

**ABSTRACT NO.:** 576

**TITLE:** The effects of Non Ionizing Radiation from Cell Towers and the Doppler Radar Site in the Central Range.

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Concern has been on many occasions, raised about possible health effects from exposure to electromagnetic radiation in the radiofrequency range. The effect of Non Ionizing Radiation (NIR) emitted from cell towers has brought about some major concerns from the general public as the installation of these cell towers near schools and homes have made individuals believe that they possess many health hazards such as skin cancers, brain tumours and migraines. This research done on the non ionization radiation from cell towers and the Doppler radar from the central range examined the electromagnetic radiation in the radiofrequency range and the possible effects on people. The equipment used was a HI-4460 hand held graphical reader and the HI-4433 series Broadband Isotropic Field Probe. The main focus was placed on three sites: cell towers located at Mt. Hope, Siparia village and Tableland. The data collected revealed that the amount of radiation being emitted from these cell towers was greater at a certain distance away as compared to directly below the particular cell tower. This distance was approximately 300-500 meters away. Previous studies and other literature were also examined to show any similarities and any possible differences. They were also examined to show any possible long term effects as well as the consequences. The possible outcomes could have been either positive, negative, or having no effect at all. All these possibilities were studied and compared to the literature. The experiments that were reviewed were previous tests done on people who were living near to the cell towers over a period of 7-10 years. Many of the studies showed that cancer, leukaemia, stress level, and even sleeping disorders were found. However, these findings were not universal since some studies stated that they did not find any side effects.

Also, the readings that were obtained were compared to international standards and were used to calculate the power density and the specific absorption rate.