

EDITORIAL

Covid 19 Individual Susceptibility: Health and Safety Management

As nations come out of lock down, the country's recovery depends on the reopening of the economy and employment; hence, occupational health and safety is vitally important.

In the emergency phase of Covid, key objectives for government were to save lives and to protect the National Health Service (NHS). One measure taken was strict isolation for those considered susceptible to severe illness. The very general initial definitions for this group posed some threat of reducing NHS manpower resource at the time of greatest potential need. It was quickly realized that there was the potential for more detailed risk assessment allowing some healthcare workers to continue to carry out vital, if modified, roles, and what was needed was a single, consistent, workforce endorsed and government promulgated process. It is to the Scottish Government's credit that such a process was issued for NHS Scotland [1] before the end of March.

After achieving control and initial protection, emergency planning typically moves to a longer period, where normal rules and regulations apply, but control is still required. For Covid, infection rates have reduced, and there may be vaccines and treatments to come, but planning for this new norm must be based on its potential to be a long-term requirement. There remains the risk of further emergency phases, and contingency plans are still required. In addition, with the virus still present, employment including health and social care must reopen their full services, recognizing that 'their customers' may have the virus and be capable of passing it to others, including employees.

In recent times we have seen guides promulgated [2,3], proposing how the occupational health and safety aspects could be conducted. We know the statutory requirements to 'assess the risk to your employee's health and safety whilst they are at work' [4], and much of this guidance is traditional consideration of risk assessment and hierarchy of controls ensuring risk is as low as reasonably practicable. The Covid hazard is ubiquitous in and outside work, encompassing transport to and from work, and the fact that a worker's colleagues may pose as much hazard to them as the customers. Importantly, key controls such as social distancing and masks are being set by government with the probability of ongoing change, and considerations of reasonable practicability relate not to the survival of a business, but what needs to be done

for national survival. This observation does not appear clear from the guides.

Some guides also propose risk assessment based on the individual susceptibility of the worker. Some indicate that this falls within the statutory duty to assess risks to employees' health and safety. This has had at least some endorsement from the Health and Safety Executive (HSE), who stress a legal duty to protect workers from harm, considering workers who are 'particularly vulnerable' [5]. Susceptibility is not mentioned specifically in legislation, but it could be covered. The mantra is 'the law is the law', though we know it is interpretation and legal precedent that are important. There is some common law precedent to consider if there is 'strong potential that the harm would be particularly great' but in health and safety criminal law it appears less clear. There is evidence of individual sensitivity in almost all areas of occupational disease from Noise-Induced Hearing Loss to occupational cancers [6], though employers do not seem to have been prosecuted for not considering it, and regulators have not included it in UK statutory instruments dealing with such diseases. In terms of vulnerability, we do have different manual handling guidelines in terms of gender, but this is different. If we agree there is a statutory duty, then we need to admit it is something we have done very little of over the last 50 years. It is also something very different from the emergency phase risk assessment action taken to protect the NHS in Scotland.

Ionizing Radiation protection is one area of health and safety regulation that has been actively looking at susceptibility in recent years. In parallel the International Commission for Radiological Protection (ICRP) has placed increasing emphasis on the ethical aspects of regulation [7]. Ethical considerations have therefore been part of these susceptibility considerations. Science issues include size and strength of the effect, thresholds and numbers in susceptible groups, dose-response and considerations of synergy with lifestyle factors. It was recognized that susceptibility to occupational disease is widespread, with the need to establish principles that apply generally, and not just to radiation-induced cancer, though there has been little outside response to these suggestions. In terms of ethics there is the identification that the issue raises questions about major fundamental principles such as well-being, justice, fairness, as well as

dignity and autonomy, but more importantly that the ethical response requires dialogue and consensus in relation to a wide range of important stakeholders [6,8]. It is important to emphasize that the issue is not just the recognition of increased risk, but brings that forward into workplace regulation or control in terms of actual changes in dose limits, or even denying employment.

Looking at Covid susceptibility, the UK's Faculty of Occupational Medicine (FOM) has recently stated that the evidence base is not set and is evolving [9]. In relation to the equality agenda, many of the lead characteristics are considered relevant, ranging through age, gender, disability (underlying health conditions) and ethnicity, with real evidence that social inequality itself is a risk. Could we ever consider placing restrictions on an individual's employment based on their social class? There has been little coverage in the media, except in relation to Black, Asian and Minority Ethnic (BAME) considerations, with calls both for risk assessment and also reporting if it is not done. There is little evidence of public or stakeholder discussion, again with the possible exception of Public Health England's report on BAME [10]. What little debate there has been has focused almost completely on numeric risk, rather than the controls that could be considered to mitigate risk for those in the higher categories.

Return to work is vital to national recovery, and also to real people. The issue of worker Covid susceptibility needs to be addressed. Just as the NHS Scotland emergency process required to be consistent, worker endorsed and Government promulgated, so I would suggest must any consideration of susceptibility in a national health and safety management system.

For work that does not require close personal contact; while it may be nuanced in terms of the health and safety risk assessment model, what is required is for employers to comply absolutely with government advice, and amend their workplaces until they do. There is arguably no requirement to do more, and reduce risk further, since the government is fully aware of the potential benefits of say increasing social distancing, but has set the figure where it is in terms of the needs of the Nation. No susceptibility considerations appear relevant.

For many employers, some, if not all, of their operation requires closer contact than government limits; examples include health and social care, hairdressers and hospitality. Here the first task is to ask, do we need to do this? A lot has happened in the last 3 months, and many tasks which needed face-to-face contact have changed, and are now part of the new norm. Whether remaining roles are required at all, may well be an ethical as well as financial decision for Government. In these roles the risk reduction measures are limited, consisting of reducing the risk of infection in the customer, by pre-contact isolation and or testing; increasing the levels of hygiene in terms of washing, cleaning, etc.; reducing contact by time or screening, and finally personal protective equipment (PPE), for the workers and customers in relation to worker

protection. The protection factors for these measures are becoming clearer. There may be a role to consider susceptibility here. We need to understand the risk science, and have the ethical discussions with stakeholders in those categories. We need to think these changes may last for a long time into the future, and have major changes in our considerations of inequality. This leads to the need for a determined effort with maximum public and stakeholder involvement leading to some form of national policy or even a statutory instrument; The Covid at Work Regulations. Covid is of course important enough on its own to justify this effort, but the outcome would also set an important precedent for the consideration of susceptibility in relation to other occupational conditions. Is there a role for occupational physicians in taking this forward? I hope so; our participation could be justified by the fact that as a group we probably have more experience than any other in discussing occupational disease and illness with real people, and also by the fact that we have a clear history of ethical practice in this difficult field.

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References

1. *Endorsed Guidance for NHS Scotland Staff and Managers on Coronavirus*, Scottish Government DL (2020). <https://www.staffgovernance.scot.nhs.uk/media/1701/guidance-for-health-and-social-care-and-emergency-serve-workers-with-underlying-health-conditions-30-march-2020.pdf> 30 March 2020. (21 July 2020, date last accessed).
2. *Covid Medical Risk Assessment*. Association of Local Authority Medical Advisors. <https://alama.org.uk/covid-19-medical-risk-assessment/> (21 July 2020, date last accessed).
3. *Covid-19 Return to Work Guide*. Society of Occupational Medicine. June 2020. https://www.som.org.uk/SOM_RTW_guide_health_professionals_COVID-19_FINAL.pdf (21 July 2020, date last accessed).
4. *Management of Health and Safety at Work Regulations 1999*. UK Statutory Instrument 1999 No. 3242.
5. Health and Safety Executive. *Working Safely During the Coronavirus (Covid19) Outbreak*. <https://www.hse.gov.uk/coronavirus/working-safely/index.htm> (21 July 2020, date last accessed).
6. Kalman C. Individual sensitivity to occupational hazards. *Occup Med (Lond)* 2015;**65**:2–3.
7. ICRP. ICRP Publication 138: ethical foundations of the system radiological protection. *Ann ICRP* 2018;**47**.
8. Kalman C, Oughton D. Ethical considerations related to radio-sensitivity and radio-susceptibility. *Int J Rad Biol* 2019;**96**:340–343.
9. *FOM COVID-19 Update*. Faculty of Occupational Medicine (FOM) Academic Dean. 9 June 2020.
10. *Understanding the Impact of Covid-19 on BAME Groups*. Public Health England Publications GW-1307. June 2020.