Bacterial cell dies and breaks down, releasing its contents

Another bacterial cell takes up plasmid or transposon

Transposons can come from the bacterial DNA or from a plasmid

Bacteria connect temporarily. DNA from transposons or plasmids can be passed from one bacterium to another

Transposons are incorporated into the bacterial DNA or into a plasmid (transposons usually don’t exist independently)

DNA can sometimes be transferred from one bacterium to another by viruses

Transposon

Small piece of DNA that can change its position within a genome, or move from one DNA molecule to another

Resistant bacterium

Non-resistant bacterium

Virus

Plasmid

Small piece of DNA that can change its position within a genome, or move from one DNA molecule to another

How antibiotic resistance spreads