

***We've been down this  
road before: Vulnerable  
work and occupational  
health in historical  
perspective***

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# Overview

- Precarious Employment not new phenomenon
- 19<sup>th</sup> and early 20<sup>th</sup> century sources on OHS
- Evidence on OHS effects
  - Sweating, casual labour, child labour, shop workers & merchant seamen (focus on 3 of these & UK/Aus evidence)
- How best to explain & historical policy

# Putting vulnerable and precarious work into historical context

- Emergence of modern capitalist societies eroded stable work arrangements of medieval period & by 19<sup>th</sup> century insecure or contingent work was the norm for most workers in Western Europe, North America & Australasia in 19<sup>th</sup> to early 20<sup>th</sup> century
- Vulnerable groups (women, immigrants) then as now concentrated in most insecure and low paid work
- Contemporary commentaries used the term 'precarious' to describe situation of sweated workers, casual labour and others (eg 7 February 1849 *Maitland Mercury*, referred to the hundreds of labourers wandering the streets of Sydney '*earning a precarious subsistence by casual work*').
- Placed in historical context period 1940-1980 where permanent work (esp for) norm can be viewed as historically exceptional unless trends reversed

# *Vulnerable/precarious workers*

## *1840-1930*

- Sweated labour & outwork (mainly women)
- Child labour
- Casual labourers (eg dock, agriculture, navvies)
- Indentured immigrants (esp non European)
- Shop-workers
- Merchant seamen
- Subcontracted/outsources labour



# *Contemporary evidence of health effects 19<sup>th</sup> & early 20<sup>th</sup> century*

- Government inquiries/commissions into sweating, child labour, navvies, capital/ labour, shops (eg UK Child Labour Commission, 1867)
- Government agencies eg inspectorates, Board of Trade, Public Health
- Arbitration & related industrial tribunal hearings
- Medical and health journals (eg *Lancet*, *Am J of Public Health*)
- Union/sympathetic group reports
- Incidental employer material
- Academic journals (Economics, Law, Sociology)

# *Sweating, outwork and child labour*

- Not just garment making (but others like boots)
- elaborate subcontracting of work (middlemen) & outwork
- Low pay (piece-rates), poor housing, nutrition

# *Sweating, outwork and child labour: Health effects*

- Fatigue/exhaustion/sleep deprivation
- Poor diet/malnutrition (wasting disease)
- Cramped posture/strain injuries
- Overcrowded, poor ventilation, unhygienic working & living conditions
- Increased risk of infectious disease (workers & communities)
- Insecurity and mental wellbeing
- Children –interrupted physical/mental development & early onset chronic injuries

# *Sweating: Irregular work and health*

*‘The irregularity of employment and of income must be a fruitful source of disease. For instance, while there is much enforced idleness, a tailor has often to perform “nine days’ work in a week.” The insufficient sleep, the strain to the eyes, the lack of proper time to take meals or out-door exercise, and the prolonged confinement in unwholesome and over-heated workshops are naturally important factors in undermining the constitution of even the most fortunate among the journeymen tailors’ Lancet June 1888.*



# *Sweating: Overcrowded, ill-ventilated & unhygienic conditions*

'The Lancet Special Sanitary Commission on "sweating" among tailors in Liverpool and Manchester', 21 April 1888 p792.

*garret workrooms... entering by a door in a back street that runs behind a resplendent shop, it is necessary to go through a long stone passage. On the left, there is a row of closets that are quite dark, have no windows, but ventilate into the passage. Only one of these closets is at the disposal of the workpeople, and it is frequented by twenty-six men and women. There was soil in front and on each side of the seat. The closet had evidently not been cleaned for a long time...Passing beyond...There is no light, and suddenly the foot sinks in soft, pulpy material, and a fearful choking odour arises. Several flag-stones are missing...At last, when the garret was reached, we found three little rooms occupied by tailors, another by tailoresses, and another two by female machinists. Some of the rooms were intensely hot from the pressing-iron, the gas, and the overcrowding; others were intensely cold. In the latter the irons and gas were not required, and yet no fire is allowed for fear of accidents...One of the over-heated rooms contained only 108 cubic feet for each workman.*

# *Sweating and health – disease, exhaustion and public health*

● *Lancet* 14 April 1888

*'The clothes at times are contaminated, the workers so starved and exhausted that they must soon fall victims to wasting disease when they are not actually driven to suicide. This is a matter of such immediate importance, and which every sentiment of humanity is so concerned, that petty quibbles over the details of doctrinaire political economy must not be allowed to stand in the way of those sweeping and far-reaching reforms that alone can deal with the widespread evils now fully revealed to the public. (Lancet also noted disincentive to report disease outbreaks because loss of work/income)*

# *Link between precarious employment & psychosocial risks are not new*

*‘Sweating and Suicide’ (Lancet April 1888)  
reported woman acquitted from attempting to  
commit suicide at Manchester City Police Court  
‘though her only excuse was the extremely low  
wages she earned when working for a sweater.  
During the whole of the previous week she had  
worked as a costume finisher from half-past eight  
in the morning till seven in the evening, and yet  
only earned 2s. 2d. She lived on tea and bread,  
and out of these wages 6d. was deducted in  
consideration of the hot water supplied for her  
tea! Then she had to repay a loan of 6d. to the  
forewoman. With the remaining 1s. 2d she had to  
meet her rent, which amounted to 2s 6d a week.’*



# *Sweating: Outworkers near Dudley*

*'groups of girls may be seen trudging along with bundles balanced on their heads. The bundles generally contain moleskin trousers, often weigh half a hundredweight, and have been carried sometimes for more than three miles. These are the home workers, the wives and daughters of men [predominantly miners] whose earnings are insufficient to keep their families.'* Lancet June 1888



# *Sweating and health: Australia*

- Catherine Powell, Sydney tailoress, referred to the low wages (with lengthy unpaid trial periods), piecework, dilapidated and cramped workplaces where 'girls so heaped together that they cannot turn around.' (NSW Royal Commission on Strikes, 1891)
- The report of the Queensland Labour Commission (1891) found overcrowding was a key aspect of poor sanitary conditions in the small workshops associated with sweating, and neither the Local Government Act nor the Health Act provided an avenue for dealing with this. The combination of inadequate nutrition, cramped working and living conditions also increased the risk of communicable diseases.
- In 1899 a Victorian female factory inspector (Cuthbertson) expressed concern both at the risk of typhoid due to the impure water used in factories and some employers fitting out gas-lit and poorly ventilated basements for 'girls' to work in (Report of Chief Factory Inspector for 1899).
- As in Britain, child labour was also an issue associated with sweating. In 1896 a Queensland MLA (McDonnell) urged the passage of factory legislation because '*children who ought to be at school were employed in making up goods in these places. Something must be done, especially to put a stop to sweating, and to the long hours that girls were compelled to work in some of the warehouses.*'

# *Casual labour – dock workers*

- Casually engaged often via subcontract & irregular work the norm (bull system of discriminatory hiring)
- Very low income (women support via stay making in UK), poor housing & nutrition

# ***Dock workers/wharf labourers health risks***

- Irregular/long hours, fatigue/exhaustion
- Poor diet/nutrition
- Poorly organised work activities/high injury risk
- Job insecurity and poor mental health
- Physiologically heavy work
- Exposure to infectious agents
- Poor/crowded/unhygienic living conditions

# *Dock workers health: Mortality and injuries - UK*

- *'in a special report on accidents amongst dock labourers... it was shown, could have in most instances been avoided if the men employed were not overworked and underfed. For months they may be left without work... and then... when they secure employment, there is so much hurry and eagerness to do the work quickly and cheaply, that accidents become, not the exception, but the rule. This is, in a great measure, due to the system of sub-contracting, or sweating, which prevails in docks as in so many other phases of labour.'* *Lancet* December 1888
- Ogle's analysis of deaths amongst males aged 45 to 55 years reported to the UK Registrar General's Office in 1890-92 found dock workers had third highest death rate (40.71 per thousand) of 40 occupations measured, just behind pottery workers & well ahead of chimney sweeps & miners.
- In 1929 12 percent of British dockers claimed compensation, three times that of railway workers (4%) and factory operatives (3.8%)



# *Dock workers health: irregular hours, exhaustion & physical strain*

- *'These poor men come to work without a farthing in their pockets...and by four o'clock their strength is utterly gone; they pay themselves off: it is absolute necessity which compels them'. (UK Dock manager/Webbs) & nutrition*
- Following WW1 fatigue studies of munitions workers Waller's 1920 study confirmed the strenuous and heavy nature of dock work and the inability of dock labourers to maintain effort over time notwithstanding piecework payment systems.
- Heavy lifting and lack of incentive to use machinery meant strains and ruptures 'all too common.' (*Lancet* 1924)

# *UK Dock workers' health: work & home disease risks*

- Exposure to hazardous dust, fibres & infectious agents (eg Anthrax, Cholera, plague) spread back to communities
- 1870-1910 *The Lancet's* reiterated connection between influxes of casual and low paid work in the docks (Liverpool, Hamburg, London), overcrowded and poor quality housing, and spread of diseases like typhus (Sydney too, plague/Rocks slum clearance)
- Intergenerational effects-1897 Herbert Burrows, London School Board Manager, damp/overcrowded living conditions, poor clothing & insufficient diet (estimated 60,000 went to school in his region without breakfast) fomented disease & poor education attainment (dock children over-represented).
- Tully Glasgow nutrition study 1921 *'Father, a docker; until week of this study has had very little work, one or two days per week at most; 4½ days during study. House is rather untidy but quite clean. Children are rather delicate; two have rickets; child (4) has eruption on face; child (8) is lame owing to an abscess on leg. Mother is thin and unhealthy looking.'*

# *Wharf labourers and health: Australia*

- *'the work is of such a precarious character, and you have so much broken time that you are not in a position to work eight hour shifts... there on a particular day, but the second or third day there may be several vessels arrive, and it is therefore to my interest to try and work overtime to make up the time I have already lost.'* (R McKillop NSW Royal Commission on Strikes 1891)
- In 1897 London Dock Union leader Benjam Tillet visiting Australia said a key benefit of labour mobilisation was *'the restriction of unhealthy employment, with the consequent prevention of loss of life and limb.'*
- Waterside Workers' Federation report for the Workers' Compensation Commission based on 1937-8 statistics indicated half the men could expect to experience an injury ranging in severity from a week off work to fatality, and pursuit of profits pre-empted even basic safety precautions.
- Health costs of a life of insecure work, aggravated by the Great Depression stated by a government appointed physician (McQueen) who after examining Sydney dockworkers in 1942 observed: *Their endless search for the infrequent job which would keep them and their families from the precarious borderline of malnutrition had taken its devastating toll. The feverish high-tension work performed when the job is secured in order to ensure its repetition had been paid for at the shocking high price of premature old age and physical calamity'.*



# *Minimum labour standards should apply to all workplaces: The Lancet, 2 August 1890, p246*

*"From a public health point of view...What does it matter whether the people working together are members of the same family who are acting in a sort of partnership with each other, or whether they call in outsiders to help them? These workers... still they consume an equal amount of oxygen and require the same proportion of space. The real basis – the only sound basis to work upon – is the principle that what is made for the public and sold to the public, the public has a right to watch and control through every phase of its manufacture and distribution, whether it be made in a magnificent factory, where hundreds of workers are employed, or in wretched garret where but one or two sweater's victims work together."*



# Unfettered markets, competitive tendering, outsourcing & health 19<sup>th</sup> century style

Two years later *The Lancet* criticised the contracting out of work by the London County Council, stating that while it could not discuss the economic grounds for the decision its immediate concern “*as medical journalists, is rather with the bearing which the system has for the requirements of public health.*” ‘The Sweating Question’ *The Lancet*, 15 October 1892, p893.

# *Merchant seamen: Employment late 17<sup>th</sup>-early 20<sup>th</sup> century*

- Critical emergent group of mass wage labour from 18<sup>th</sup> century (sugar/slave trade)
- Significant employer not just in UK but America and Australasia
- Engaged via articles for voyage (fixed term contract – couldn't resign but no security)
- Not paid til end of voyage (up to 2-3 years)
- Low pay, poor rations (inflated costs of necessities & arbitrary deductions, harsh discipline)
- Long absences difficult to support dependents
- Extensive use of 3<sup>rd</sup> world seamen (Lascars & Chinese under inferior conditions – precursor to flags of convenience)
- Widespread desertion, crimping and dissent

# *Merchant Seamen: The hazards*

- Overloading & poor maintenance of ships common (Plimsoll, govt inquiries, journals)
- Long hours/overwork (under-crewed ships)
- Poor & repetitive diet
- Damp, overcrowded and unhygienic crew quarters
- Limited redress under legal system & dissent ruthlessly punished
- More concern with public safety (passenger ships) than crew safety
- UK data indicates mortality rates (both disease & injury) far higher than navy (& understated because many ill not engaged & returned to shore to die so omitted/fixed term – extensive research by WE Home)

# Merchant seamen: some evidence

- *'It is of common occurrence for a vessel starting on a long voyage to find on the first day out, that one, two, or three of the crew are unfit for service. They become a tax upon the vessel, without rendering adequate return. The ship's crew, probably short at the start, or at least limited to the smallest number considered absolutely necessary to man the vessel, become, by the unexpected reduction, overtaxed and overworked, and consequently more or less inattentive to duty.'*

John Woodworth Supervising Surgeon-General for US  
Marine Hospital Service



# Merchant seamen: some evidence

- In 1875, for example, 1,502 US vessels and 85 foreign vessels suffered serious incidents (with 312 being total losses) resulting in 888 deaths (another 73 seamen and others were drowned by being washed or falling overboard).<sup>[1]</sup> Writing in 1876, John Woodworth, the Supervising Surgeon-General for the US Marine Hospital Service, endorsed the struggle of Samuel Plimsoll: *'No thoughtful person will doubt that a large proportion of these casualties are preventable. The loss of these vessels result chiefly from the use of unseaworthy vessels; from the lack of the necessary amount of physical force, resulting from short crews and unseaworthy sailors; from overloading, or from ignorance, inattention or recklessness of officers...Overloading is given as the cause of only eleven casualties in an aggregate of 7,671, but most of the vessels that go down from this cause are part of the long list of those never more heard from after leaving port.'*

<sup>[1]</sup> Woodworth, J. (1876) 'The safety of ships and of those who travel in them' p79.



# Merchant seamen: some evidence

In 1884 *The Lancet* noted mortality incidence rate for British merchant seamen which was 19 per 1000 in 1879 had increased to 23.8 in 1882 – with 75% of the deaths in the latter year being due to ‘violent causes’.<sup>[1]</sup> Further, *The Lancet* noted that the mortality figure excluded seamen whose health prevented them engaging on a voyage – an early reference to what is now known as the ‘healthy worker’ effect *‘the nature of the service, which necessitates a certain selection of men at the commencement of each voyage, and which loses sight of those whose health will not allow for re-engagement, it is patent that no materials exist for the calculation of a death rate that can be compared to the death-rate of landsmen.’*

<sup>[1]</sup> ‘Mortality in the merchant service’, *The Lancet* 12 April 1884, 123(3164):676-677.

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John Woodworth Supervising Surgeon-General for US  
Marine Hospital Service 1876

## *Merchant seamen: some evidence*

- Herber Smith, surgeon in charge of the US Marine Hospital Service for the port of New York, argued (1875) the high sickness rate amongst seamen was *‘probably greatly augmented by the want of light and air; and the presence of dampness and filth so often observed in the forecastles of even the largest and best equipped sailing and steam vessels.*

# ***How best to explain & historical policy***

- *‘That the labor problem is at bottom a question of health, and that it can best be approached from that side though legislation is a conviction that is becoming world wide.’*

*Source: Economic Bulletin December 1909 p238 cited in Coulter, J. (1910), ‘The economist and his relation to the problem of conservation of human resources’ American Journal of Public Hygiene 20(1):1.*



# *Merchant seamen: some evidence*

- Samuel Smith, a fireman told the 1891 NSW Royal Commission on strikes that *“there have several reductions made in the number of hands employed in the stoke-holds; (8314) they have been reduced to extent of 20 per cent; (8315) such a reduction does not add to the men’s contentment, and it does not increase the safety of the ship; (8316) I have very often known firemen to be disabled; (8317) laid up by sickness or injury. I have sometimes seen three or four men incapacitated; (8317).*

# Work, the state & social protection – rich countries 1880-2007

Year	1880	1970	2007
<b>Employment security &amp; contingent work</b>	No regulated job security & substantial contingent work	Secure jobs norm (except women)/small contingent workforce	Decline in job security & growing contingent workforce
<b>Minimum labour standard laws (wages &amp; hours)</b>	No minimum wage or hours laws (except children)	Universal minimum wage and hours laws	Minimum wage and hours laws – some erosion
<b>Extent of union membership &amp; collective bargaining</b>	Union density low (<10%) & limited collective bargaining	Union density 25->50% & extensive collective bargaining	Substantial decline in union density & collective bargaining
<b>Extent of vulnerable groups of workers</b>	Extensive exploited vulnerable groups (women, immigrants, home-workers, young & homeless, old)	Still vulnerable groups (women, immigrants & home-workers) but more circumscribed	Expansion of vulnerable groups (women, home-workers, immigrants, homeless, old & young –child labour re-emerge)
<b>Extent of occupational health &amp; safety law</b>	Limited OHS law (factories, mines) & poorly enforced	Expansionary revision of OHS laws initiated	Expanded OHS law but under indirect threat
<b>Extent of workers' compensation system</b>	No workers' compensation system	Mandated workers' comp/injury insurance system	Workers' compensation /injury insurance – some erosion
<b>Extent of public health infrastructure (water, hospitals, sewer etc)</b>	Little public health infrastructure sewer, (hospitals, water)	Extended public health infrastructure/ health insurance	Public health infrastructure – some erosion
<b>Social security safety net (sickness, age &amp; unemployment benefits)</b>	No age pension, social security, unemployment benefits	Age pension/social security, unemployment benefits	Age, disability & unemployment benefits – cutback
<b>State activity in utilities, education &amp; transport</b>	Limited state involvement in education & transport	Wide government involvement in education, transport, utilities	Privatisation, competitive tendering & social capital erosion

# PDR model: Risk factors associated with Insecure and contingent work

<b><i>Effort/Reward Pressures</i></b>	<b><i>Disorganization</i></b>	<b><i>Regulatory Failure</i></b>	<b><i>Spill-over Effects</i></b>
Insecure jobs (fear of losing job)	Short tenure, inexperience	Poor knowledge of legal rights, obligations	Extra tasks, workload shifting
Contingent, irregular payment	Poor induction, training & supervision	Limited access to OHS, workers comp rights	Eroded pay, security, entitlements
Long or irregular work hours	Ineffective procedures & communication	Fractured or disputed legal obligations	Eroded work quality, public health
Multiple jobs (may work for several agencies)	Ineffective OHSMS / inability to organise	Non-compliance & regulator oversight (stretched resources)	Work-life conflict

# Lessons from history?

- Health effects of long hours, casual work, irregular /low pay/sweating, home-work, subcontracting well documented in govt inquiries etc 1880-1920
- Flow on effects of poverty on child labour, education, housing & health also well documented
- At least some vulnerable groups (home-based garment workers, agricultural workers and merchant seamen) occupy same situation today (note too parallels with poor countries today)
- Social mobilisations, regulation and infrastructure policies (1880-1940) response to these problems, and raising many of the issues now increasingly recognised by policy makers
- Neoliberalism just Laissez Faire back with a vengeance