



Know the risks



Floods:

The word flood comes from the old English word “flōd” that means “a flowing of water, river or sea”.

Although it can happen at any time, flooding is a cyclical hazard that typically occurs during the spring months (April to July) following heavy rain or when snow starts to melt, causing rivers to overflow their banks. This is known as "freshet".

Storm surges can also cause flooding in coastal communities. A storm surge is a rise in sea level that occurs during intense storms.

While most floods develop slowly, flash floods develop in just a few minutes and without any visible signs of rain. Flash floods are the most dangerous because they combine the destructive power of a flood with incredible speed and unpredictability.

Ice jams can also cause flooding. An ice jam is when chunks of ice in a frozen body of water are pushed together by heavy rains, essentially causing a dam. Water piles up behind the dam. Eventually the wall of ice breaks and fast-moving water rushes out.

Flooding can also be caused by infrastructure giving way, such as a dam or levee rupturing.

In 2013, southern and central Alberta experienced heavy rainfall that triggered catastrophic flooding along many rivers and tributaries. In total, 32 states of local emergency were declared, 28 emergency operations centres were activated, numerous communities were placed under evacuation order, five people were confirmed dead, more than 100,000 people were displaced, some 2,200 Canadian Forces troops were sent in to help and total damage estimates exceeded \$5 billion. While this is an extreme example, it clearly illustrates that flooding can have enormous social and economic impacts.

It's important that you never swim in or play around flood water – it could contain hazardous chemicals, debris and even live electrical wires. Just six inches of moving water can knock you down, while two feet of water can sweep away a vehicle.

WARNING SIGNS: In B.C., the River Forecast Centre monitors and analyzes gauges located throughout the province's river system. As conditions change and river levels rise, the centre may issue a high streamflow advisory, a flood watch or a flood warning.

For information on the difference between advisories, watches and warnings, visit the Definitions You Should Know page.

For information on flood preparedness, visit Know the Risks > Floods on PreparedBC.