

## Case Study 2:

### What would YOU do?

Read the following case study to see what was done incorrectly, and how changes can make the garden a safer place.

Javier woke up feeling very well and ready to work this Thursday. After getting ready, he went to work and ready to pick some fruits and vegetables from the field. As he arrived, Javier walked into the field in his sandals and started picking the produce. Javier left his harvesting bin on the ground because he didn't have a vehicle or bench to put it on. By the time he got to the middle of the field, Javier had to use the restroom very badly. He walked into the portable restroom available. There was not soap present, so he just decided to rub his hands on his shirt and go back to picking the fruits and vegetables. Earlier in the shift, Javier's boss informed him that pesticides were applied to the field prior to his arrival. Javier remembered that the chemical containers were on the other side of the field. He decided that he could leave them in the garden for the night and would pick them up tomorrow when he returns. As Javier was leaving the garden, he saw some rotten tomatoes on the ground by the other fruits and vegetables. He decided to leave them where they were so the nutrients from the tomatoes could benefit the soil. Once the produce got to post-harvest production, Javier put the refrigerated produce in the refrigerator. When it was time to continue production, he removed the most recently refrigerated produce items from storage to continue the processing steps. Javier did not take any records of temperatures, storage times, dates, or cleaning and sanitizing practices.

#### 1. What did Javier do wrong?

- Javier wore sandals in the field. Wearing sandals will increase the risk of a physical hazard to occur.
- He stored the harvesting bin on the ground, rather than on a bench or vehicle. These should not be stored on the ground because potentially physical, chemical, or microbial hazards can come in contact with them from the soil and contaminate the produce.
- He didn't wash his hands appropriately. ALWAYS wash hands with soap and water and lather for 15 seconds, and dry with a single use disposable towel.
- Javier left chemicals in the field overnight. Chemicals should not be left in the field or unsupervised at any time. These chemical containers could leak, resulting in a chemical hazard in the soil or on the produce itself.
- Javier left the rotting produce in the field. These fruits and vegetables should be removed from the garden and placed in a proper waste location or compost. The rotten produce will favor microbial growth and can potentially contaminate the soil with harmful or spoilage microorganisms.
- He removed the most fresh produce items first. Javier should follow the "First in, first out" protocol to maximize produce output and reduce waste.

---Javier didn't take any records. Records need to be taken to make sure produce is handled appropriately and safely.

## **2. What can YOU do to avoid these problems?**

--- Always wear closed-toed shoes when going to work in the garden. By wearing appropriate footwear, the chances for a physical hazard to occur are significantly reduced.

--- Bring a vehicle or bench to store harvesting bins on. The vehicle should have a covering over the harvest baskets to reduce the chance of bird feces or dirt and debris from entering.

--- Always follow the appropriate protocol when washing hands. Rinse hands with water, lather them for 15 seconds (making sure to wash the hard to reach areas), wash off residual soap, and dry hands with a disposable hand towel.

---Store chemicals in a location away from the produce. Make sure the chemicals are kept in a locked location where only certified personnel can access them to reduce chances of chemical hazards from occurring.

--- Properly remove rotting or decomposing produce from the field. Place these items in a designated waste area (a garbage or a compost for use at a later time).

--- Follow the "First in, first out" protocol to reduce waste with produce items.

---Always keep documentation. If you didn't record it, IT NEVER HAPPENED! Be as specific as possible when taking qualitative data. With quantitative data, it is very important to take dates, times, temperatures, pH values, etc. The more elaborate you are, the better the documentation will be.