

# Wi-Fi radiation – health risk unproven

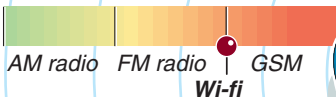
UK health officials have called for an inquiry into the use of wireless computer networks in schools after it was revealed that wi-fi radiation levels in the classroom could exceed those of a mobile phone mast

## WI-FI NETWORK

Wi-fi or WLAN networks require a wireless router to transmit data from internet to computer and vice versa

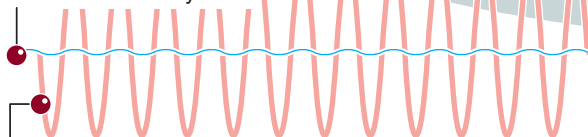
**Wavelength:** Wi-fi typically operates at 2.4 GHz frequency – in microwave or Radio Frequency Radiation (RFR) range

10km 100m 0.1m 1mm



## Signal strength:

Wi-fi: Low intensity RFR



Microwave oven: Similar wavelength but 100,000 times stronger than wi-fi

## Specific Absorption Rate

SAR safety standards based on heating effect of radiation



Permitted SAR of 2W/kg of body mass

Mobile phone – typically around 1W/kg with heating effect of less than 0.25°C

Wi-fi – typical 0.1W/kg but when computer is in close proximity, e.g. on lap, could be over 2W/kg

