

Gaol and ship fevers

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In the late 18th and through the 19th century there was a marked increase in the number of people who suffered from what they called “fevers”. Among those recognized by physicians, two were of particular interest to the government and the merchant classes: gaol (or jail, sometimes spelled “jaylor”) fever and ship fever.

The first of these had been mentioned in a book published as early as 1547 by Boorde,¹ who called it the “sycknesse of prisons”. In 1750 it was described by Sir John Pringle,² physician to the armed forces.

Ship fever, described by Lind, a naval surgeon, in 1774,³ was important because it affected the efficiency of the navy when the country was at war and because sickness among the crews of merchant ships affected trade and profit.

As long as gaol fever affected only the inmates of prisons it was of little concern to the government and the public. At times of gaol delivery, however, when prisoners were brought into court for trial, court officers, officials and spectators were liable to be affected.

The first of what became known as “Black Assizes” was at Cambridge in 1522. The cause was said to be “foul air” and the pestilential savour, whether arising from the “noisome smell” of the prisoners or from the “damp of the ground” and the “filth of the house”. The next was that at Oxford in 1577 when note was made of the nauseating stench that came from the cells beneath the courtroom, which housed some 300 prisoners in close

confinement. This incident was followed by an epidemic in the city that killed 300 people.

After the Assizes in Exeter in 1586, there seems to be an absence of further reports until 1730 when, at the Lent Assize at Taunton, several high officials



succumbed – allegedly as a result of the infected stench of the prisoners brought from Ilchester Gaol. Probably the last was the Black Assize at the Old Bailey in 1750.

In 1729 the government appointed a Parliamentary Select Committee to

inquire into the very low levels of cleanliness and sanitation in prisons. Only two prisons were investigated: the Fleet and the Marshalsea. The committee reported overcrowding, with as many as three inmates sleeping in a single bed; up to 40 prisoners in a room 16 x 14 feet and only 8 feet high, with no sanitation and a noisome stench “beyond expression”.

Further evidence of conditions can be found in the reports of Mayhew and Binny,⁴ as well as in reports and contemporary novels.⁵ Probably the most detailed account concerns

Newgate Gaol, which stood on the site of the present Central Criminal Court (the Old Bailey). The stench and nastiness of gaol fever and the lack of or absence of sanitation are described in *The Newgate Calendar*⁶ and include accounts of rotting corpses that stayed in the gaol until claimed by relatives or Poor Law officials. Conditions in ships were no better, except for the officers. Other ranks, whether naval or mercantile, lived on the lower decks where ventilation was poor, cleanliness almost unheard of and sanitation primitive.

It is difficult to assess morbidity and mortality levels because, apart from the paucity of official records, the physicians of the time were liable to include other gaol or ship fevers if they occurred in those areas. In his *Survey of London*, Stow⁷ tells that in 1414, 64 prisoners as well as some gaolers died of fever in Newgate. When the prison reformer Howard⁸ investigated the conditions in 33 prisons in 1773–74 he commented on the

high incidence of jail fever in 22 of them and noted that more people died of gaol fever than were executed.

According to Creighton, the losses from ship fever were very high (as many as 150 in a single ship). Several ships in the Channel Fleet were disabled by

sickness – mostly “fever” – and about one tenth of naval men were lost to the sickness.⁹

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It was Pringle who noted that the symptoms of these two fevers were almost identical. They included a high fever and headache, with delirium, sensitivity to light and an intense thirst. The patient also suffered from pains in the stomach and muscles and developed a cough. He lapsed into a stupor from which he might not recover. Furthermore, a connection was made between “spotted fever”, which was endemic but often epidemic, like both gaol and ship fever. This, also known as hospital and putrid fever, became known in medical circles as typhus fever, a name first applied in 1760. It was the stupor in the final stages of the disease that led to the term, the Greek word typhos meaning hazy or fog-like.

In 1752 the Rev Dr Stephen Hales built a wind-driven device on the roof of Newgate Gaol to pump out bad air so that it could be replaced with fresh air from outside. It is said that the operators were overcome by the stench brought up from below. In 1774 parliament passed an Act for Preserving the Health of Prisoners in Gaol and Preventing the Gaol Distemper, the provisions of which included general cleansing, separation of

new inmates into clean or filthy areas, facilities for fumigating clothing and the provision of clean apparel. It also required justices responsible for prisons to employ an experienced surgeon or apothecary to report to them on the state of the prisoners under his charge. In 1817 there was an epidemic of gaol fever in Ilchester. Energetic cleansing of well and sick prisoners, whitewashing, ventilating and fumigation of wards as well as the provision of clean bedding successfully prevented its extension into the town. At Assizes and in some other courts, attempts were made to prevent the spread of gaol fever from prisoners to court officials and the public. After the incident in 1750, court premises were strewn with fresh, sweet-smelling herbs and flowers. This procedure (“a smell to cover a stink”) has persisted in the custom of presenting the judge with a posy at every hearing.

Court premises were strewn with fresh, sweet-smelling herbs and flowers

Proposals for the prevention of ship fever followed slightly different lines. The shortage of volunteers for naval service led to the press-gang system and to the custom of offering felons their “freedom” if they joined the navy. As many of these ex-prisoners were already infected with gaol fever, they passed it on to other sailors in the cramped, overcrowded and

not very clean conditions in the lower deck. Gaol fever thus became ship fever. It was Lind who noted the connection between the recruitment of these ex-prisoners and outbreaks of ship fever, and between the diseases, ashore and afloat, and crowded and dirty conditions. He noted that “filthy clothes and bedding contain a more certain and more contagious poison than newly emitted effluvia.” Filthiness, he claimed, was the chief source of infection. He campaigned for better conditions, ventilation to remove foul air, the baking of the clothing of the recruits, and the issue of soap and clean clothing. He also recommended iron bedsteads, clean straw and bedding, plus plenty of water for bathing and better food.

Fumigation was used to combat both fevers. Fumigants included burning sulphur; boiling vinegar; burning gunpowder; burning tar and nitre (potassium nitrate); and gases generated by heating a mixture of oil of vitriol (sulphuric acid) and nitre.

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Gaol and ship fevers virtually disappeared by the end of the 19th century but typhus remained endemic, sometimes epidemic among the general population. It was not until 1909 that the body louse was shown to be the vector of the micro-organism responsible for the fever.¹⁰

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