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# **Study on the Healthy Risk of the Workers:**

## a survey in the Yangtse Rive Delta

## **ÉTUDE DU RISQUE DE SANTE POUR LES TRAVAILLEURS:**

ENQUÊTE DANS LE DELTA DU YANGSTÉ

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**Abstract:** Problems of occupational health and safety in small and medium size enterprises are severe in China. With this paucity of official statistics documenting work-related injuries, the auther undertook a project in the Yangtse Rive Delta last year in the hopes of injecting at least some preliminary data into the public discourse. The epidemic of work-related injuries, and the failure of local business and government to address it either through prevention or adequate compensation stems from two functional dimensions: the technical and the institutional. The technical level includes the physical causes of work-related injuries, which are not unique to the Yangtse Rive Delta. The institutional problems, on the other hand, are rooted in China's unique developmental history, politics and growth. These include the absence of legal aid institutions, poor government oversight and official corruption on the local and provincial levels.

**Key words:** healthy risk, workers, survey

Résumé: Les problèmes de santé et de sécurité professionnelles dans les petites et moyennes entreprises s'avèrent graves en Chine. Avec l'insuffisance de statistiques officielles documentant l'accident du travail, l'auteur a effectué l'année dernière un projet dans le delta du Yangtsé dans l'espoir d'injecter au moins des données préliminaires dans la conversation du public. L'augmentation des accidents du travail, l'échec des entreprises locales et du gouvernement à résoudre le problème soit par la prévention soit par la compensation adéquate sur les plans technique et institutionnel. Le niveau technique inclut les causes physiques de l'accident du travail qui n'est pas unique dans le delta du Yangtsé. De l'autre côté, les problèmes institutionnels s'enracinent dans l'unique histoire de développement de la Chine, ses politiques et sa croissance, comme l'absence d'aide institutionnelle légale, la vue courte du gouvernement et la corruption des officiers à l'échelle locale et provinciale.

Mots-Clés: risque de santé, travailleurs, enquête

### 1. INTRODUCTION

Nowdays, the problems of occupational health and safety in small and medium size enterprises are severe in China. The rate and seriousness of occupational injuries has reached critical levels, poisoning the economic prosperity and threatening the stability China has achieved over the past two decades. In the Yangtse Rive Delta and the Pearl River Delta, the fastest-growing industrial millions of migrant workers, at least 60.000 work-related region in China and home to injuries occur every year.

With this paucity of official statistics documenting Chinese work-related injuries, the auther undertook a project in the Yangtse Rive Delta last year in the hopes of injecting at least some preliminary data into the public discourse, to be based on the situations of workers as told

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by workers themselves. The information and projections that follow are based on the data from that project, taken in interviews with 126 workers suffering from work-related injuries in zhejiang provience and jiangshu provience. Based on these cases, we find it is the direct relationship between increased fatigue and both work injury frequency and seriousness. Our findings describe a situation in need of considerable improvement and innovation to bring working conditions in China to a humane and lawful level.

The information in this report was gathered in Match and Auguest 2005 from 126 workers in ten hospitals in Taizhou and Kunshan. Taizhou, situated in the coastal central section of Zhejiang, has a subtropical monsoon climate. Made up of three districts including Jiaojiang, Huangyan and Luqiao in downtown area, it has under control two county-level cities, that is, Linhai and Wenling, and 4 counties such as Yuhuan, Tiantai, Xianju and Sanmen. With accelerating development as the motif and taking a new road to industrialization as the goal, Taizhou kept speedy development of national economy and achieved new performance by opening wider to the outside world and advancing economy overall. Taizhou is the birthplace of Chinese shareholding economy and as well one of the key manufacture bases of Zhejiang. It has currently formed its massive economy and industry assemblage with local characteristics. top 10 Pillar Industries in Taizhou: vehicle fittings, medicinal chemicals, plastics and dies, household appliances, clothing machines, pumps and valves, craftworks and gifts, foodstuff processing, footwear, caps and apparels, electric power. The goal of Taizhou in building manufacture bases is: to build top 10 national-level bases of industrial products and the largest electric power base of East China via efforts of 5 years.

Lies in the Yangtze economic belt, Kunshan is well facilitated in transportation, adjacent to Shanghai in the east and Suzhou in the west. There are 200,000 professionals in its investment sections, such as Kunshan Economic & Technological Development, Kunshan Export Processing Zone, Kunshan Business Incubator for Overseas Scholars. As an industrial &commercial city, Kunshan has attracted many world-famous companies and foresighted entrepreneurs to make their investments in here .So far, Kunshan has approved the establishment of about 2300 enterprises from 54 countries and regions. 23 of the world top 500 have established their affiliates in Kunshan, such as Total Fina, Neste, Avery, DSM, Toyota. Kunshan has grown into a region noted for biggest influx of international capital and high profit return for investors.

### 2. METHOD AND DATA

Research visits were unannounced, so as to ensure access to injured workers, and injured subjects were chosen at random in the hope that the study pool might more accurately reflect a profile of the entire Taizhou and Kunshan working population. Access to hospitalized workers was the greatest barrier to us, as local hospitals often have relationships with the local factories that provide most of their patients. We conducted ward interviews without any hospital or factory officials present, in order to allow workers to speak honestly and without fear of reprisal. Data collected from workers explicitly reflects the conditions in 110 factories employing approximately almost 70,000 workers. We believe the conditions reported by these workers are not the exception, but are the rule not only in the Yangtse Rive Delta, but also in other major manufacturing center in China.

The average age of workers interviewed was 26.5 years. The median age was 23. Only 20% of workers interviewed were women while an overwhelming 80% were men. This breakdown reflects the gender profile of the manufacturing sector as a whole; men dominate the heavier and more dangerous industries, while women are better represented in the light and textile industries. This is also the rule within any given factory, where men are usually assigned the heavier and more dangerous positions. The workforce overall is very young and single. Of all workers interviewed, 30% were married, 68% were single and 2% did not respond.

This is a thoroughly migrant workforce in the same pattern as most Reform Era urban migration. Most workers are from Central and Western China. Of the 126 workers interviewed, over one third came from Hubei, Anhui and Jiangxi alone, while only 20 were natives of Zhejiang and Jiansu themselves. That migrants comprise over 90% of injured workers foreshadows many of our conclusions as to the root causes of the work-injury problem and its possible solutions. As will be explained in more detail in a later section, many barriers that prevent injured workers from receiving proper workplace protections, medical care and compensation are the same as those that bar migrant workers from other government services in their new urban homes. It is as a component of the greater marginalization and exploitation of migrant workers in industrial China that the work-injury epidemic must be understood.

Ninety percent of all injuries were to victims' hands or arms, with severity ranging from cuts and burns to severe nerve damage, permanent paralysis and the loss of entire digits and limbs. The hands are the primary limbs involved in most factory work and machine operation, so their prominence in this context is not surprising. The most common injuries reported were broken or severed fingers on the dominant hand. Most workers cited industrial factors as the causes of their injuries: "machine malfunction" accounted for a third of all responses, distantly followed by "lack of training." Though this has not been confirmed statistically, we believe that most injuries generally occur within six months of a migrant's arrival, and that training of any kind is rarely, if ever, given.

Worker themselves factors (carelessness, fatigue, overwork, etc.) accounted for another third of injuries. The second most common response for all workers was "carelessness"; however, the severity of the injuries was such that even the most careless of workers could probably not. Furthermore, since usually no training is given, it remains to be seen whether a worker's "carelessness" can be held responsible for an injury when he was never instructed how to use a machine properly. A third of workers could not account for the causes of their injuries.

Depending on the injury, workers stayed in the hospital on average two to four weeks. The more serious injuries, however, often required hospital stays of two or three months, with one seriously injured individual requiring 160 days of rehabilitation for a head injury. The average medical bill was Y7130, and the median Y4200.

The majority of workers interviewed reported receiving only their base salaries while hospitalized (60%), or none at all (9%). Only a dozen reported receiving full salaries. Since all are generally subjected to compulsory overtime work well exceeding the legal maximum of 55 hours per week, this hospital pay represents a significant cut in workers' salaries for weeks or months at a time. If an injury is serious enough that a worker cannot work, or the company will not rehire him or her, then the loss of livelihood may be permanent and the effects even more devastating.

Workers' incomes (including overtime) on average were Y900 per month or Y1180 per year. Managers in factories, however, can expect to make on average Y32,000 a month, or 35 times their average worker's salary.

Only half of workers surveyed reported any work-injury insurance. This work-injury insurance would normally cover industrial accidents; however, employers often refuse to provide necessary documentation for filing claims or dispute that injuries were work-related. Consequently, even if a worker is insured, compensation is not assured. This is particularly true of small factories without government licenses; having broken one law, they may be less reluctant to break others. In these factories, reports of employers insuring only a few employees and then forcing uninsured injured employees to use the names of the insured are common. This practice is not only fraudulent, but can also make it impossible for a law-abiding worker to obtain compensation after he is injured.

On average, injured workers worked 11.5-hour days, seven days a week. Only 16% of workers interviewed, however, reported working the legal daily maximum of hours, and only thirteen workers out of all 126 reported working the legal weekly maximum for overtime. Data, however, strongly suggests a direct relationship between overwork/fatigue and work injuries. Those who worked 12 hours a day suffered the most serious and by far the greatest number of injuries, while those who worked less than 8 hours per day suffered both the fewest and least

serious injuries. Since workers generally do not work at more than one factory, work rates correlate directly to levels of fatigue. Workers who worked fewer hours were most likely less fatigued, more alert and less prone to injury, while those who worked longer hours were more fatigued, less alert, more likely to be injured, and more likely to be injured seriously. Thus, the tolerance level for work injuries appears to be 7 hours of work a day, excluding one hour for lunch. That is to say, if workers have an 8 hour day (including lunch), work injuries are almost eliminated.

This observed relationship between injury and fatigue is revealing, as the most affected workers were those forced to work an illegal number of hours. The fewest injuries occurred at 8 hours/day, a legal work rate, while the most numerous and serious injuries occurred at 12 hours/day or more. Twelve-hour days (or 72-hour weeks) are not only unsafe, but also illegal and far in excess of the absolute limit stipulated in Chinese labor law (including overtime) of 53 hours per week. The policy implications of this are not to be understated. If existing maximum hour laws were enforced, work injuries would be significantly reduced.

The positions of workers interviewed range from the skilled to the unskilled, from technicians to carpenters to assembly line attendants. They make common consumer products including shoes, apparel, tires, office furniture and traditional Chinese medicine, as well as industrial products such as iron pipes, circuit boards and electronics. Half of workers interviewed reported that their products were exported for sale overseas, many of those goods bound for American markets.

The education level of workers filling these unskilled factory jobs is generally very low. Of the 126 workers interviewed, only 20 or 15% had any education beyond the compulsory minimum of nine years. Of those 20 workers, only two had any education beyond the high school level and only one was female. Of all workers interviewed, 34 or 26% had not completed the state minimum of nine years, including ten workers who did not finish primary school. The majority of workers polled were middle school graduates, having received just the bare legal minimum of nine years of compulsory education.

It is perhaps unsurprising then that only 19% reported having any knowledge of labor law, while the rest reported having none at all. Of those workers who responded in the affirmative, almost all cited their source of information as "listening to other people." Despite or perhaps because of a general paucity of knowledge regarding labor law, 78% all of workers also responded that they needed legal assistance.

At the time of this study, only one of the 126 workers interviewed had received any compensation for his injuries. This worker had been in the hospital six months and did not expect to ever be able to return to his former job. As for the rest, the great majority of workers either did not know what they would do, or said they would try

and claim compensation against their employers. Many of the least seriously injured (those with level 10 injuries) said they would return to work in their factories if allowed. However, due to local hiring practices towards the disabled, it is unlikely they will be afforded the opportunity.

#### 2. FINDINGS AND DISCUSSION

The epidemic of work-related injuries, and the failure of local business and government to address it either through prevention or adequate compensation stems from two functional dimensions: the technical and the institutional. The technical level includes the physical causes of work-related injuries, which are not unique to the manufacturing sector of the east of China. The institutional problems, on the other hand, are rooted in China's unique developmental history, politics and growth. These include the absence of legal aid institutions, poor government oversight and official corruption on the local and provincial levels.

As mentioned in the previous section, this study found the most common causes of work-related injuries to be machine malfunction, lack of training, and especially fatigue. Even when workers cited their own carelessness as the cause, the nature of the injury suggested that had the proper safety measures been in place, the mandated safety regulations been followed, the proper training provided, or simply the legal work limits respected, then the injury would not have occurred. The answer to curbing the work injury epidemic is as simple as following the existing safety regulations, adhering to work hour limits to prevent fatigue and promote alertness, and providing more extensive job training. Communities seeking to promote foreign investment through preferential business conditions could subsidize the hiring of dedicated trainers in each factory to teach correct use of equipment, safety laws and regulations, instead of compromising workers' safety by providing a "soft environment". Furthermore, since workers are increasingly finishing the compulsory nine year educational minimum, basic principles of labor rights and safety should be introduced into the national curriculum so all workers and citizens can understand the minimum level of treatment to which they are legally entitled, no matter what their profession.

One of the institutional barrier is the relative lack of legal aid for workers who seek compensation, and the difficulty in accessing what little help there is. The circuitous legal procedure and the large amounts of capital required to even file a work-injury claim alone prevent the great majority of migrant workers from receiving adequate compensation. Workers often settle for less because they are pressured by company officials and simply cannot afford the legal fees to pursue their cases. Yet, even if they do possess the financial means, it can take up to three years to obtain compensation.

According to state-run media, if compensated at all, workers usually only receive 20,000-30,000 RMB. This is unacceptable, especially as injured employees who can no longer work usually return to their homes in the interior, externalizing the costs of supporting disabled laborers onto poorer and less developed provinces.

The hospital itself is the usually the first barrier to filing a compensation claim. Workers are usually taken to small local hospitals often specializing in hand injuries and generally treating workers exclusively. Since most patients are workers, most of each hospital's treatment is paid for by local factories, consequently, usually have a strong relationship with the hospital's staff and management. We found that this relationship often extended to limiting workers' access to visitors, intimidation and the denial or forgery of medical certificates required for filing work-injury claims at factories' request.

After the injury has occurred, the process for filing a claim is difficult to navigate and easily derailed at each step by uncooperative or corrupt officials. Before he can file a claim, a worker must first obtain his state identification card, a hospital certificate, a document proving employment at the factory, a copy of the factory's state business registration, a witness and an application form from the Labor Bureau. While the state issued ID and application are usually not difficult to obtain, hospitals and factories often deny the health certificate and documents of employment, defeating a worker's compensation claim before it has even begun. From here, a government agent may come from the Work Injury Board within two months to investigate the claim. The Work Injury Board is a government entity often made up of or influenced by the same functionaries that have provided a "soft environment" to local companies, and so may also deny workers certification. If, however, a worker has the financial and personal resources to propel his claim over these first hurdles it may then be submitted to the Social Security Bureau for compensation. Unsurprisingly, this legal course is quite difficult to navigate for migrant workers who have little political or economic clout of their own. A more accessible and less expensive means by which employees can sue unsafe employers, would not only see justice more often served, but it would also create an economic incentive for all companies to improve safety conditions in order to avoid large compensation suits.

At the base of the work-injury epidemic, however, is the same local level corruption that has plagued China since it moved as a nation to a more market-driven economy. With some notable exceptions, China has many progressive statutes on the books governing labor like the Labor Act of 1994 and the Worker Safety Law of 2002. Together these laws set average work week ceilings at 44 hours, with monthly overtime hours not to exceed 36 hours per month. They set minimum wage premiums for overtime work, guarantee at least one day off a week and give workers the right to refuse to operate machinery that violates safety regulations without risk of

termination or lost wages.

To eradicate this epidemic and inoculate industrial sector for the future, the government must act immediately and boldly. It must go beyond the State Administration of Work Safety's recommendation for a National Production Safety Statistic Index and create a mechanism on the local and provincial levels to record cases, ensure compensation and compel local cadres to follow up. They must create a legal aid system which allows all people to pursue their legal rights regardless of income or origin. But most of all, they must move to better safe-guard workers from exploitation if they are ever to move into the community of nations as a full

partner and friend of basic human rights. Without these measures, China economic rise will continue to come on exploitation of its once valored proletariat.

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