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War Losses (Australia)

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The official numbers of casualties suffered by the Australian Imperial Force (AIF) in the First World War are underestimated in multiple categories. These official figures comprise the limited statistics of 60,000 dead and 155,000 woundings, impacting upon a purported 331,000, mainly civilian volunteers, who went to war. These statistics are significantly limited because, contrary to international convention, they omit hospitalisations for all injury and any for illness and substantially understate admissions for shell shock. However, ground-breaking statistical analysis, completed in the centennial 2014, has now revealed the extent of premature post-war death, and that the total hospital admissions for wounding, injury and illness suffered by the men of the AIF exceeded 750,000.

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Introduction

The official figures of casualties suffered by the men of the Australian Imperial Force (AIF) in the First World War are wrong in multiple categories. The official figures comprise the limited statistics of 60,000 dead and 155,000 wounded, impacting upon a purported 331,000 mainly civilian volunteers that went to war.^[1] These statistics are significantly limited because they omit hospitalisations for injury and illness and substantially understate admissions for shell shock.

However, ground-breaking statistical research examining over 12,000 individual soldiers' records has now revealed that total hospitalisations for wounding, injury and illness suffered by the men of the AIF exceeded 750,000 admissions. [2] This is five times greater than that officially acknowledged today, essentially due to the omission of hospitalisations for all injuries suffered and any injury and illness. Of those that survived, the men of the AIF were admitted to hospital on average three times each, of which on average one admission was for wounding. Over half the survivors were discharged medically unfit. It is conservatively estimated that at least one in five of them were suffering from shell shock.

Why has this devastation of the AIF, in both absolute and comparative terms, taken nearly 100 years to come to light? Was it propaganda to suppress the toll, incompetence of Australia's official war historians Charles Bean (1879-1968)^[3] and Arthur Graham Butler (1872-1949),^[4] or simply the unquestioning acceptance of the official record? The findings of this recently completed research, coincidentally in these centennial years, are startling and rewrite Australia's casualty statistics of the First World War.

Recounting Australia's Losses

The publication of the official Australian casualty figures for the First World War began with C.E.W. Bean in 1921, with Volume 1 of *The Story of Anzac, Official History of Australia in the War of 1914-1918*. Sometime later, figures were recorded by Ernest Scott (1867-1939), Professor of History at the University of Melbourne, who was responsible for Volume XI of the official history, *Australia during the War*, published in 1936. The official medical statistics were compiled and analysed by A.G. Butler in his three volumes of medical text, analysis and statistics, entitled *Australian Official Medical History of the First World War 1914-1918*, the last and most significant volume of which was finally published in 1942. Later that year in the capacity of editor-in-chief of Australia's official war history overseeing Scott and Butler, Bean published his last volume, Volume VI. These three authors are universally accepted as the authorities on the human cost of this conflict for the men of the AIF. Remarkably, their contributions have essentially remained unquestioned to date.

It has been universally believed that a review of the casualty data for the First World War contained in the hundreds of thousands of soldier records at the National Archives of Australia (NAA) in Canberra and Melbourne was practically impossible. However, there was a way forward. This mountain of official casualty records can be tested. The record is unique in the world, in completeness and accessibility. To their great credit, the NAA has digitised all soldier records and

made every page available online.^[5] By subjecting these records to a rigorous random sampling technique using Gallop polling methodology, the mine of information contained in the 416,000 extraordinarily detailed AIF individual soldier Attestation Papers can be explored. The methods used were verified by the Statistical Consulting Centre, within the Department of Mathematics at The University of Melbourne. By the main statistical analysis of the examination of a sample of over 9,600 randomly chosen soldier papers, physically collecting data page by page, it was possible to produce results of casualties suffered in the 95 percent Confidence level to +/- 1 percent accuracy. A recount of these records and the subsequent creation of a 400,000 cell spreadsheet enabled a challenge to the prevailing understanding of Australia's casualty figures, indeed to question the understandings of the medical basis of these First World War statistics. It also assessed for the first time the true and measurable post-war impacts contained in and implied by the individual's AIF service record. Impacts of suffering only partially qualified to this day.

Enlistments

To begin, the official figure of 416,809 enlistments for Australia was overstated by nearly 10 percent, despite a Royal Commission in 1918 examining, verifying and reporting upon a large proportion of this number. Lasting eight days, it remains the shortest Royal Commission in Australian history. The recent research, sampling across all of the Attestation Papers, established that a more accurate estimate of 379,000 men +/- 650 enlisted in the AIF. The balance of the official figure can be defined at best as an application to enlist. Approximately 36,000 men were rejected mainly failing medical assessments – hernias, dental problems, even varicocele (7 percent), a condition like varicose veins of the testes that is rarely painful but may lead to low sperm counts. Why this was a cause for rejection to be a soldier is unknown. The number 416,809 should be removed from the headline official figures not only because it is incorrect, but also because its original purpose of inflating Australia's contribution to this conflict is long out of date and was simply politicking at the time.

In addition, a large proportion of the selected men did not set foot in an army base in a theatre of war overseas. For example, approximately 8,000 men deserted before embarkation. The simple sample analysis of this research corrects the official figure of 331,781 embarkations and determines that the correct number of effective embarkations for war is 318,100^[9] with a range of 315,300 to 320,800 at the 95 percent Confidence Interval. It is upon this foundation that the most detailed and accurate analysis of Australian soldiers' commitment to this war can now be built.

But firstly, before this can begin, the need to define the term of casualty must be addressed. There is one consistent definition used in most nations' medical statistical analyses of war casualties from the First World War - it is that an admission to hospital is used as the basis to count a casualty resulting from wounding, injury or illness.^[11] This single simple statistic can be used to compare the war experience of other nations, with that suffered by the AIF, but only after another common

denominator is determined for the AIF and other nations. That denominator is the actual size of the armies exposed in the field to this war. For example it will be shown that the United States claims to have raised an army of over 4 million men. Less than one-third would land in France.

The most difficult category to define in the analysis was an admission to hospital for apparent shell shock. This has consequences for an accurate appraisal of overall soldier suffering. More than ninety years ago, significant prejudices, stigma and ignorance prevailed when these records were being compiled, either in the field, or in official post-war analyses. At the time, multiple terminologies for so-called shell shock existed, and medical practitioners' disagreement masked the extent and even the legitimacy of the diagnosis of this condition. The conflict among wartime medical practitioners is nowhere more evidenced than the following. [12] The goal of the regular military medical officer was to get the soldier back into fighting fitness. However, the primary purpose of the majority of medical practitioners, who temporarily served (enlisted from civilian practices), was a broader aim to permanently cure the patient, rather than to merely fix them sufficiently to re-join the battle.

What was recognised early on as new in this war was not the existence of shell shock *per se* but the devastatingly increased exposure of the soldiers to modern artillery and machine gunfire.^[13]

Differentiation between the physical and mental effects^[14] meant that diagnoses recorded on soldiers' records were for "shell shock (wounding)" or "shell shock (sick)". Opposing views were vehemently held over whether sufferers were malingerers, or mentally weak to begin with. Butler belonged to the school that held the view that mental illness was already present in those who displayed symptoms of shell shock and only needed an event to bring it out. He believed the cause to be "constitutional".^[15] As a result only approximately 20,000 admissions for shell shock were included in the official wounding statistic, a further 50,000 admissions for shell shock were treated as an illness and today are officially ignored and remain unaccounted.

The following list contains most but not all of the expressions implying shell shock found in the records of men of the AIF to denote the cause of admission to hospital - they demonstrate tragically, sometimes euphemistically, clear cases of extreme trauma:

Neuralgia, Myalgia, Rheumatism, Debility, Multiple neuritis, DAH (Disordered Action of the Heart), VDH (Valvular Disorder of the Heart), Irritable Heart, Tachycardia,
 Melancolitis, Neurosis, NYD, NYDN, Neurasthenia, Hypochondrium neurosis, Stress, Hysteria, Concussion (leading to medical discharge some months later), Disorder of Accommodation, Effort Syndrome, Mental, Nervous Breakdown, Premature Senility, Senility, inability to stand noise of shell fire, Facial Paralysis, Nervous Prostrations, prostrate convulsions, Mental Instability, Facial Neuralgia, insanity, stammering, weakmindedness, Dementia Praecox, Cardiac Insufficiency.

On the other hand, data collection for the admission to hospital in the AIF for Venereal Disease (VD) presented very few problems but its impact on the AIF was severe. Detailed records of its incidence and treatment were maintained accurately for the purposes of pay suspensions while servicemen

received treatment. This usually involved injections of heavy metals like mercury and arsenic-based compounds.

Treatment was not the only difficulty in dealing with VD. The stigma associated with contracting these diseases invariably delayed medical attention being sought. Response to treatment and therefore the duration of hospitalisation were highly variable but periods of fewer than four weeks were rare. Six months in hospital was not uncommon. Reinfection was a compounding factor as was readmission following premature release from hospital. Alex Depena (Serial Number 6944) was admitted once for a period of 157 days and Percy Sinclair (2521) was also admitted once but in his case he was hospitalised for a period of 196 days. Charlie Duncan (605) was admitted on five occasions for VD over less than three years of his service for periods of ninety-six, eighteen, eighty, fifty-four and forty-nine days. Indeed, Duncan had trouble staying out of hospital. A Queensland drover and horse breaker, he was admitted to hospital a total of twelve times, two due to wounding. Much of Duncan's overseas service was spent in hospital. In total there were 55,000 men admitted on 70,000 occasions for VD.^[17]

But the truly staggering impact was the resultant unavailability of these men. The average stay in hospital was fifty days but the time taken to return them to their unit (some men were treated back in Australia) resulted in a loss of availability amounting to 4 million days, second only to wounding as a whole and similar to the impact of the incidence of shell shock. Tragically, the ultimate loss of availability was death.

Death

The analysis of the soldier records revealed a death toll slightly higher than the official record and is presented here for the first time in a format that, in one picture, puts into perspective the deadly significance of the main campaigns of the war. During the existence of the AIF, 62,300 +/- 400 men died, 8,700 (8,530 to 8,870 or +/- 170) from non-battle causes.^[18]

The graph "Death by Campaign" puts the AIF's first exposure in the North African theatre of the Turkish Gallipoli Campaign in (red) in its place in relation to the AIF's first exposure to the Western Front in the disaster of Fromelles. The second spike at Gallipoli represents the persistent multiple and failed spring attempts to take high ground at The Nek and Lone Pine which cost as many men as the fierce fighting required for the landing of the forces on the peninsula. The graphic also shows the period of relative calm in the first six months of 1916, when the AIF was evacuated from Gallipoli to Alexandria and held there for fear of a counter-attack from Turkey, which, when it did not eventuate, allowed these men of the AIF to be shipped off for service on the Western Front imbedded within British command.

After a few months of reorganisation following the landing in France, mainly at Marseilles, they were presented as a diversion to the front at Fromelles on 18 July 1916. The graphic reveals the relative losses at Pozieres (23 July to 3 September 1916), where Australian artillery, used for the first time,

killed many Australian soldiers through lost communication and confusion; and the Germans' counter-attack using artillery to obliterate Pozieres which was by then occupied by Australian soldiers. [19] It places the often-called "victory" at Messines (7 to 14 June 1917) accompanied by the detonation of twenty-one mines under the German frontline, an explosion that was heard in London, in the context of the costly campaign that it actually was. It also puts into perspective the tragedy of the decision of General Sir Douglas Haig (1861-1928), as Commander-in-Chief, to fight on into the winter and through the mud of 1917, endeavouring to take the higher ground around Passchendaele and break through as part of an equally delusional aim to get to the coast, only to hand back Passchendaele and the ground won at such cost to Australian and Canadian soldiers within weeks, when it was realised that the ground taken was strategically indefensible. "What had taken four months to win was evacuated in three days" in January 1918. [20]

The graph also shows the only period of time when the AIF was solely under Australian command (blue) of that of Sir John Monash (1865-1931).^[21] After being thrown into stopping the German's 1918 spring advance at Villers Bretonneux, the AIF were persistently pushed forward until they were withdrawn from the front in the first week of October 1918. The war was over for the AIF, no longer a fighting force.

As mentioned earlier, there were causes of death of a non-battle nature. The memory of the deadly impact on the AIF of the outbreak of Cerebro Spinal Meningitis (CSM) was somewhat overwhelmed by the pandemic of Spanish Flu. The CSM outbreak predominantly affected troops based in the rural camps in Victoria in 1915 and in all Australian states in 1916 and 1917. The medical response of quarantine and isolation was implemented in fits and starts across Australia. However, this medical response provided the experience and preparedness to react quickly and extremely well when the Spanish Flu was to later sweep the globe and the armies of the war. The pandemic's impact on the AIF was relatively minor, as graph 2 details. In contrast, the United States of America had more deaths from "pneumonia" (90 percent), other illnesses and accidents in their depots at home before they had left for war (37,400) than were killed in action in the war itself (36,700).

The particularly tragic nature of the timing of suicide warranted the creation of a time plot of its incidence in the analysis. The concentration of suicides in the three years from 1919 to 1921 is significant; men unprepared and unsupported for what they had to face when they were sent home (see graph 3: "Relative occurrence and frequency of Suicide and CSM").

In comparing Australia's losses with other countries, as a proportion of its fighting strength, it can now be claimed that the men of the AIF suffered more deaths, more hospitalisations for wounding and more hospitalisations for illness and VD than did Britain, Germany, France, Canada and the USA.

Deaths	%			Tot.		VD adm's
%	Non-	Wounding	Illness/injury	1103р.	Men	aum 5

Country	army	В	per 1,000	per 1,000	per 1,000	millions	per 1,000
USA	8.2	57	150	720	870	1.39	91
Britain	13.0	-	310	1,040	1,350	5.40	25
Germany	19.4	8	460	1390	1,850	10.50	27
France	16.8	13	540	380*	920*	7.89	-
Canada	13.5	9	350	950	1,300	0.418	158
Australia	20.2	14	680	1750	2,430	0.308**	184

^{*}Doubtful

Table 1: Comparative total casualty statistics - Australia and other selected belligerents^[25]

Post-War

The 1933 Commonwealth Census in Australia contained questions related to war service and subsequent analysis by the Australian Commonwealth Superannuation Actuary in 1938^[26] provides us with a measure of premature death of returned servicemen due to war related illness, injury and suicide after the war up to 1933. By extrapolation of this comparison data of the post-war death of exservicemen with a similar aged cohort of the population that did not serve, it is now claimed that a further 8,000 ex-servicemen would have their lives cut short in the period up to the start of the Second World War due to war related injury wounds or illness.

In considering these various proportions of servicemen that served in a theatre of war evidently impacted in some way following the war, and incorporating them along with those who paid the ultimate price during or until the disbandment of the AIF on 31 March 1921 into a single graphic, it initially appears that only 10 percent of the men who served in a theatre of war were left unscathed (see graph 4: "Total Impact on the AIF of the First World War").^[27]

But were they? When these 10 percent of soldier records were examined and those soldiers who had been hospitalised for wounding, illness or injury during the war were deducted from this remaining segment, the percentage reduces to just over 3 percent, or only 11,000 men, who were apparently unaffected. But even this may not be the right figure for those unscathed. In this analysis, there was no accounting for the men who walked away, never wanting to have anything to do with officialdom again for as long as they lived. Nor did it cover those who refused to ask for help because of their pride and the stigma of shell shock being a constitutional weakness, or the shame and stigma of VD; or those who soldiered on with the stigma and destruction of alcoholism. Many of these would be represented in those 25,000 men, or their next of kin who by 1944 had chosen not to

^{**} Adjusted for 10,000 men mainly in Britain and eligible for only one medal

collect their medals.

Australia's official historian, Bean, was a journalist answerable to military command and Defence

Department bureaucrats. His presentation of 60,000 dead and 155,000 woundings representing AIF

casualties is his legacy, along with his failure to adequately reflect the true extent of loss and

suffering borne by these mainly civilian volunteer soldiers. He failed to follow the practice set by

previously published British, American and Canadian official histories to include all hospitalisations.

As editor-in-chief, he set the parameters of the medical history, [28] one that was so complex as to be

almost impossible to meet. He appointed Butler as medical historian, a man unsuitable to the task;

he failed to provide adequate resources to Butler; he failed to adequately supervise him resulting in

the medical history taking twenty years to complete; he defended Butler against calls for his dismissal after the release of the first volume, then failed to have him replaced in the mid-1930s as

the project dragged on. Australia has an official history record of this conflict, significantly

underestimating its cost, omitting to place on record that the AIF was so devastated as to not finish

the war, and omitting to place on the record Australia suffered casualties proportionally in excess of

Britain, Canada, USA, Germany and France.

Therefore, to return to the question raised at the beginning of this article, as to whether it was

propaganda, incompetency or an unquestioned acceptance of the official record that allowed for this

flawed and misleading casualty history record to exist to this day - the answer is that it was all three,

each varying in degree in the eyes of the beholder. However it begs the question, why did Australian

forces suffer so disproportionately to the main belligerents? This is currently the subject of ongoing

research.

Conclusion

Based on a robust, statistically sound, conservative analysis in this review of well over 9,604 soldier

records, it is claimed that Bean failed in his task of providing a record of all hospitalisations although

aware of its magnitude; failed to acknowledge the premature death rate after the war although aware

of it; that all of those who were exposed to this war were damaged, disabled or died from it. As such,

officially, the plight of so many of these servicemen remains unacknowledged, effectively forgotten.

This is contrary to and indeed a breach of the Australian nation's pledge: lest we forget, we shall

remember them.

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Notes

- 1. † Beaumont, Joan et al.: Australian Defence: Sources and Statistics, The Australian Centenary History of Defence v. 6, South Melbourne, Australia et al. 2001.
- 2. ↑ Noonan, David: Those We Forget: Recounting Australian Casualties of the First World War, Melbourne, Australia 2014, p. 135.
- 3. † Ibid. pp. 1, 3, 4, 18-9, 20-1, 28-9, 38, 198.
- 4. † Ibid. pp. 1, 3, 10-3, 18-24, 29-30, 36, 39-41, 65-6, 72, 131, 166, 180, 198.
- 5. ↑ National Archives of Australia: www.naa.gov.au (retrieved 18 May 2016); also via Australian War Memorial www.awm.gov.au (retrieved 18 May 2016).
- 6. ↑ Noonan, Those We Forget 2014, p. 8.
- 7. 1 lbid. p. 57.
- 8. 1 lbid. p. 55.
- 9. 1 Ibid. p. 62.
- ↑ As determined using Minitab (a statistical software package): 1 Proportion Test and Confidence Interval.
- 11. ↑ Butler, Graham A.: Official History of the Australian Army Medical Services 1914-1918, volume III, Canberra 1930-1942, pp. 859, 894.
- 12. ↑ Leese, Peter: Shell Shock, traumatic neurosis and the British soldiers of the First World War, London 2002, pp. 34, 41.
- 13. ↑ Maudsley Monographs, Shell Shock to PTSD, Military Psychiatry from 1900 to the Gulf War, number 47, London 2005.
- 14. † Garton, Stephen: The Cost of War: Australians Return, Melbourne 1996; The Commonwealth of Australia, Royal Commission on the Assessment of War Service Disabilities, Canberra 1924.
- 15. † Lindstrom, Richard: The Australian Experience of Psychological Casualties in War 1915-1939, Victoria 1997.
- 16. ↑ Maudsley Monographs, Shell Shock to PTSD, 2005.
- 17. ↑ Noonan, Those We Forget 2014, pp. 131-135.
- 18. ↑ Ibid. p. 117.
- 19. ↑ Prior, Robin/Wilson, Trevor: The Somme, New Haven 2005, p. 177.
- 20. † Prior, Robin: Passchendaele: the untold story, Melbourne 2003, p. 200.
- 21. Monash, John: The Australian Victories in France in 1918, Melbourne 1923.
- 22. † Cumpston, J. H. L./Lewis, Milton James/Australia, Dept. of Community Services and Health: Health and Disease in Australia: a History, Canberra 1989, p. 321.
- 23. † Lewis, Milton James: The People's Health: Public Health in Australia, 1788-1950, 2 volumes, Contributions in medical studies, Westport, Connecticut et al. 2003, p. 230.
- 24. † United States Army Medical Department: The Medical Department of the United States Army in The World War, Volume XV, Statistics, Part 2, Medical and Casualty, Washington 1925, p. 147. The descriptor Spanish flu was used some time after the US official history was published early 1920. The cause of death was rapid double pneumonia hence most of these deaths would have been Spanish Flu.

- 25. 1 Noonan, Those We Forget 2014, p. 168. MacPhail, Sir Andrew: Official History of the Canadian Forces in the Great War 1914-1918, The Medical Services, Ottawa, Canada 1925. Mignon, Médecin Inspecteur General A.: Le Service de Sante Pendant la Guerre 1914-1918, volume IV, Paris 1927. Whalen, Robert Weldon: Bitter Wounds, German Victims of the Great War, 1914-1918, London 1984. The Medical Department: The Medical Department of the United States Army in The World War, Volume XV, Statistics, Part 2, Medical and Casualty Statistics. Mitchell, T. J. / Smith, G. M.: History of the Great War, Medical Services, Casualties and Medical Statistics of the Great War, London 1931.
- 26. ↑ Commonwealth of Australia: Census of the Commonwealth of Australia 1933, Canberra 1938; Ibid.: Annual Report, Canberra 1938-1939.
- 27. † The aim was to present a very simple graphic so that some overlap is not displayed. For the sake of thoroughness here is some detail. The rounded numbers for the AIF are 318,000 embarked; 308,000 were sent to a theatre of war; over 70,000 died (62,000 during and within two and a half years after the war); 131,000 were discharged medically unfit; a further 76,000 would apply for a pension; another 8,000 died in the post-war period (and some would overlap with the previous two numbers); leaving 31,000 or 10 percent apparently impacted. Excel allowed access to these files by elimination and found that 20,000 had been hospitalised at least once, leaving 11,000 (3 percent) apparently unaffected.
- 28. † O'Keefe, Brendan: Butler's Medical Histories, Journal of the Australian War Memorial, no. 12 (1988).

Selected Bibliography

Beaumont, Joan (ed.): **Australian defence. Sources and statistics**, The Australian centenary history of defence, South Melbourne; New York 2001: Oxford University Press.

Butler, A. Graham: The Australian army medical services in the war of 1914-1918. Special problems and services, volume 3, Canberra 1943: Australian War Memorial.

Commonwealth of Australia: Census of the Commonwealth of Australia, 30th June, 1933, Canberra 1938: Commonwealth Government Printer.

Commonwealth of Australia: Report of the Royal Commission on the assessment of war service disabilities, Melbourne 1924: Government Printer.

Commonwealth of Australia: **Annual report**, Canberra 1938-1939: Department of Repatriation.

Cumpston, J. H. L. / Lewis, Milton James: **Health and disease in Australia. A history**, Canberra 1989: Australian Government Publishing Service.

Garton, Stephen: **The cost of war. Australians return**, Melbourne; New York 1996: Oxford University Press.

Jones, Edgar / Wessely, Simon: **Shell shock to PTSD. Military psychiatry from 1900 to the Gulf War**, Maudsley monographs, number 47, Hove; New York 2005: Psychology Press.

Leese, Peter: Shell shock. Traumatic neurosis and the British soldiers of the First World War, New York 2002: Palgrave.

Lewis, Milton James: **Public health in Australia, 1788-1950**, Contributions in medical studies, number 49. People's health, volume 1, Westport 2003: Greenwood Press.

Lindstrom, R. G.: The Australian experience of psychological casualties in war, 1915-1939 (thesis), Melbourne 1997: Victoria University of Technology.

Macphail, Andrew: Official history of the Canadian forces in the Great War 1914-19. The medical services, Ottawa 1925: Acland.

Mignon, A.: Le service de santé pendant la guerre 1914-1918. L'évolution du service de santé pendant la guerre 1914-1918, volume 4, Paris 1927: French Government.

Mitchell, T. J. / Smith, G. M.: **History of the Great War based on official documents. Medical services. Casualties and medical statistics of the Great War**, London 1931: Her Majesty's Stationery Office.

Monash, John: **The Australian victories in France in 1918**, London 1920: Hutchinson & Co.

Noonan, David C.: Those we forget. Recounting Australian casualties of the First World War, Melbourne 2014: Melbourne University Press.

O'Keefe, Brendan: **Butler's medical histories**, in: Journal of the Australian War Memorial 12/25, 1988.

Prior, Robin / Wilson, Trevor: Passchendaele. The untold story, Melbourne 2003: Scribe.

Prior, Robin / Wilson, Trevor: **The Somme**, New Haven 2005: Yale University Press.

United States Army medical department / Love, Albert G. (eds.): **Statistics. Medical and casualty statistics, part 2**, The medical department of the United States Army in the world war, Washington, D.C. 1925: Washington Government Printing Office.

Whalen, Robert Weldon: **Bitter wounds. German victims of the Great War, 1914-1939**, Ithaca 1984: Cornell University Press.

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