

Solution

(1) Pupils should use Table 1 to identify whether or not they feel pancreatic cancer is a growing problem in Northern Ireland.

From the table they should see that, although the incidences for ‘males’, ‘females’ and ‘both’ don’t rise year on year, they are now bigger in 2013 than they were in 2004.

This suggests that pancreatic cancer is a growing problem.

The following provides possible discussion points for the pupils:

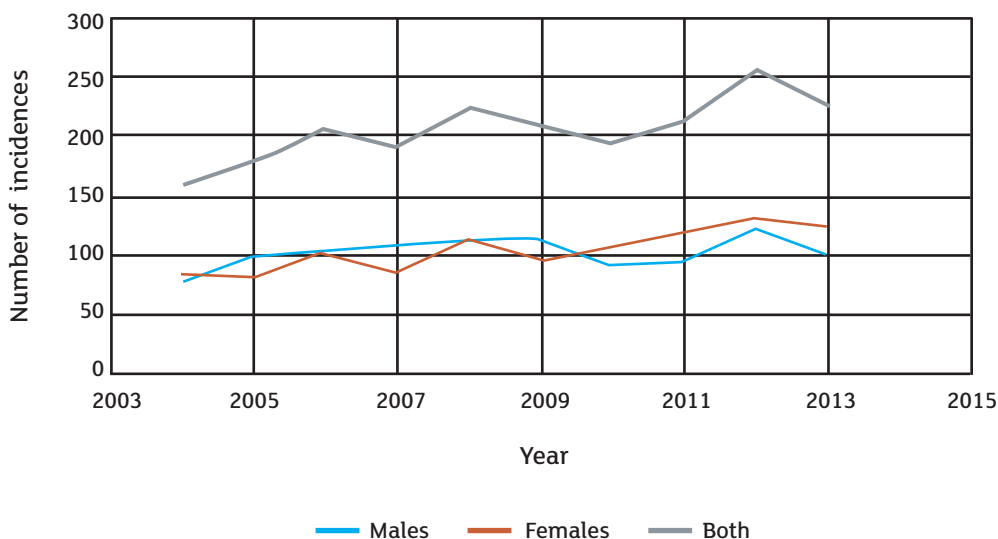
	2004	2013	More incidences in 2013 compared to 2004
Males	77	101	$101 - 77 = 24$
Females	83	126	$126 - 83 = 43$
Both	160	227	$227 - 160 = 67$

Table 1 suggests that pancreatic cancer is being diagnosed more frequently in females than it is in males. In 2013, there were 43 more female incidences and 24 more male incidences.

In 2004, there were only six more female incidences compared to men ($83 - 77$), but in 2013 there were 25 more female incidences compared to men ($126 - 101$). Since 2010, pancreatic cancer has been a greater problem for women.

Pupils may draw a line graph to present the incidence trends and use it for ‘males’, ‘females’ and ‘both’. If so:

Incidence Trends of Pancreatic Cancer



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Pancreatic Cancer (Continued)

(2) Pupils should use Table 2 to identify whether the Cool FM news statement is accurate or not.

In Table 2, 'males', 'females' and 'both' have a 5% or higher survival rate five years after being diagnosed with pancreatic cancer.

Using just Table 2, it would seem that the 4% stated on Cool FM is not correct.

However, the data in Table 2 does not go beyond 2008 – and the statement was made in 2016.

Furthermore, Table 2 does not show survival rates beyond five years since diagnosis, or provide any information beyond that for Northern Ireland.

Therefore, this statement may be true for more recent data and/or more years since diagnosis.

Finally, we do not have any data or information for other cancer rates to compare with.

Pupils should be able to recognise that they cannot confirm whether the statement is true or not based on the available information.

(3) Pupils should use Table 1 and 2 to identify how many men and women survived pancreatic cancer between 2004 and 2008, inclusive, less than a year after being diagnosed.

	2004	2005	2006	2007	2008	Total
Males	77	100	104	108	112	501
Females	83	81	102	85	112	463

	Total diagnosed from 2004 to 2008	Survival less than one year after diagnosis	Percentage of total from 2004 to 2008	Number that survived
Males	501	32.4%	$501 \times 32.4\% = 162.324$	162
Females	463	28.8%	$463 \times 28.8\% = 133.344$	133

