

Occupational asthma

There is moderate evidence that exposure elimination is the most powerful means for the primary prevention of occupational asthma (OA), according to this systematic review (29 studies included). While exposure reduction is likely to reduce disease burden, there is only limited evidence to support this statement. There is strong evidence that substitution of powdered allergen-rich natural rubber latex (NRL) gloves greatly reduces NRL sensitisation and NRL-related asthma. There is limited evidence that skin exposure to workplace allergens contributes to occupational sensitisation and OA, and that respiratory protective equipment can contribute to primary prevention of OA.

- European Respiratory Review 2012; 21(124): 112–124
- <http://err.ersjournals.com/content/21/124/112.abstract>

Occupational asthma host factors

The prognosis for people diagnosed with occupational asthma (OA) is generally poor, but what factors affect the outcome? A systematic review (35 included papers) finds that OA outcomes are worse in older workers (moderate evidence), those exposed to high-molecular weight agents (moderate evidence), longer duration of exposure to the causative agent (moderate evidence) and impaired lung function (moderate evidence). However, neither atopy (strong evidence) nor being a smoker at the time of diagnosis (moderate evidence) affect outcomes. It is important to clarify that while atopy is a risk factor for OA caused by high molecular weight agents it does not alter the prognosis of the disease once it manifests.

- European Respiratory Review 2012; 21(124): 88–96
- <http://err.ersjournals.com/content/21/124/88.abstract>

Medical screening for work-related asthma

Excluding subjects with a family history of asthma would have only a negligible impact on the incidence of work-related asthma (WRA – asthma caused or exacerbated by work factors), this evidence review confirms (72 papers included). Pre-employment/pre-placement factors, including atopy, do increase WRA risk, but are insufficiently predictive for screening out susceptible individuals. Questionnaires should be used to identify workers at risk of developing WRA to help inform ongoing surveillance. There is strong evidence that skin-prick tests using high-quality allergen extracts are suitable for screening workers exposed to high molecular weight sensitisers (eg latex, enzymes, flour). There is strong evidence that a combination of questionnaires, physiological tests and immunology can improve the predictive value of screening.

- European Respiratory Review 2012; 21(124): 105–111
- <http://err.ersjournals.com/content/21/124/105.abstract>

Non-specific neck pain

A systematic review (seven papers) finds strong evidence that females and those with a previous history of neck complaints are predictive of non-specific neck pain among office workers, but that many previously labelled risk factors are not predictive of it. High keyboard usage, poor understanding of computer placement position, and low social support (strong evidence) and high levels of psychosocial stress (moderate evidence) are not predictive of neck pain. There is limited evidence that keyboard distance from the edge of the desk, poor

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computer skills in men, high task difficulty and high muscular tension, are predictive of neck pain, and limited evidence that arm support during mouse and keyboard use, awkward body posture, high work flow, non-adjustable chair or desk, low decision latitude, and high mouse or high keyboard activity are not predictive of pain.

- Occupational & Environmental Medicine 2012; online first: doi: 10.1136/oemed-2011-100459
- <http://oem.bmj.com/content/early/2012/05/11/oemed-2011-100459.abstract>

Organisational justice

Three components of organisational justice are each negatively associated with mental health problems, according to this systematic review (11 papers included); however, only 'relational' and 'procedural' justice are independent of the effort–reward imbalance or demand-control-support models. Relational justice (dignity and respect employees receive from management) has a significant negative effect on mental health and sickness absence even after controlling for other psychosocial factors. Procedural justice (equity and fairness in processes and procedures) is also negatively associated with depressive and other mental health symptoms and with absence. Just two papers looked at the effect of 'distributive' justice (fair distribution of resources and benefits) and both found an association with lower levels of depression and absence; however, a lack of adequate controls meant that the effects could not be separated from the possible influence of other psychosocial factors.

- Occupational & Environmental Medicine 2012; online first: doi: 10.1136/oemed-2011-100595
- <http://oem.bmj.com/content/early/2012/06/11/oemed-2011-100595.abstract>

Depression risk factors

A large-scale population-based longitudinal study in Canada finds that work-related factors such as effort–reward imbalance (ERI), job insecurity, job strain, and work/family conflict are important predictive factors for major depressive disorder (MDD), but they appear to mediate depression risk through different mechanisms in men and women. The study was based on 2,752 randomly selected employees without a current or lifetime diagnosis of depression, drawn from the public and private sectors. One-year incidence of MDD was 3.6% (2.9% men; 4.5% women). High job strain ratio (high psychological demand with low skill discretion and low decision authority), low job security and family-to-work conflict increased MDD risk in men. In women, working 35–40 hours per week, job insecurity, high ERI and work-to-family conflict increased MDD risk.

- American Journal of Epidemiology 2012; online first: doi: 10.1093/aje/kwr473
- <http://aje.oxfordjournals.org/content/early/2012/05/03/aje.kwr473.abstract>

Healthcare workers' dermatitis remains a problem

One in five healthcare workers (HCWs) in Denmark reported hand eczema in the previous 12 months, twice that of the background population, according to this study of 2,274 HCWs (87% female) in three Danish hospitals. One in eight HCWs (12%) reported current hand eczema and 35% had a lifetime prevalence of the condition. Of those reporting eczema in the previous 12 months, 11% had severe, 39% moderate and 50% mild symptoms. HCWs with eczema were more likely to be male (31% one-year prevalence) than female (20%) –

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contrasting previous research. Eczema was not significantly associated with profession but was correlated with long working hours, and with atopic dermatitis. Atopy was the only factor significantly associated with symptom severity.

- [Contact Dermatitis 2012; online first: doi: 10.1111/j.1600-0536.2012.02105.x](https://doi.org/10.1111/j.1600-0536.2012.02105.x)
- <http://onlinelibrary.wiley.com/doi/10.1111/j.1600-0536.2012.02105.x/abstract>

Control over working time

‘Only very limited causal inferences’ can be made regarding the impact on health and wellbeing of employees having enhanced control over their working time, according to this systematic review (63 papers). Thirty-one papers examined the impact of having general or ‘global’ control over working hours, while others looked at specific aspects, such as control over breaks, start/end times, daily working hours or freedom to choose when to take holidays. There is moderate-to-strong evidence for a positive association between global work-time control (WTC) and work–non-work balance, and moderate evidence that the relationship is causal. There is moderate evidence for a positive association between WTC and job-related outcomes, particularly job satisfaction, but no clear evidence for an association with health or wellbeing. There is moderate evidence for positive cross-sectional associations between access to flexitime and work–non-work balance, health and wellbeing, and job-related outcomes.

- [Scandinavian Journal of Work, Environment & Health 2012; online first: doi: 10.5271/sjweh.3307](https://doi.org/10.5271/sjweh.3307)
- http://www.sjweh.fi/show_abstract.php?abstract_id=3307

Can hernia be work related?

There is insufficient current evidence of a causal link between specific mechanical exposures at work and increased risk of inguinal hernia (IH), according to this systematic review. Eleven of 23 included papers (three cross-sectional, four case–control, one prospective cohort, three case series) incorporated information on risk of IH in relation to occupation or mechanical exposure at work. Increased risk was reported in six studies, but methodological quality was poor. The case series looked at sudden-onset hernias: while patients tend to attribute their hernia to specific single strenuous events, there is insufficient evidence of a link. There is inconsistent evidence linking occupational exposure to increased risk of post-operative recurrence.

- [Scandinavian Journal of Work, Environment & Health 2012; online first: doi: 10.5271/sjweh.3305](https://doi.org/10.5271/sjweh.3305)
- http://www.sjweh.fi/show_abstract.php?abstract_id=3305

Vitality at work

Older hospital workers given guided yoga, exercise and vitality coaching sessions for six months did not benefit in terms of improved vitality, performance or attendance at work, according to this randomised controlled trial of 730 workers, aged 45 or over, from two teaching hospitals in Amsterdam. Workers in the intervention group took part in a six-month ‘vitality exercise programme’, comprising weekly guided yoga and weekly guided exercise. They were also given free fruit, three individual goal-setting sessions with a ‘vitality coach’, and were asked to carry out vigorous physical activity for at least 45 minutes once a week. Both control and intervention workers received written information about healthy diet,

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exercise and relaxation. Attendance rates for the yoga and exercise sessions were 52% and 45% respectively. There were no significant differences between the intervention and control groups at six- or 12-month follow-up for general vitality, work-related vitality, work engagement, productivity or sick leave. General and work-related vitality was significantly higher among workers with better compliance to the yoga programme.

- Scandinavian Journal of Work, Environment & Health 2012; online first: doi: 10.5271/sjweh.3311
- http://www.sjweh.fi/show_abstract.php?abstract_id=3311