

EXAMPLE SHORT EFFECTS ESSAY

Prompt: Write an essay about the effects of pesticides that is based on your research. Be sure to include at least five paragraphs. Also include in-text citations and a reference list; use APA style.

TITLE OF PAPER: Silent Killer

Silent Killer

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Silent Killer

Warning: Pesticides are deadly, and not only for pests! Pesticides are chemicals that are used by farmers, home owners, and landscapers to kill insect pests that harm plants in farmlands, backyards, golf courses, parks, and other public lands. Although they were originally thought to be helpful, the public became aware that pesticides are generalized killers when Rachel Carson published her book *Silent Spring* in 1962. The problem is that 98% of the pesticides used today reach destinations for which they were not intended (Wikipedia, 2014), and they are deadly to more than the pests they were designed to kill. Wind blows pesticides away from the targeted land; rain washes pesticides into the soil and into our waterways; and people spill pesticides which create puddles that soak into the ground. As a result, pesticides create harmful effects on the environment which in turn affect plants, humans, and many other creatures.

Importantly, the environment is severely affected by pesticides in numerous ways. Because they can be carried by the wind, pesticides become part of the air around us. They are a form of air pollution that all creatures breathe. They combine with other chemicals in the air to form a type of ozone, which becomes part of the ozone layer that causes global warming. Also, because they can be washed into our waterways, pesticides have contaminated streams, rivers, and reservoirs. When waterways were tested, 100% were found to be contaminated with pesticides; when wells were tested, 90% were found to be contaminated with pesticides (Defenders of Wildlife, 2014). Additionally, because pesticides are washed or spilled into the soil, they can create poor soil quality. High quality soil is one of the main ingredients that farmers need to grow their crops.

As a result of these environmental impacts, plants are severely affected by pesticides in relation to root growth, plant size, and color. Because the quality of soil has been decreased, the

development of hairs on the roots of plants is slowed. This means that plants get less moisture and nutrients from the soil for their growth. As a result, they do not grow as tall or as strong. Many plants do not grow at all. Additionally, they might turn yellow instead of staying green. At a minimum, they absorb the pesticides into their leaves and fruit.

In consequence, humans are affected negatively by pesticides in several respects. By eating fruits and vegetables that have been sprayed with pesticides and by drinking contaminated water, the chemicals enter peoples' bodies. Sometimes this causes the poor development of fetuses in their mothers' bodies. Sometimes this causes birth defects. Moreover, the build up of pesticide chemicals in human bodies can cause blood and nerve disorders. Additionally, these chemicals can cause tumors and cancers. Some of these cancers can be deadly. By breathing in the polluted air, humans can experience all sorts of breathing problems like asthma and other lung disorders.

Not surprisingly, other creatures, like bees, birds, fish, insects, deer, and other wild animals, are negatively affected by pesticides, too. For example, whole colonies of bees can be killed by pesticides. When this happens, crops are not pollinated, and they do not bear fruit. For another example, birds can be harmed when they eat pesticide pellets or insects that have been killed with pesticides. In consequence, the shells of their eggs are thin, fewer of their eggs hatch, and fewer of their chicks survive. Song birds can no longer sing, which affects their ability to attract mates. Bird behavior such as feeding their young is negatively affected which leads to their babies' starvation. For still another example, pesticides can directly kill all the fish in a stream. They can indirectly kill fish when they kill the plants in water. The decaying plants use up all the oxygen in the water, and then the fish cannot breathe. Pesticides can also kill the insects that fish eat. Other larger wild animals, like deer, are affected by pesticides, too. When

they enter sprayed fields, the pesticides attach to their bodies and cause the same kinds of problems that pesticides cause in human bodies.

In conclusion, pesticides are creating harmful effects on the environment, which in turn cause problems for plants, humans, and other creatures. There are some ways to prevent these problems. Clearly, if at all possible, pesticides should not be used. There are several alternatives to using pesticides. For instance, beneficial insects can be used to kill harmful insects, barriers and traps can be set up, crops can be rotated, and insects can be removed by hand. If pesticides must be used, there should be buffer zones of several acres created around areas where they are to be sprayed. Windbreaks of tall trees should be planted all around land where pesticides will be used. “No spray days” such as windy days and days where rain is expected should be honored. Additionally, each person needs to decide how to protect him or herself and loved ones. Possible options include eating organic foods (those grown without pesticides) and drinking purified water. Without such protections for humans, health problems are likely to occur.

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