How statistics can be misleading – WS

Check the following words

	ensemble		taux		ainsi		légèrement
	se cacher		global		susceptible de		Susciter
	sens dessus dessous		tendance		accusé		Se faire avoir
	membre de la famille		se produire		condamné		Taille unique
	sur (proportion)		apparaître		l'un ou l'autre		exact
	trébucher		moyenne		condamner		trompeur
	réel		programme		le meilleur		prendre (une décision)

Main point: a potential danger
in some _____ of statistics, something can _____ the results _____
because something is _____

Example 1 : the hospitals
statistics for hospital A:
statistics for hospital B:
apparent conclusion:

Additional statistics: patients in poor health
hospital A:
hospital B:
conclusion:

Additional statistics: patients in good health
the better choice is :
apparent paradox:

What is **Simpson's paradox**: the same _____ can show opposite _____ depending on _____ because there is a _____ variable;
here: the _____

Example 2: smokers
surprising statistics: smokers seem to have a _____ over a _____ period
explanation: non-smokers are _____ on _____ => more _____ to die during the _____ period
conclusion: here, the lurking variable is _____

Example 3: death penalty cases in Florida
apparent situation : no racial _____ in _____ between white and black defendants
the lurking variable: the _____ of the victim
explanation: most murders occur between _____ and there are more death penalties when _____

Conclusion: what can be done?
There is no _____ solution
data can be grouped _____
sometimes _____ numbers can give more _____ results
categories can be _____ or arbitrary
we need to carefully _____ the _____ situations and look for _____ variables
the risk: data can be used to _____ others and promote specific _____