



The Welsh Government acknowledges COVID-19 is spread by airborne transmission, close contact via droplets and via surfaces. Airborne transmission is a very significant way that the virus circulates.<sup>12</sup> There is evidence to suggest the spread of COVID-19 is higher in areas of poor ventilation.

There is a need to adapt and change our internal healthcare environments to reduce the impact of COVID-19 and other airborne diseases. The Welsh Government have put in place systems for education settings to improve ventilation and monitor air quality<sup>3</sup>. The Welsh Government now needs to commit to doing this for health settings.

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This document will focus on ventilation within the NHS estate. However we recognise ventilation in social care settings is equally as important and needs investment and action.

Ventilation is the process of replacing stale air with fresh air. This can be done naturally, by opening a window, or mechanically, through a ventilation system using fans and ducts.

Ventilation is used in health and care settings to provide a safe and comfortable environment for patients. More specialised ventilation is provided to help reduce infection risks via air in areas such as operating departments, critical care facilities, isolation rooms and primary patient treatment areas.<sup>4</sup>

Healthcare buildings are continuously occupied by patients and staff, intensively used and because of the specialised nature of the facilities it may be extremely difficult to provide the service elsewhere.

Ventilation is important in controlling the spread of airborne diseases, such as COVID-19. As a Group 3 biological hazard, SARS-CoV-2 (the virus that causes COVID-19) NHS employers are accountable under health and safety law, specifically the Control of Substances hazardous to health (COSHH) to assess and manage the risk of exposure to healthcare staff. The RCN has developed a Risk Assessment toolkit to support employers and staff manage the risk of COVID-19 in the workplace.<sup>5</sup>

As an airborne pathogen, the risk of infection also exists for patients, which when acquired as a direct result of care is classified as a healthcare associated infection. The importance of ventilation as one aspect of managing airborne infection risk has been recognised by the Welsh Government

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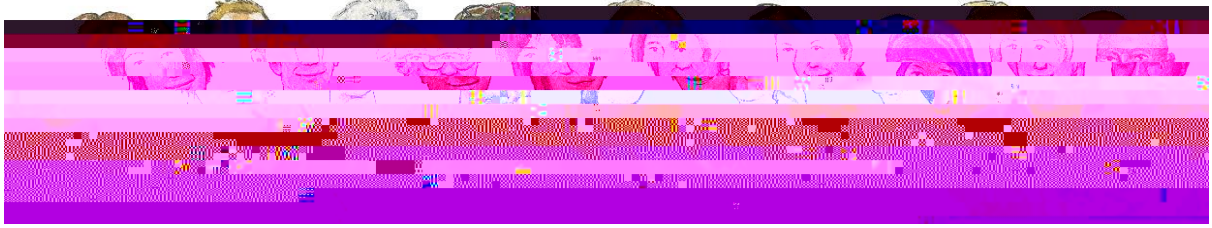
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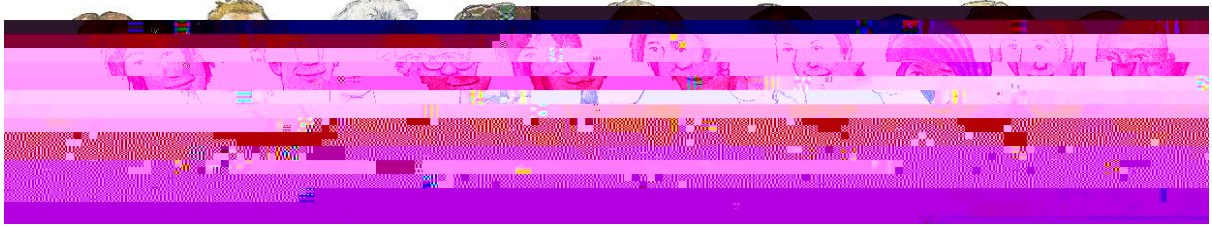
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Many NHS buildings have narrow hallways, small rooms and windows that cannot be opened, this eliminates the possibility of natural ventilation. The NHS is therefore reliant on mechanical ventilation that, if present, may not have been updated in a number of years.



Within the guidance regarding the use of CO2 monitors in education settings it explains  
eRe  $\text{Z}^3$



The Welsh Government must ensure national leadership on ventilation and support health boards by providing funding for CO2 monitors as an initial step. Following this, and the gathering of data, the Welsh Government must set out a long term plan (j-160(pla)4(n)-1