Background Improvements in health and safety are required to ensure injury rates in Australian agriculture are comparable to other sectors like mining. Identifying key health and safety drivers in the best performing commodity sectors has implications for other areas of agriculture.

Aim This study aimed to measure commodity sector performance against existing benchmarks and to define variations.

Methods Data from 683 farming enterprises were drawn from a nationally stratified random sample representing seven commodity sectors. A benchmark survey was used covering existing health and safety systems, plus controls of known hazards.

Results There are low levels of implementation for farm health and safety plans, induction for new workers and contractors. Improvements to control major safety hazards are required for farm machinery and implements, farm vehicles, reducing exposure of children to hazards and the use of helmets when riding quad bikes, motorbikes and horses. Considerable variations between sectors exist, with horticulture, cotton and dairy being the best performers. These sectors had embedded health and safety into other quality assurance requirements around food safety and/or environmental considerations.

Significance This study identifies major variations in compliance by commodity sectors in Australia. The major drivers for improvements were outside the typical health and safety domain. Health and safety improvements can best be attained when linked to issues around production and profitability.