



Good Agricultural Practices (GAPs) Fact Sheet



BC berries are grown, harvested and handled under a wide range of conditions, using various agricultural inputs and technologies. BC-grown berries have never been known to cause food borne

illness. However, food borne illness has been linked to berries in other parts of the world^{1, 2}. Growers should be using GAPs as a tool to reduce the risk of physical, chemical, or microbial contamination of berries during growing, harvesting and handling. GAPs help growers take steps to protect consumers, families, businesses and their livelihoods.



What are GAPs?

GAPs are practical steps that can be implemented on farms to reduce the risk of contaminating berries. There are 5 major areas of contamination risk that berry producers should be aware of:

- 1) adjacent land use
- 2) pesticide application
- 3) manure application
- 4) water quality
- 5) worker hygiene and picking practices.

Why follow GAPs?

GAPs help growers minimize the probability of an outbreak associated with berries. Other benefits of adopting GAPs include

- meeting the demand of buyers requiring third party food safety audits as a condition of purchase
- protecting the grower from drops in sales, damage to reputation, and financial loss in case of an outbreak
- broader market access and a competitive edge when competing in an oversupplied market



All growers are affected by general loss during an outbreak. However, it has been proven, in cases of outbreak linked to other fresh produce, that growers with an implemented food safety program had higher volumes of sales. Similarly,

it was shown that growers not compliant with GAPs had sales decline to about half the normal volume and demand for other products grown by the producer also decreased by about 30%.³

Worker training is an important element of GAPs. Workers have a very important role in keeping food safe. Growers should have an ongoing worker-training program covering personal hygiene, good picking practices, and the safe use of equipment and chemicals, where applicable.



Record keeping is also a key element of GAPs. Written records include documentation of training, water tests, manure use, pesticide & fertilizer application, and harvest dates. In a crisis situation, having detailed and complete records can help growers prove that appropriate action and due diligence occurred during berry production.

References:

¹Food Safety in Food Security and Food Trade. Case Study: Guatemalan Raspberries and *Cyclospora* http://www.ifpri.org/sites/default/files/publications/focus10_07.pdf

²An outbreak of hepatitis A associated with consumption of raw blueberries http://www.nzfsa.govt.nz/science/research-projects/produce-safety/Hep_A_in_raw_blueberries_2002.pdf



Good Agricultural Practices Network for Education and Training (Cornell) <http://www.gaps.cornell.edu>

Food Safety Begins on the farm http://www.sfc.ucdavis.edu/pubs/articles/foodsafety_beginsonthefarm.pdf

International Trade and Food Safety: Economic Theory and Case Studies <http://www.ers.usda.gov/publications/aer828/aer828g.pdf>

³The Economics of Food Safety: The Case of Green Onions and Hepatitis A Outbreaks http://www.ers.usda.gov/publications/vgs/nov04/VGS_30501/VGS30501.pdf

Outbreak Linked to Spinach Forces Reassessment of Food Safety Practices <http://www.ers.usda.gov/AmberWaves/June07/Features/Spinach.htm>

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