

Ends and Means: Typhus in Naples, 1943–1944


▼ **SPOTLIGHT ARTICLE** in *How Epidemics End*, ed. by Erica Charters

▼ **ABSTRACT** In 1943, Allied forces in recently liberated Naples were confronted with an outbreak of louse-borne typhus. The established Anglo-American narrative of that epidemic is a triumphant story of effective action that controlled the disease with unprecedented speed and success, aided by the pioneering use of the pesticide DDT. Rather than retell that tale, this article discusses why the outbreak and its ending are largely absent from Italian accounts of wartime Naples. Drawing on Italian sources and contemporary Allied ones, it argues that this absence speaks powerfully to the realities of life for Neapolitans at the time. These realities included the likelihood that the epidemic left most people unscathed, and the presence of additional challenges that made survival in the city perilous. Illustrating how tangled events (and even non-events) can be fashioned into simplistic but meaningful frameworks according to the perspective and priorities of the observer, the article also demonstrates how methods (in this case, delousing with insecticide) that were later proclaimed as crucial in ending an epidemic can be viewed very differently by populations required to comply with them, especially when the disease's dangers seem remote.

▼ **KEYWORDS** Epidemics, History of Medicine, History of Science, Medical Humanities, Typhus, DDT

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If most epidemic narratives are about “the origin or causes of epidemics and the details of their course,” then the enduring story of a typhus outbreak in the southern Italian city of Naples, at the height of the Second World War, is among the excep-

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tions.¹ The dominant narrative of that epidemic is all about how it ended. Typhus is a bacterial disease typically spread by the human body louse, and the tale long told about Naples is that this outbreak was rapidly and decisively halted through the timely introduction, by the city's Allied liberators, of pioneering methods of containment.² "The typhus epidemic at Naples will doubtless stand out as a milestone in the field of public health and disease control," one senior Allied medical officer declared afterwards: "Here it was for the first time that a major epidemic of this vicious disease, which characteristically strikes men when they are down, was not merely curbed but actually brought under control by the vigorous application of delousing measures."³ The use of a new louse-killing pesticide, DDT, was particularly praised. In powdered form, DDT had been applied to the bodies, clothes, and homes of hundreds of thousands of Neapolitans as a means of destroying the vector, and in that way, so the story goes, brought the outbreak to its swift conclusion.

That, at least, is the Anglo-American narrative. In Italian accounts of Naples's wartime past and of epidemics in Italy generally, this outbreak, including its dramatic end, is barely mentioned. The absence is most striking in the historiography of Naples itself, where its conspicuousness to readers familiar with the Anglo-American tale has prompted some to speculate that the omission is deliberate. In a study of the rich literature about this period of Naples's past, John Gatt-Rutter claims that "reference to the typhus epidemic that swept the resident population" is "taboo." Its populace, he says, "were so humiliated both by the affliction itself and by the high-handed manner in which disinfectant measures were imposed by the US military authorities that they censored it from consciousness."⁴ Gatt-Rutter points to the work of two historians of wartime Naples, Sergio Lambiase and G. Battista Nazzaro, and their picture of a distressed and affronted population at the receiving end of intolerable Allied handling. Typhus's presence, the pair claim, was considered "an individual and collective shame ... unconfessable and repulsive ... the filthy face of a city oppressed by its age-old evils." Delousing, meanwhile, was "brutal," "degrading," and "inhuman": a "violent" act that Neapolitans resisted and rejected.⁵

The end stages of epidemics can be drawn-out affairs, requiring the involvement of many parties and the institution of many measures. They can also give rise to simplistic narratives that, by contrast, spotlight one actor or a single public health measure. The successful control of typhus in Naples was the result of a multitude of factors, from the ability of a modern military force to impose its will upon a city of up to a million inhabitants, to a wide-ranging public health campaign and

1 Charters & Heitman (2021, p. 212).

2 The following provide a sense of the diversity of settings in which this narrative appears: Zimmerman & Lavine (1946, pp. 1–2, 93); MacNalty (1947, p. 631); Knipping (1952, p. 490); Cushing (1957, pp. 57–62); Hobson (1963, pp. vii, 33–34); Williams (1964, pp. 32–33); Dunlap (1981, pp. 61–62); Carson (2000, pp. 232–233); Gladwell (2001, p. 42); Russell (2001, pp. 127–130); Farley (2004, pp. 131–133); Harrison (2004, pp. 135–138); Snowden (2006, p. 199); Hall (2010, p. 77); Stepan (2011, p. 111).

3 Parkinson, Brig.-Gen. G. S. (1945), Foreword to report "Allied Control Commission for Italy, 1945," in Bayne-Jones (1964, p. 231).

4 Gatt-Rutter (1996, p. 248).

5 Lambiase & Nazzaro (1978, pp. 170, 172).

the widespread preparedness of that population to comply with the measures put in place. This success was accorded enormous publicity afterwards, yet sight was soon lost of the fact that DDT had been but one of a raft of interlinked interventions, from contact tracing and quarantines to the extensive use of other pesticides, that worked together to bring the outbreak to a close.⁶ Powerful propellants were at work on the “DDT-did it” story, however, from press and military appetites for tales of war-winning technology, heroism, and altruism, to political and commercial interests in promoting new methods of preserving health and wealth.⁷

In contrast to Anglo-American narratives of the technological conquest of typhus, this article blends Italian sources with contemporary Allied reports to illuminate Neapolitan responses to the epidemic and interpretations of the measures taken to end it. Recent scholarship has called for greater attention to be paid to the fact that “epidemics are not always visible and may go unmarked, especially in marginalized populations or when they are viewed as politically inconvenient.”⁸ Leaf through accounts of life in Naples at this time and it becomes apparent that, for the city’s population, the outbreak was over before the disease could fulfil its potential and sear itself into collective memory. As Allied records show, typhus had not “swept” the city. Narratives of the end stages of epidemics can intimately reflect narrators’ priorities and perspectives, and it is no coincidence that Italian historians write more about delousing than dying: vast numbers of Neapolitans were exposed to that preventive intervention, but the horrible reality of louse-borne infection was an experience confined to an unfortunate few. Moreover, typhus and Allied efforts to control it were but two of the innumerable problems that plagued Naples in this period.

Wartime Naples is a topic of established interest among modern scholars, with particular attention paid to civilian suffering and aerial bombing, but no published Italian study devotes more than a few pages to its encounter with typhus.⁹ Written almost 70 years ago, a short and little-known article on the outbreak’s clinical features by Ferruccio De Lorenzo, a prominent Neapolitan specialist in infectious diseases, remains one of the most detailed Italian accounts of it.¹⁰ Paolo De Marco’s discussion of the epidemic in *Polvere di piselli*, a 1996 study of life in Naples during its occupation by Allied forces, is the most archive-based but still runs to less than 10 pages, while his sources for that section are chiefly Anglo-American.¹¹ Attilio Wanderlingh’s *Storia fotografica di Napoli 1939–1944*, which includes a detailed timeline of events and an

⁶ Dunlap (1981, p. 62).

⁷ See, in particular, Kinkela (2011).

⁸ Fissell, Greene, Packard, & Schafer (2020, p. 533). Studying the nonappearance of epidemic narratives is not yet a common academic pursuit. For previous examples, see Echenberg (2003); Harrison (2020).

⁹ See, for example, Stefanile (1968); De Marco (1985; 1986; 1996a; 1996b; 1997); Chianese (1995); Gribaudi (1997; 2005); Porzio (2011); Gargiulo (2018); Cerchia (2020). English-language studies of wartime Naples also focus their attention largely elsewhere. See, for example, Lancaster (2005); Chester, Duncan, Wetton, & Wetton (2007); Williams (2013); Laffin (2019).

¹⁰ De Lorenzo (1955, pp. 202–206).

¹¹ De Marco (1996b, pp. 29–36).

introduction by historian Gloria Chianese, is more typical of Italian historiography: it makes no mention of the epidemic at all.¹²

A few Italian historians employ the outbreak to illustrate the challenges encountered by Allied forces on entering Naples, as well as some of their priorities. As Maria Porzio writes, the Allies “intervened rigorously” when confronted with an epidemic that was obviously dangerous: conscious of typhus’s record and potential and that Naples was a vital logistics hub for supporting the war against Germany, Allied commanders did not want to see the city succumb to the disease or thousands of their soldiers infected.¹³ But the epidemic remains an event that features rarely on the radars of Italian writers; and Italian perspectives—rather than those of American and British soldiers—are rarer still. Indeed, one gradual development in Italian writing about the outbreak has been the strengthening toehold of that Anglo-American narrative: a development that may explain why, in the revised version of Lambiase and Nazzarro’s history of wartime Naples, the chapter in which the epidemic features, formerly entitled “Typhus,” is now “Triumph of DDT.”¹⁴ It may also help to explain the mistaken assumption among some scholars that typhus is the nameless plague present throughout *La Pelle*, Curzio Malaparte’s infamous novel set during the Allied occupation of Naples.¹⁵ (It is not: Malaparte’s plague, which he accuses the Allies of bringing to the city, is the corrupting influence of the liberators upon the city’s populace.)

This limited attention to typhus becomes easier to understand when the extent of infection in Naples is considered. According to Allied records, total cases, between July 1943 and May 1944, numbered just over 2,000. Of these, 429 were fatal: a case–fatality ratio of 21.5% that amply underlines the seriousness of the disease and, when combined with the rapid increase in cases before counter-measures became effective, its potential to have impacted appallingly on Naples if it had been left to run unchecked.¹⁶ As it was, there was no such impact. Swollen by refugees, the city’s civilian population in December 1943 was estimated to be between 750,000 and 1 million: take the lower estimate, and this equates to a maximum sickness rate of 0.27% and a fatality rate of 0.06%. Add the fact that a quarter of those 2,000 cases were spread among 60 scattered communities far away from the city centre, and it becomes apparent that most city-dwellers would have encountered the disease’s existence only in the form of the Allied measures introduced to control it: the occasional evacuation of homes, the occasional quarantining of infected and suspected cases, and delousing.¹⁷

When consideration is given to the wartime topics on which historians of Naples have tended to write, the epidemic’s impact in terms of lives affected becomes still less notable. Bombing and depravation are central themes for good reason. When Allied

¹² Wanderlingh (1998).

¹³ Porzio (2011, p. 44). See also Cerchia (2020, p. 632) and Paolo De Marco’s work.

¹⁴ Lambiase & Nazzarro (2002, p. 117).

¹⁵ See, for example, Luzzi (2004, p. 49).

¹⁶ Bayne-Jones (1964, pp. 221–222).

¹⁷ Soper, Markham, Davis, & Riehl (1947, p. 313).

forces entered the city on October 1, 1943, Naples was no stranger to heightened levels of death and suffering. Poor health and a short life expectancy had been a characteristic of certain quarters for decades. More recently, the whole population had become vulnerable to the multiple harms of aerial bombing. Over a hundred raids struck Naples during the Second World War, their scale and effects intensifying as Allied forces neared the Italian mainland. In December 1942, the first major U.S. raid left over 350 people dead. The heaviest, in August 1943, days before the invasion came, may have killed 700.¹⁸ Other impacts included the destruction of thousands of homes, the displacement of hundreds of families, shattered water and power supplies, and wrecked sanitation. British and American aircraft did most of the damage, but the city's liberation would bring little respite: German bombs soon started to fall, and on October 7, 1943 at least 30 people were killed by the delayed explosion of a German time-bomb hidden in the city's main post office.¹⁹ To this were added the myriad ills that make any wartime population more vulnerable and disaffected, from food shortages to the destruction of livelihoods. "Hunger governed all," an Australian war correspondent wrote of Naples in late 1943. "Food. That was the only thing that mattered. Food for the children. Food for yourself. Food at the cost of abasement and depravity. And after food a little warmth and shelter."²⁰

In Naples, then, typhus was one trial among many and, for most of its inhabitants, unlikely to have been especially impactful. As for delousing, that was less remote: there is no doubt that most Neapolitans experienced it. With the intention of removing lice from the entire population, Allied forces had quickly established multiple "mass dusting" stations at appropriate points across the city with the aim of delousing 100,000 people every day: ranging from churches, railway stations, and refugee camps to hospitals and the port, locations were chosen on the basis of population density, typhus rates in the neighbourhood, and the proximity of homes, shops, and workplaces. In addition, trained squads worked their way through air-raid shelters and other corners where people lived especially close to one another, and a sophisticated scheme for case- and contact-searching was put in place: up to 200 household and neighbourhood contacts could find themselves dusted per single infected case. In 5 months, over 3 million individual dustings were carried out.²¹

Certainly dusting could make an impression. Everywhere, the standard practice, which lasted seconds, was for everyone—man, woman, or child—to be covered from head to toe with a powder containing pesticide. The instrument used to apply it was a hand-held, plunger-pushed dust pump, the nozzle of which was pushed inside people's clothing to ensure comprehensive coverage and directed especially at the warmer and hairier areas where lice liked to lurk, such as the groin.²² DDT's properties were not public knowledge at this time, and no sources suggest any consciousness or concern among the population that any pesticide employed might

18 Wanderlingh (1998, pp. 94, 112). Stefanile (1968) provides a detailed record of the raids.

19 Cerchia (2020, p. 630).

20 Moorehead (1945, p. 63).

21 Bayne-Jones (1964, p. 228).

22 Wheeler (1946, pp. 122–128).

possess harmful chemicals.²³ Nevertheless, it can be believed that Neapolitan women in particular found the delousing experience invasive and unsettling, especially when men wielded the dust-pumps: such reactions are recorded among women deloused in other settings around this time.²⁴ Care should be taken with the image that the process was as shunned and detested as some writers claim, however. Lambiase and Nazzaro state that some Neapolitan newspapers condemned this “brutal” procedure as being one traditionally inflicted on South Americans—“the underdeveloped peoples of Brazil and Columbia”—and thus unworthy of the city’s “superior civilization.” The pair also assert, without evidence, that people who resisted had it forced upon them: “they are dragged by force by the military on duty in the streets. Naked, they are powdered with DDT from head to toe.”²⁵ It is unlikely that many, if any, people were actually deloused in that way. For one thing, the techniques rolled out in Naples had been deliberately devised for people wearing clothes: it saved on time, effort, and discomfort, while well-dusted clothing possessed the benefits of making the pesticide more effective. Moreover, plenty of Allied reporting about delousing in Naples records the population as willing to undergo it, as well as the steps taken to explain its purpose and secure the trust and compliance of local communities. None of these sources suggest that force was required or even contemplated, or that newspaper stories about “brutal” techniques and South Americans represented the prevailing view or were about much more than war-weariness and prejudice. “Trade is brisk,” one Allied report noted of the work of the mass dusting stations at the height of the epidemic: “powdering, which has the church’s blessing, is popular and fashionable,” while problems—“real mob scenes”—had occurred in some stations due to the “excessive number of persons presenting for delousing.”²⁶ A month later, the Allied unit overseeing these stations observed that no publicity had been required beyond the “person to person comments of satisfied customers The most efficient propaganda was probably the string of men, women and children leaving the stations with powder in their hair and a certain amount spilled over the clothing.” The same report added that children, “who, as a group, are particularly lousy, fortunately like to be powdered and came in groups over and over again.”²⁷

This implies that adults liked delousing rather less. How, then, to account for their apparent enthusiasm for it? Two explanations emerge from available sources. One is that people accepted that typhus was a threat and understood that delousing would protect them. As one woman recalled of the treatment, “wounded dignity or careful personal hygiene were not worth it; it was better for you to be doused from

23 Contemporary qualms among some researchers responsible for assessing DDT’s safety received no publicity until long afterwards. See, for example, Russell (1999, pp. 780–781).

24 See, for example, McDowell (2005, p. 76).

25 Lambiase & Nazzaro (2002, pp. 119, 118).

26 “Naples: Preliminary Report on the Typhus Situation in the Naples Area” (1944, ca. Jan. 10), Record Group 492, Entry 318, Box 2649, National Archives and Records Administration, College Park, MD (hereafter NARA).

27 “Report on Mass Delousing in Naples, Dec. 28. 1943 to Feb. 15. 1944” (1944, Feb. 18), Record Group 492, Entry 318, Box 2649, NARA.

head to toe, above and below, with the saving insecticide.”²⁸ An account attributed to Colonel Bill Stone, the U.S. Army's Chief Preventive Medicine Officer in Naples at the time, points to the second explanation: a popular desire for relief from a different kind of epidemic. After typhus was under control, a U.S. Army journalist quoted Stone as saying: “At the beginning of the program there was some resistance on the part of suspicious civilians, especially in the poorest sections, to whom the man with the dust-gun was a sinister stranger to be avoided.” But very soon, Stone went on, “relief from the maddening itch,” as he put it, proved “a potent persuasive”: delousing “permitted them, for the first time in weeks, to get a sound, itch-less night's sleep.” Word spread, lines at dusting stations “stretched for blocks,” and once-suspicious Neapolitans “began to queue up for a daily dusting—a precaution totally unnecessary.” To conserve resources, delousing teams “were forced to stamp everyone going through the line with a silver nitrate marking that would not wash off, to prevent them from going through again the next day.”²⁹ These are Stone's words as they appeared in the U.S. Army press; but other Allied medical officers had the same impression of a population more anxious to be rid of an existing torment than fearful of whatever evils might lie in store with typhus. A senior British medical officer present in Naples throughout the epidemic reported, “There was no compulsion placed on the populace to submit to this form of disinfection, but its availability was made known through the medium of Doctors, Priests and the Press. It was found that all were eager to be rendered louse-free, partly from their fear of Typhus, but more probably because it gave them relief from body irritations, from which they had suffered for many months.”³⁰

In a recent study of Senegal's response in 2014 to Ebola's spread in West Africa, anthropologist Alice Desclaux argues that a constructed sense of impending threat—“the anticipated nightmare”—fuelled the speed with which preventive steps were taken. Arguing that Charles Rosenberg's multi-phase model for epidemic narratives fails to capture this “imaginary” stage, she proposes two further phases: a “pre-epidemic” stage “corresponding to the presence of the threat before the infectious agent appeared”; and a post-event stage of discourse and reflection “crucial in creating meaning for the epidemic” and powerful enough to “reinforce or reconstruct the interpretation at its beginning.”³¹ These two phases are an effective fit for Naples's typhus outbreak—so far as Anglo-American perspectives are concerned. Aware of how typhus epidemics had devastated populations in the past, Allied commanders had swiftly introduced countermeasures that successfully smothered the disease before its presence was significantly felt. Fuelled by a market for scientific success

²⁸ Gambelli (1986, p. 289).

²⁹ Stone, Col. W. S., quoted in “The Army's New ‘Gun-Powder’” (1944, Jun. 6), Record Group 112, Entry 343A, Box 21, NARA.

³⁰ Chalke, Lt.-Col. H. D., “Notes on the Civil Typhus Outbreak [in] Italy 1943–1944” (1944, Mar.), WO 220/414, The National Archives, London, UK.

³¹ Desclaux (2020, pp. 149, 162–163).

stories, a triumphant narrative subsequently emerged of new and decisive methods of technological expertise and of disasters heroically averted.

Yet, the paucity of engagement in Italian historiography with this epidemic and its ending speaks to a different context: the realities of life for Neapolitans at the time. While anxiety about the implications of typhus's presence and potential to spread—Desclaux's "imaginary phase"—precipitated the Allied decision to intervene, no comparable sense of "anticipated nightmare," nor, indeed, much consciousness of the epidemic at all, can be detected among the city's civilian population: an absence easier to fathom when Italian histories of wartime Naples and the contemporary impressions of Allied soldiers are read beside the established narrative. These alternative perspectives testify to a host of added challenges and distractions in the city, from bombing and food shortages to the irritations of body lice, as well as to the fact that the epidemic was never a cause of significant or widespread harm; indeed, the popular enthusiasm for DDT-dusting would seem to have been as much about its ability to provide relief from lice as it was about salvation from typhus. The level of local interest in this epidemic's ending can serve to underline, too, a perennial and resonant issue in public health and preventive medicine: the limited ability of individuals and societies to invest in the outcomes, urgency, and certainty of solutions—technological, multi-factoral, or otherwise—when the catastrophic ends to be sidestepped have yet to be widely experienced.³²

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³² See, for example, Meertens, Van de Gaar, Spronken, & de Vries (2013).

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