

= Leg before wicket =

Leg before wicket (lbw) is one of the ways in which a batsman can be dismissed in the sport of cricket . Following an appeal by the fielding side , the umpire may rule a batsman out lbw if the ball would have struck the wicket , but was instead intercepted by any part of the batsman 's body (except the hand holding the bat) . The umpire 's decision will depend on a number of criteria , including where the ball pitched , whether the ball hit in line with the wickets , and whether the batsman was attempting to hit the ball .

Leg before wicket first appeared in the laws of cricket in 1774 , as batsmen began to use their pads to prevent the ball hitting their wicket . Over several years , refinements were made to clarify where the ball should pitch and to remove the element of interpreting the batsman 's intentions . The 1839 version of the law used a wording that remained in place for nearly 100 years . However , from the latter part of the 19th century , batsmen became increasingly expert at " pad @-@ play " to reduce the risk of their dismissal . Following a number of failed proposals for reform , in 1935 the law was expanded , such that batsmen could be dismissed lbw even if the ball pitched outside the line of off stump . Critics felt this change made the game unattractive as it encouraged negative tactics at the expense of leg spin bowling .

After considerable debate and various experiments , the law was changed again in 1972 . In an attempt to reduce pad @-@ play the new version , which is used to this day , allowed batsmen to be out lbw in some circumstances if they did not attempt to hit the ball with their bat . Since the 1990s , the availability of television replays and , later , ball @-@ tracking technology to assist umpires has increased the percentage of lbws in major matches . However , the accuracy of the technology and the consequences of its use remain controversial .

In his 1995 survey of cricket laws , Gerald Brodribb states : " No dismissal has produced so much argument as lbw ; it has caused trouble from its earliest days " . Owing to its complexity , the law is widely misunderstood among the general public and has proven controversial among spectators , administrators and commentators ; lbw decisions have sometimes caused crowd trouble . Since the law 's introduction , the proportion of lbw dismissals has risen steadily through the years . Statistics reveal that the probability of a batsman being dismissed lbw in a Test match varies depending on where the match is played and which teams are playing .

= = Definition = =

The definition of leg before wicket (lbw) is currently Law 36 in the Laws of Cricket , written by the Marylebone Cricket Club (MCC) . Before a batsman can be dismissed lbw , the fielding team must appeal to the umpire . For the batsman to be adjudged lbw , the ball , if it bounces , must pitch in line with the wickets , or on the off side of the stumps . Then the ball must strike part of the batsman 's body , without first touching his bat , in line with the wickets and have been going on to hit the stumps . The batsman may also be out lbw if , having made no attempt to hit the ball with his bat , he is struck outside the line of off stump by a ball that would have hit the wickets . The umpire must assume that the ball would have continued on the same trajectory after striking the batsman , even if it would have bounced before hitting the stumps . However , if the bowler delivers a no ball ? an illegal delivery ? the batsman cannot be lbw under any circumstances .

A batsman can be out lbw even if the ball did not hit his leg : for example , a batsman struck on the head could be lbw . However , he cannot be lbw if the ball pitches on the leg side of the stumps (" outside leg stump ") , even if the ball would have otherwise hit the wickets . Similarly , a batsman who has attempted to hit the ball with his bat cannot be lbw if the ball strikes him outside the line of off stump . However , some shots in cricket , such as the switch hit or reverse sweep , involve the batsman switching between a right- and left @-@ handed stance ; this affects the location of the off and leg side , which are determined by the stance . The law explicitly states that the off side is determined by the batsman 's position when the bowler commences his run @-@ up .

According to MCC guidelines for umpires , factors to consider when giving an lbw decision include the angle at which the ball was travelling and whether the ball was swinging through the air . He

must also account for the height of the ball at impact and how far from the wicket the batsman was standing ; from this information he must determine if the ball would have passed over the stumps or struck them . The MCC guidance states that it is easier to make a decision when the ball strikes the batsman without pitching , but that the difficulty increases when the ball has bounced and more so when there is a shorter time between the ball pitching and striking the batsman .

= = Development of the law = =

= = = Origins = = =

The earliest known written version of the Laws of Cricket , dating from 1744 , does not include an lbw rule . At the time , batsmen in English cricket used curved bats , which made it unlikely that they would be able to stand directly in front of the wickets . However , a clause in the 1744 laws gave umpires the power to take action if the batsman was " standing unfair to strike " . Cricket bats were modified to become straighter over the following years , allowing batsmen to stand closer to the wickets . Subsequently , some players deliberately began to obstruct the ball from hitting the wickets . Such tactics were criticised by writers and a revision of the laws in 1774 ruled that the batsman was out if he deliberately stopped the ball from hitting the wicket with his leg . However , critics noted that the umpires were left the difficult task of interpreting the intentions of batsmen . The 1788 version of the laws no longer required the umpires to take account of the batsman 's intent ; now a batsman was lbw if he stopped a ball that " pitch [ed] straight " . Further clarification of the law came in 1823 , when a condition was added that " the ball must be delivered in a straight line to the wicket " . The ambiguity of the wording was highlighted when two prominent umpires disagreed over whether the ball had to travel in a straight line from the bowler to the wicket , or between the wickets at either end of the pitch . In 1839 the MCC , by then responsible for drafting the Laws of Cricket , endorsed the latter interpretation and ruled the batsman out lbw if the ball pitched in between the wickets and would have hit the stumps .

= = = Controversy and attempted reform = = =

In essence , the lbw law remained the same between 1839 and 1937 , despite several campaigns to have it changed . An 1863 proposal to allow a batsman to be lbw if the ball hit his body at any point between the wickets , regardless of where the ball pitched or whether it would hit the wicket at all , came to nothing . There were few complaints until the proportion of lbw dismissals in county cricket began to increase during the 1880s . Until then , batsmen used their pads only to protect their legs ; their use for any other purposes was considered unsporting , and some amateur cricketers did not wear them at all . As cricket became more organised and competitive , some batsmen began to use their pads as a second line of defence : they lined them up with the ball so that if they missed with the bat , the ball struck the pad instead of the wicket . Some players took this further ; if the delivery was not an easy one from which to score runs , they attempted no shot and allowed the ball to bounce safely off their pads . Arthur Shrewsbury was the first prominent player to use such methods , and others followed . Criticism of this practice was heightened by the increased quality and reliability of cricket pitches , which made batting easier , led to higher scores and created a perceived imbalance in the game .

Several proposals were made to prevent pad @-@ play . At a meeting of representatives of the main county cricket clubs in 1888 , one representative expressed the opinion that a " batsman who defended his wicket with his body instead of with his bat should be punished " . The representatives supported a motion to alter the law to state that the batsman would be out if he stopped a ball that would have hit the wicket ; in contrast to the existing wording , this took no account of where the ball pitched relative to the wickets . Further proposals included one in which the intent of the batsman was taken into account , but no laws were changed and the MCC merely issued a condemnation of the practice of using pads for defence . This reduced pad @-@ play for a short time , but when it

increased again , a second pronouncement by the MCC had little effect .

Further discussion on altering the law took place in 1899 , when several prominent cricketers supported an amendment similar to the 1888 proposal : the batsman would be out if the ball would have hit the wicket , where it pitched was irrelevant . At a Special General Meeting of the MCC in 1902 , Alfred Lyttelton formally proposed this amendment ; the motion was supported by 259 votes to 188 , but failed to secure the two @-@ thirds majority required to change the laws . A. G. Steel was the principal opponent of the change , as he believed it would make the task of the umpires too difficult , but he later regretted his stance . Lyttelton 's brother , Robert , supported the alteration and campaigned for the rest of his life to have the lbw law altered . As evidence that pad @-@ play was increasing and needed to be curtailed , he cited the growing number of wickets which were falling lbw : the proportion rose from 2 % of dismissals in 1870 to 6 % in 1890 , and 12 % in 1923 . In 1902 , the proposed new law was tried in the Minor Counties Championship , but deemed a failure . An increase in the size of the stumps was one of several other rejected proposals at this time to reduce the dominance of batsmen over bowlers .

= = = Alteration to the law = = =

Between 1900 and the 1930s , the number of runs scored by batsmen , and the proportion of lbw dismissals , continued to rise . Bowlers grew increasingly frustrated with pad @-@ play and the extent to which batsmen refused to play shots at bowling directed outside the off stump , simply allowing it to pass by . The English fast bowler Harold Larwood responded by targeting leg stump , frequently hitting the batsman with the ball in the process . This developed into the controversial Bodyline tactics he used in Australia in 1932 ? 33 . Some batsmen began to go further and preferred to kick away balls pitched outside off stump ? reaching out to kick the ball instead of allowing it to hit their pads ? if they presented any threat , knowing that they could not be dismissed lbw . The authorities believed these developments represented poor entertainment value . At the height of the Bodyline controversy in 1933 , Donald Bradman , the leading Australian batsman and primary target of the English bowlers , wrote to the MCC recommending an alteration of the lbw law to create more exciting games .

To address the problem , and redress the balance for bowlers , the MCC made some alterations to the laws . The size of the ball was reduced in 1927 , and that of the stumps increased in 1931 , but the changes had little effect . Between 1929 and 1933 , county authorities conducted a trial in which a batsman could be lbw if he had hit the ball onto his pads . Then , in 1935 , an experimental law was introduced in which the batsman could be dismissed lbw even if the ball pitched outside the line of off stump ? in other words , a ball that turned or swung into the batsman but did not pitch in line with the wickets . However , the ball was still required to strike the batsman in line with the wickets . The umpire signalled to the scorers when he declared a batsman out under the new rule , and any such dismissal was designated " lbw (n) " on the scorecard .

Several leading batsmen opposed the new law , including the professional Herbert Sutcliffe , known as an exponent of pad @-@ play , and amateurs Errol Holmes and Bob Wyatt . Wisden Cricketers ' Almanack noted that these three improved their batting records during the 1935 season , but batsmen generally were less successful . There were also fewer drawn matches . There was an increase in the number of lbws ? out of 1 @,@ 560 lbw dismissals in first @-@ class matches in 1935 , 483 were given under the amended law . Wisden judged the experiment a success and several of its opponents changed their mind by the end of the season ; batsmen soon became accustomed to the alteration . Although Australian authorities were less convinced , and did not immediately introduce the revision into domestic first @-@ class cricket , in 1937 the new rule became part of the Laws of Cricket .

According to Gerald Brodribb , in his survey and history of the Laws , the change produced more " enterprising " , exciting cricket but any alteration in outlook was halted by the Second World War . When the sport resumed in 1946 , batsmen were out of practice and the amended lbw law played into the hands of off spin and inswing bowlers , who began to dominate county cricket . The cricket historian Derek Birley notes that many of these bowlers imitated the methods of Alec Bedser , an

inswing bowler who was successful immediately after the war , but that the resulting cricket was unexciting to watch . The revised lbw law , and other alterations in the game in favour of the bowler , further encouraged such bowling . The new law continued to provoke debate among writers and cricketers ; many former players claimed that the alteration had caused a deterioration in batting and reduced the number of shots played on the off side . A 1963 report in The Times blamed the law for reducing the variety of bowling styles : " the change has led to a steady increase in the amount of seam and off @-@ spin bowling . Whereas in the early thirties every county had a leg spinner and an orthodox left arm spinner , leg spinners , at any rate , are now few and far between . Walk on to any of the first @-@ class grounds at any time tomorrow and the chances are that you will see the wicketkeeper standing back and a medium pace bowler in action ... there is little doubt that the game , as a spectacle , is less attractive than it was . " Several critics , including Bob Wyatt , maintained that the lbw law should be returned to its pre @-@ 1935 wording ; he campaigned to do so until his death in 1995 . On the other hand , Bradman , in the 1950s , proposed extending the law so that batsmen could be lbw even if they were struck outside the line of off stump . An MCC study of the state of cricket , carried out in 1956 and 1957 , examined the prevalent and unpopular tactic involving off @-@ spin and inswing bowlers aiming at leg stump with fielders concentrated on the leg side . Rather than alter the lbw law to combat the problem , the MCC reduced the number of fielders allowed on the leg side .

= = = Playing no stroke = = =

In the 1950s and 1960s , the amount of pad @-@ play increased , owing to more difficult and unpredictable pitches that made batting much harder . Critics continued to regard this tactic as " negative and unfair " . In an effort to discourage pad @-@ play and encourage leg spin bowling , a new variant of the lbw law was introduced , initially in Australia and the West Indies in the 1969 ? 70 season , then in England for 1970 . Under the re @-@ worded law , a batsman would be lbw if a ball destined to hit the stumps pitched in line with the wickets or " outside a batsman 's off stump and in the opinion of the umpire he made no genuine attempt to play the ball with his bat . " This revision omitted the requirement that the impact should be in line with the wickets , but meant that any batsman playing a shot could not be out if the ball pitched outside off stump , in contrast to the 1935 law . The editor of Wisden believed the change encouraged batsmen to take more risks , and had produced more attractive cricket . However , the proportion of wickets falling lbw sharply declined , and concerns were expressed in Australia . The Australian authorities proposed a reversion to the previous law . A batsman could once more be out to a ball that pitched outside off stump , but a provision was added that " if no stroke is offered to a ball pitching outside the off @-@ stump which in the opinion of the umpire would hit the stumps , but hits the batsman on any part of his person other than the hand , then the batsman is out , even if that part of the person hit is not in line between wicket and wicket . " The difference to the 1935 rule was that the batsman could now be out even if the ball struck outside the line of off @-@ stump . This wording was adopted throughout the world , although it was not yet part of the official Laws , from 1972 and the percentage of lbws sharply increased to beyond the levels preceding the 1970 change . The MCC added the revised wording to the Laws of Cricket in 1980 ; this version of the lbw law is still used as of 2013 .

= = = Effects of technology = = =

Since 1993 , the proportion of lbws in each English season has risen steadily . According to cricket historian Douglas Miller , the percentage of lbw dismissals increased after broadcasters incorporated ball @-@ tracking technology such as Hawk @-@ Eye into their television coverage of matches . Miller writes : " With the passage of time and the adoption of Hawkeye into other sports , together with presentations demonstrating its accuracy , cricket followers seem gradually to have accepted its predictions . Replay analyses have shown that a greater proportion of balls striking an outstretched leg go on to hit the wicket than had once been expected . " He also suggests that umpires have been influenced by such evidence ; their greater understanding of which deliveries are

likely to hit the stumps has made them more likely to rule out batsmen who are standing further away from the stumps . This trend is replicated in international cricket , where the increasing use of technology in reviewing decisions has altered the attitude of umpires . Spin bowlers in particular win far more appeals for lbw . However , the use of on @-@ field technology has proved controversial ; some critics regard it as more reliable than human judgement , while others believe that the umpire is better placed to make the decision .

The International Cricket Council (ICC) , responsible for running the game worldwide , conducted a trial in 2002 where lbw appeals could be referred to a match official , the third umpire , to review on television replays . The third umpire could only use technology to determine where the ball had pitched and if the batsman hit the ball with his bat . The ICC judged the experiment unsuccessful and did not pursue it . More trials followed in 2006 , although ball @-@ tracking technology remained unavailable to match officials . After a further series of trials , in 2009 the Umpire Decision Review System (DRS) was brought into international cricket where teams could refer the on @-@ field decisions of umpires to a third umpire who had access to television replays and technology such as ball tracking . According to the ICC 's general manager , Dave Richardson , DRS increased the frequency with which umpires awarded lbw decisions . In a 2012 interview , he said : " Umpires may have realised that if they give someone out and DRS shows it was not out , then their decision can be rectified . So they might , I suppose , have the courage of their convictions a bit more and take a less conservative approach to giving the batsman out . I think if we 're totally honest , DRS has affected the game slightly more than we thought it would . "

Critics of the system suggest that rules for the use of DRS have created an inconsistency of approach to lbw decisions depending on the circumstances of the referral . Opponents also doubt that the ball @-@ tracking technology used in deciding lbws is reliable enough , but the ICC state that tests have shown the system to be 100 % accurate . The Board of Control for Cricket in India (BCCI) have consistently declined to use DRS in matches involving India owing to their concerns regarding the ball @-@ tracking technology . Early DRS trials were conducted during India matches , and several problems arose over lbws , particularly as the equipment was not as advanced as it later became . The BCCI believe the technology is unreliable and open to manipulation .

= = Trends and perception = =

A study in 2011 by Douglas Miller shows that in English county cricket , the proportion of wickets to fall lbw has increased steadily since the First World War . In the 1920s , around 11 % of wickets were lbw but this rose to 14 % in the 1930s . Between 1946 and 1970 , the proportion was approximately 11 % but subsequently increased until reaching almost 19 % in the decade before 2010 . Miller also states that captains of county teams were statistically more likely to receive the benefit of lbw decisions ? less likely to be out lbw when batting and more likely to dismiss batsmen lbw when bowling . For many years , county captains submitted end @-@ of @-@ match reports on the umpires ; as umpires were professionals whose careers could be affected , captains consequently received leeway whether batting or bowling . Before 1963 , when the status was abolished in county cricket , umpires were also more lenient towards amateur cricketers . Amateurs administered English cricket , and offending one could end an umpire 's career . Elsewhere in the world , lbws are more statistically likely in matches taking place on the Indian subcontinent . However , batsmen from the subcontinent were less likely to be lbw wherever they played in the world .

Teams that toured other countries often became frustrated by lbws given against them ; there was often an assumption of national bias by home umpires against visiting teams . Several studies investigating this perception have suggested that home batsmen are sometimes less likely than visiting batsmen to be lbw . However , the data is based on lbw decisions awarded , not on the success @-@ rate of appeals to the umpire . Fraser points out that it is impossible to determine from these studies if any of the decisions were wrong , particularly as the lbw law can have different interpretations , or if other factors such as pitch conditions and technique were involved . A 2006 study examined the effect that neutral umpires had on the rate of lbws . Although the reasons were

again ambiguous , it found that lbws increased slightly under neutral umpires regardless of team or location .

In his survey of cricket laws , Gerald Brodribb suggests that " no dismissal has produced so much argument as lbw ; it has caused trouble from its earliest days " . Among those who do not follow cricket , the law has the reputation of being extremely difficult to understand , of equivalent complexity to association football 's offside rule . Owing to the difficulty of its interpretation , lbw is regarded by critics as the most controversial of the laws but also a yardstick by which an umpire 's abilities are judged . In his book *Cricket and the Law : The Man in White Is Always Right* , David Fraser writes that umpires ' lbw decisions are frequently criticised and " arguments about bias and incompetence in adjudication inform almost every discussion about lbw decisions . " Problems arise because the umpire has not only to establish what has happened but also to speculate over what might have occurred . Controversial aspects of lbw decisions include the umpire having to determine whether the ball pitched outside leg stump , and in certain circumstances whether the batsman intended to hit the ball or leave it alone . Umpires are frequently criticised for their lbw decisions by players , commentators and spectators . Historically , trouble ranging from protests and arguments to crowd demonstrations occasionally arose from disputed decisions . For example , a prolonged crowd disturbance , in which items were thrown onto the playing field and the match was delayed , took place when Mohammad Azharuddin was adjudged lbw during a 1996 One Day International in India .