

## Understanding Red-Eye in photos and how it can be prevented

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### Why are eyes red in photos?

Red-eye is a phenomenon that happens only when taking photos using a flash. When taking photos in day light or when in high ambient light scenarios peoples eyes look normal. When taking pictures in low ambient light scenarios using a flash the result many times is redness in the peoples eyes.

The reason for the color red is simple when flash light from the camera hits the eyes it penetrates and is reflected back from the retina. The color of the reflected light is red because the light is actually reflected from the red blood in the retina.

In some scenarios the red-eye is evident while in others it is mild or doesnt seem to appear at all. One of the main factors for that is the state of the pupils. If the pupils are dilated (for example the pupils dilate in darkness or when drinking alcohol) more light is reflected back from the retina and the eyes in the photo appear redder.

### Common way to reduce red-eye

The most commonly used method to reduce red-eye is activating the cameras built-in red-eye reduction feature. The red-eye reduction feature is very simple yet effective. When turned on the camera shoots a series of pre-flash strobes followed by one more strobe when actually taking the photo. The pre-flash strobes cause the pupils to reduce in size and by the time the photo is taken the pupils are small enough for the eye redness to substantially reduce.

The red-eye reduction feature does what it is supposed to [Real Estate Photography in Myrtle Beach](#) do: reduce the red-eye effect but almost never is it completely prevented. There are many limitations to this feature for example pupils reaction time to light can vary. In addition this feature can have a side-effect that results in photos having peoples eyes closed. The reason is that the pre-flash strobes blind the people and cause them to close their eyes.

### Other ways to prevent red-eye

Understanding what causes red-eye helps being more creative in preventing it. Following are some ways to prevent red-eye other than using the built-in camera red-eye reduction feature:

Increasing the light where photos are taken (for example by turning on the lights in a room before taking photos of people) causes peoples pupils to reduce in size and eye [real estate photographer in Myrtle Beach](#) redness to reduce.

Point the flash away from the eyes. Since red-eye is caused by flash light reflected from the retina the best way to prevent red-eye would be to eliminate such reflection as much as possible. In most cameras the angle between the flash and the lenses is narrow (this is especially true for built-in flash and pocket cameras) causing most of the flash to bounce back from the retina to the lenses. Increasing the angle (for example by using an external flash) reduces the reflected light. You can also use a bounce flash by having the flash light bounce off a bright surface (a white wall or a professional reflector) most of the direct reflection from the retina can be eliminated.

Red-eye can also be removed after photos were already taken by using photo processing software on your PC. Most digital cameras include a CD with PC software that embeds this feature. Although this method doesnt eliminate the red-eye from the source it can result in a practically red-eye free photo. Some software are better than others some are manual while others automatically identify the red-eyes and process that area to revert to normal eye colors.