



Quarantine measures were used to combat the plague in Europe from the fourteenth century onwards, beginning in 1377 at the seaport of Ragusa (now Dubrovnik). The Rector of Ragusa issued a 30 day isolation period for ships (40 days for land travellers).

[The concept of quarantine in history: from plague to SARS - ScienceDirect](#)



Citizens of Tournai burying plague victims

By Pierart dou Tielt (fl. 1340-1360) - <http://balat.kikirpa.be/photo.php>

Environmental cleaning



It was recognised that having a clean environment was important to reduce the spread of infectious diseases at least as far back as the Ancient Greeks, as seen in the Hippocratic Treatise ‘On airs, waters, and places’.

Joseph Lister pioneered the use of modern antiseptics to prevent wounds from becoming infected during surgery in the nineteenth century.

[Joseph Lister's antiseptics system | Science Museum](#)



The antiseptic system in practice in an operating room. In ‘[Antiseptic Surgery its Principle Practices and Results](#)’ by William Watson Cheyne.

Wellcome Collection CC-BY

Vaccination



Vaccination has been used to prevent the spread of lots of infectious diseases, including polio and measles.

Vaccination was successfully used to eradicate smallpox, a deadly disease that killed at least one in three people infected.

[History of smallpox vaccination \(who.int\)](#)



Early 20th century vaccination poster

[Smallpox and the story of vaccination | Science Museum](#)