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16. Abstract Objective: To evaluate whether the National Death Index (NDI) can identify deaths among airmen who did not renew FAA medical certification in 2021 and whether NDI data provide insights relevant to aeromedical risk management. Methods: A cohort of 56,285 non-renewing airmen was screened against the NDI using identifiers (name, date of birth, Social Security Number), though match reliability was limited by widespread use of pseudo-SSNs. Confirmed matches (NDI class II or higher) were analyzed for cause of death, and FAA medical records were reviewed for prior documentation of heart disease or cancer. Results: Only 367 airmen (0.66%) matched to NDI records, a rate below the 2021 U.S. mortality rate (0.88%). Leading causes of death were external factors (42.6%), cancer (18.5%), and cardiovascular disease (17.2%). Among matched cases, 7.5% of cancer deaths and 31.7% of cardiovascular deaths had corresponding FAA documentation. Discussion: Although linkage was limited, NDI data revealed evidence of underreporting of major conditions. Improved identifier accuracy and integration with external data sources may enhance long-term aeromedical surveillance and safety risk management.		
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