

An Observable typically does not *throw* exceptions. Instead it notifies any observers that an unrecoverable error has occurred by terminating the Observable sequence with an `onError` notification.

There are some exceptions to this. For example, if the `onError()` call *itself* fails, the Observable will not attempt to notify the observer of this by again calling `onError` but will throw a `RuntimeException`, an `OnErrorFailedException`, or an `OnErrorNotImplementedException`.

## Techniques for recovering from `onError` notifications

So rather than *catch* exceptions, your observer or operator should more typically respond to `onError` notifications of exceptions. There are also a variety of Observable operators that you can use to react to or recover from `onError` notifications from Observables. For example, you might use an operator to:

1. swallow the error and switch over to a backup Observable to continue the sequence
2. swallow the error and emit a default item
3. swallow the error and immediately try to restart the failed Observable
4. swallow the error and try to restart the failed Observable after some back-off interval

You can use the operators described in [\[\[Error Handling Operators\]\]](#) to implement these strategies.

## RxJava-specific exceptions and what to do about them

### `CompositeException`

This indicates that more than one exception occurred. You can use the exception's `getExceptions()` method to retrieve the individual exceptions that make up the composite.

### `MissingBackpressureException`

This indicates that a Subscriber or operator attempted to apply reactive pull backpressure to an Observable that does not implement it. See [\[\[Backpressure\]\]](#) for work-arounds for Observables that do not implement reactive pull backpressure.

### `OnErrorFailedException`

This indicates that an Observable tried to call its observer's `onError()` method, but that method itself threw an exception.

### `OnErrorNotImplementedException`

This indicates that an Observable tried to call its observer's `onError()` method, but that no such method existed. You can eliminate this by either fixing the Observable so that it no longer reaches an error condition, by implementing an `onError` handler in the observer, or by intercepting the `onError` notification before it reaches the observer by using one of the operators described elsewhere on this page.

#### `OnErrorThrowable`

Observers pass throwables of this sort into their observers' `onError()` handlers. A `Throwable` of this variety contains more information about the error and about the Observable-specific state of the system at the time of the error than does a standard `Throwable`.