There have long been concerns about the safety of very low low-density lipoprotein cholesterol (LDL-C), but these concerns were related to a therapeutic situation that was largely theoretical. Now, with the advent of PCSK9 inhibitors, the situation will be common. The pleiotropic effects of long-term low LDL-C are unknown and will take years to discover through clinical trials. We leveraged de-identified electronic health records (EHRs) at Vanderbilt University Medical Center to compare the risk of (1) T2DM and (2) sepsis in a cross-sectional study among individuals with low and normal LDL-C levels.